Competency-Based Dynamic Curriculum for MD/ MS Unani

(PRESCRIBED BY NCISM)

Semester III-VI

Moalajat

(Medicine)

(SUBJECT CODE : UNIPG-MOA)

(Applicable from 2024-25 batch, from the academic year 2025-26 onwards until further notification by NCISM)

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Preface

The MD in Moalajat (Medicine) is a three-year postgraduate program designed to provide comprehensive training in diagnosing and treating common health problems and disorders, based on the principles of the Unani System of Medicine. The program also integrates relevant modern advanced knowledge along with scientific and technological developments, ensuring that graduates are equipped to tackle contemporary medical challenges with confidence and expertise while upholding the core values of medical ethics and patient-centred care.

Through a robust competency-based approach, the program trains specialists who are highly capable of addressing community health needs and adeptly managing a diverse range of conditions specific to their field. The program aims to nurture an entrepreneurial mindset among students, encouraging them to approach healthcare delivery creatively and effectively.

This program emphasizes Unani principles and modern advancements in diagnostic and therapeutic technologies. It ensures a comprehensive understanding through theoretical knowledge, practical experimentation, observation, and hands-on experience. Physicians will develop clinical skills necessary for accurate diagnosis, interpreting diagnostic tests, and considering cost-effectiveness in their treatment approaches.

The program's primary objective is to prepare candidates to efficiently diagnose and manage medical conditions, handle medical emergencies, and engage in meaningful research. Special attention is given to prevalent and treatable disorders, ensuring that physicians are well-prepared to make a significant impact in clinical practice. In addition to clinical competence, the program aims to cultivate a personalized and holistic approach to patient care, emphasizing empathy, social determinants of health, and medical ethics, thereby preparing physicians to deliver compassionate care and positively influence both clinical settings and the wider community.

Training includes hands-on experience in medical wards and critical care settings, equipping students with the skills necessary for delivering high-quality patient care. Additionally, the program familiarizes learners with research methodologies, evidence-based practices, and teaching strategies, preparing them to contribute as educators and innovators in their field.

This document, crafted by subject-content experts, serves as a strategic framework for both educators and learners, outlining clear guidelines aimed at achieving defined outcomes through structured learning and assessment. Together, we aspire to cultivate a new generation of healthcare professionals who are not only skilled clinicians but also pioneers of development in the field of Unani medicine.

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NCISM

(NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE)

Competency-Based Dynamic Curriculum for MD/ MS Unani

Moalajat (UNIPG-MOA)

Summary & Credit Framework

Semester III-VI

Module Number & Name	Credits	Notional Learning Hours	Maximum Marks of assessment of modules (Formative Assessment)
Semester No : 3			
Paper No : 1 (Moalajat (Medicine) Paper I)			
M 1 Ilmul A'sab se Muta'lliq Buniyādi Science (Basic Sciences Related to Neurology) علم الاعصاب سے متعلق بنیادی سائنس	2	60	50
M 2 Ṣudā', Duwār, Laqwa, wa Amrāz Hawās-i-Makhsūsa (Headaches, Vertigo, Facial Palsy, and Disorders of Special Senses) صداع، دوار، لقوہ و امراض حواس مخصوصہ	2	60	50
Paper No : 2 (Moalajat (Medicine) Paper II)			
M 9 Amrāz-i Nizām-i-Tanaffus 01 (Diseases of Respiratory system-01) امراض تنفس ۱	2	60	50
M 10 Amrāz-i Nizāme Tanaffus 02 (Diseases of Respiratory system-02) امراض نظام تنفس ۲	2	60	50
Paper No : 3 (Moalajat (Medicine) Paper III)			
M 17 Amrāz-i-Nizām-i-Hazm Bālāyi (Diseases of The Upper Gastrointestinal System) امراض نظام ہضم بالائی	2	60	50
M 18 Amrāz-i-Mi'da wa Am'ā' (Diseases of Stomach and Intestine) امراض معدہ و امعاء	2	60	50

Paper No : 4 (Moalajat (Medicine) Paper IV)			
M 25 Amrāz-i-Mut'diyah (Infectious diseases) امراض متعدیہ	2	60	50
M 26 Amrāz-i-Jarāsīm wa Vairūsī (Bacterial and Viral Diseases) امراض جراثیم وویروسی	2	60	50
Semester No : 4			
Paper No : 1 (Moalajat (Medicine) Paper I)			
M 3 Nizāme A'sab ke Muta'addi aur Iltihābi Amrāz (Infective and Inflammatory Disorders of Nervous System) نظام اعصاب کے متعدی اور التہابی امراض	2	60	50
M 4 Amrāz Urūqi Dimāghi, Sakta, Ṣara', wa Tashannuji Daure (Cerebrovascular Diseases, Coma, Epilepsy and Seizures) امراض عروقی دماغی، قوما، صرع وتشنجی دورے	2	60	50
Paper No : 2 (Moalajat (Medicine) Paper II)			
M 11 Amrāz-i Nizām-i-Tanaffus 03 (Diseases of Respiratory system-03) امراض نظام تنفس ۳	2	60	50
M 12 Amrāz-i-Nizām-i-Tanaffus 04 (Diseases of Respiratory system-04) امراض نظام تنفس ۴	2	60	50
Paper No : 3 (Moalajat (Medicine) Paper III)			
M 19 Amrāz-i-Nizām-i-Mi'da wa Am'ā' Zerīn (Diseases of Lower Gastrointestinal System) امراض نظام معدہ وامعاء زیریں	2	60	50
M 20 Amrāz-i-Kabid (Diseases of Liver) امراض کبد	2	60	50
Paper No : 4 (Moalajat (Medicine) Paper IV)			
M 27 Dīgar Amrāz-i-Mut'ddiya (Other infectious diseases) دیگر امراض متعدیہ	2	60	50
M 28 Ḥummayāt (Fevers) حمیات	2	60	50
Semester No : 5			

Paper No : 1 (Moalajat (Medicine) Paper I)			
M 5 ‘Asbi ‘Azlāti ‘Awāriz wa Sal‘āt Dimāghi (Neuromuscular Disorders and Brain Tumours) عصبی عضلاتی عوارض وسلعات دماغی	2	60	50
M 6 ‘Awāriz-i-Nawm wa Amrāz ‘Asbi Shaykhūkhi (Sleep Disorders and Neurogeriatrics) عوارض نوم وامراض عصبی شیخوخی	2	60	50
Paper No : 2 (Moalajat (Medicine) Paper II)			
M 13 Amrāz-i-Qalb wa Daurāne Khūn-01 (Diseases of Cardiovascular system-01) امراض قلب ودوران خون ۱	2	60	50
M 14 Amrāz-i-Qalb wa Daurāne Khūn-02 (Diseases of Cardiovascular system-02) امراض قلب ودوران خون ۲	2	60	50
Paper No : 3 (Moalajat (Medicine) Paper III)			
M 21 Amrāz-i-Qanāt-i-Ṣafrā, Banqrās wa Ṭiḥāl (Diseases of the Biliary Tract, Pancreas and Spleen) امراض قناۃ صفراء، بانقراس وطحال	2	60	50
M 22 Amrāz-i-Kulya (Diseases of The Kidney) امراض کلیہ	2	60	50
Paper No : 4 (Moalajat (Medicine) Paper IV)			
M 29 Amrāz-i-Jild 1 (Skin Diseases -1) امراض جلد ۱	2	60	50
M 30 Amrāz-i-Jild 2 (Skin Diseases -2) امراض جلد ۲	2	60	50
Semester No : 6			
Paper No : 1 (Moalajat (Medicine) Paper I)			
M 7 Amrāz-i-Nafsāniyya aur Iski Darjābandi (Psychiatric disorders and its Classification) امراض نفسانیہ اور اسکی درجہ بندی	2	60	50
M 8 ‘Awāriz Ghudad-i-Laqanāti (Endocrine Disorders) عوارض غدد لاقناتی	2	60	50
Paper No : 2 (Moalajat (Medicine) Paper II)			

M 15 Amrāz-i-Shiryān wa, Awrida wa Lymphāwiya (Diseases of Arteries, Veins and Disorders of Lymphatic system) امراض شریان،اوردہ و لمفاویہ	2	60	50
M 16 Amrāz-i-Tawlīd Dam wa Amrāz-i-Ṣamāmāt-i-Qalb (Diseases of Haemopoietic system and Valvular Heart Disease) امراض تولید دم وامراض صمامات قلب	2	60	50
Paper No : 3 (Moalajat (Medicine) Paper III)			
M 23 Amrāz-i-Kulya wa Majārī-i-Bawl (Diseases ofthe Kidney and Urinary Tract) امراض کلیہ ومجری بول	2	60	50
M 24 Amrāz-i-Nizām-i-Tawlīd wa Istiḥāla (Diseases of The Reproductive System and Metabolism) امراض نظام تولید واستحالہ	2	60	50
Paper No : 4 (Moalajat (Medicine) Paper IV)			
M 31 Amrāz-i-Mafāṣil (Diseases of Joints) امراض مفاصل	2	60	50
M 32 Hangāmi wa Hād Ṣūrat mien Ṭib Unani (Unani medicine in emergency and acute conditions) ہنگامی وحاد صورت میں طب یونانی	2	60	50
	64	1920	1600

Credit frame work

UNIPG-MOA consists of 32 modules totaling 64 credits, which correspond to 1920 Notional Learning Hours. Each credit comprises 30 hours of learner engagement, distributed across teaching, practical, and experiential learning in the ratio of 1:2:3. Accordingly, one credit includes 5 hours of teaching, 10 hours of practical training, 13 hours of experiential learning, and 2 hours allocated for modular assessment, which carries 25 marks.

Important Note: The User Manual MD/MS Unani is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. Each paper has 16

credits and each semester covers 16 credits across 4 papers. In case of difficulty and questions regarding the curriculum, write to syllabus24uni@ncismindia.org

Credit Analysis Overview					
Sem/Paper	**Paper No 1**	**Paper No 2**	**Paper No 3**	**Paper No 4**	**Credits**
Semester 3	M-1 | 2 Crs M-2 | 2 Crs	M-9 | 2 Crs M-10 | 2 Crs	M-17 | 2 Crs M-18 | 2 Crs	M-25 | 2 Crs M-26 | 2 Crs	**16**
Semester 4	M-3 | 2 Crs M-4 | 2 Crs	M-11 | 2 Crs M-12 | 2 Crs	M-19 | 2 Crs M-20 | 2 Crs	M-27 | 2 Crs M-28 | 2 Crs	**16**
Semester 5	M-5 | 2 Crs M-6 | 2 Crs	M-13 | 2 Crs M-14 | 2 Crs	M-21 | 2 Crs M-22 | 2 Crs	M-29 | 2 Crs M-30 | 2 Crs	**16**
Semester 6	M-7 | 2 Crs M-8 | 2 Crs	M-15 | 2 Crs M-16 | 2 Crs	M-23 | 2 Crs M-24 | 2 Crs	M-31 | 2 Crs M-32 | 2 Crs	**16**
Credits	**16**	**16**	**16**	**16**	**64**

Semester VI University examination					
Theory			Practical*		
Paper	Marks	Total	Practical Heads	Marks	Total
Paper -1	100	400	Long case or procedure/Major practical as applicable	100	400
			Short case or procedure/Minor practical	50	
Paper -2	100		Spotters	50	
			Assessing teaching ability	25	
Paper -3	100		Assessing presentation skills	25	
			Viva (4 examiners: 25 marks/each examiner)#	100	
Paper -4	100		Logbook (Activity record)	25	

			Practical/Clinical Record	25	
Semester VI University examination – 800 Marks					

* Details in 6H table; # No separate marks for dissertation viva.

Course Code and Name of Course

Course code	Name of Course
UNIPG-MOA	Moalajat (Medicine)

Table 1 : Course learning outcomes and mapped Program learning outcomes

CO No	A1 Course learning Outcomes (CO) UNIPG-MOA At the end of the course UNIPG-MOA, the students should be able to	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Demonstrate comprehensive knowledge of the fundamental concepts of Unani medicine and proficiency in diagnosingand managing medical conditions using Unani methods and principles, with an emphasis on Holistic and patient-centered care.	PO1,PO6
CO2	Plan and deliver comprehensive management using Unani treatment guidelines. Apply integrated approaches that incorporates both Unani and contemporary diagnostic tools, using a systematic approach tailored to the specific needs of each patient, ensuring sustained patient wellness and improved quality of life.	PO1,PO4,PO5
CO3	Develop research and analytical skills by conducting and critically evaluating research relevant to Unani medicine. Engage in rigorous clinical research and support evidence-based practices contributing to the knowledge.	PO4,PO5,PO6,PO7
CO4	Exhibit advanced skills in managing complex disease conditions, employing a preventive, promotive, and curative approach integral to Unani medical practice, adopting pharmacological and non-pharmacological treatment modalities.	PO2,PO3
CO5	Manage emergencies efficiently by Unani and contemporary protocols including Basic Life Support (BLS) and Advanced Life Support (ALS). Recognize conditions that may be out of competence and refer them to appropriate specialist/ higher center and be well versed with medico-legal responsibilities as well.	PO1,PO5

CO6	Demonstrate skills in documentation of case details. Practice Unani medicine ethically maintaining a high standard of professional integrity, honesty, patient confidentiality, and exercise empathy and a caring attitude in line with Unani ethical values and guidelines.	PO6,PO7
CO7	Contribute to the Advancement of Unani Medicine through research, practice, and teaching, promoting its growth and integration within the broader healthcare system and implementing National Health Programmes.	PO3,PO4,PO5
CO8	Develop Personal and Professional skills by engaging in continuous learning, reflecting on personal practice, and incorporating feedback to improve clinical skills, knowledge, and therapeutic effectiveness in line with evolving Unani and conventional medicine practices.	PO6,PO7,PO8

Table 2: Course contents (Modules - Credits and Notional Learning Hours)

Paper No : 1 Moalajat (Medicine) Paper I						
Semester No : 3						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
	M-1 Ilmul A'sab se Muta'lliq Buniyādi Science (Basic Sciences Related to Neurology) علم الاعصاب سے متعلق بنیادی سائنس This module consists of two units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. This module covers Neuroanatomy (focusing on the development of the neuroaxis, the autonomic nervous system, CSF pathways, and neuromuscular junctions etc.), functional anatomy, recent advances in neuron structure etc. along with Neurophysiology (nerve impulse transmission, muscle contraction, sensory evoked potentials etc.). This module also covers evaluation of neurological diseases and unconscious patients, emphasizing examination of higher mental functions, cranial nerves, muscle tone, and reflexes along with interpretation of basic and advance investiagtios viz. digital electroneurograms, electromyograms, EEGs, CT and MRI etc.	2	10	20	30	60

	• **M 1U 1 Nizāme A'sāb ki Fi'li Tashrīḥ (Functional Anatomy of Nervous system) نظام اعصاب کی فعلی تشریح** 1.1.1. Functional Anatomy of the Central Nervous system and Peripheral Nervous System with special emphasis on the development of Neuroaxis. اعصابی محور کی نشوونما پر خصوصی توجہ کے ساتھ مرکزی اعصابی نظام اور محیطی اعصابی نظام اور خود مختار اعصابی نظام کی تشریح فعلی کی وضاحت۔ 1.1.2. Vascular Anatomy with specific emphasis on Blood Brain Barrier and C S F Pathways دموی دماغی حد اور دماغی نخاعی رطوبت کے طریقوں پر خاص توجہ کے ساتھ عروقی تشریح 1.1.3. Sensory and Motor Pathways with Special emphasis on Muscle Control حسی اور حرکی مسالک کے ساتھ عضلاتی تسلط پر خصوصی وضاحت 1.1.4. Comparative Neurology تقابلی علم الاعصاب • **M 1U 2 Clinical Neurology & Diagnostics مطبی علم الاعصاب اور ذرائع تشخیص** 1.2.1. Comprehensive history taking, Physical examination Signs and symptoms associated with CNS مرکزی نظام اعصاب سے متعلق روئداد، طبی معائنہ، علامات، کا جامع بیان 1.2.2. Mental State Examination دماغی/ذہنی حالت کا معائنہ 1.2.3. Cranial Nerves Testing اعصاب دماغیہ کا معائنہ 1.2.4. Reflexes انعکاسات 1.2.5. Integration of Unani with Modern diagnostics طب یونانی اور طب جدید کے تفتیشی ذرائع کا باہمی انضمام 1.2.6. Description of CT, MRI, PET SCAN جدید تشخیصی ذرائع مثلاً CT, MRI, PET SCAN کی تفصیل 1.2.7. Lumbar Puncture and C S F analysis بزل قطنی اور دماغی و نخاعی رطوبت کا معائنہ					
	M-2 Ṣudā', Duwār, Laqwa, wa Amrāz Hawās-i-Makhsūsa (Headaches, Vertigo, Facial Palsy, and Disorders of Special Senses) صداع، دوار، لقوہ و امراض حواس مخصوصہ This module consists of two units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively.	2	10	20	30	60

	Unit 1 of this module contains topics related to Headaches, Cranial neuralgia, and Vertigo and its different types for their diagnosis and proper management in Unani medicine with integrative approach. Unit 2 covers the diagnosis and management of Facial Palsy and disorders of Special Senses viz. disorders of smell, taste, vision, and hearing. Clinical evaluation and required investigations for diagnsosis and differential diagnosis and Management in Unani meidicine with integrative approach. **• M 2U 1 Ṣudā‘ aur Duwār (Headaches and Vertigo) صداع اور دوار** 2.1.1. Ṣudā‘ aur uske aqsām (Headache and its Types) صداع اور اسکے اقسام 2.1.2. Sadr-o-Duwār (Vertigo) سدر و دوار 2.1.3. Benign Paroxysmal Positional Vertigo دوار وضعی انتیابی/نوبتی حمیدی 2.1.4. Meniers Disease مرض مینیئر س **• M 2U 2 Laqwa wa Hawāsi Makhsūsa ke Amrāz (Facial Palsy and disorders of Special Senses) لقوہ و حواس مخصوصہ کے امراض** 2.2.1. Laqwa (Facialy Palsy) لقوہ 2.2.2. Hawāsi Makhsūsa ke Amrāz (Disorders of Special Senses) حواس مخصوصہ کے امراض 2.2.2.1. Fasāde-i-Shamm (Smell disorder) فساد شم 2.2.2.2. Fasāde-i-Dhā’iqa (Taste disorders) فساد ذائقہ 2.2.2.3. Amrāz-i-Baṣar (Disorders of Vision) امراض بصر 2.2.2.4. Fasād-i-Samā‘at (Hearing Disturbances) فساد سماعت					
		4	20	40	60	120
Semester No : 4						

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-3 Nizāme A'sab ke Muta'addi aur Iltihābi Amrāz (Infective and Inflammatory Disorders of Nervous System) نظام اعصاب کے متعدی اور التہابی امراض This module consists of two units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. This module is focused on the diagnosis and management of critical neurological conditions. Unit 1 explores the diagnosis and treatment of various CNS infections viz. Meningitis and its types, Ḥumra'-i-Dimāghiya, Māshrā and Bacterial, Viral, Fungal infection of brain including Viral Encephalitis, Bacterial Meningitis, Tuberculous Meningitis, Cysticercosis and Cerebral Malaria etc. Unit 2 of this module deals with Brain abscess and Metabolic Encephalopathy, Poliomyelitis, Herpes Zoster and Metabolic encephalopathy etc. **• M 3U 1 Dimāgh aur Nizām-i-A'sāb ke Muta'addi aur Iltihābi Amrāz (Infective and Inflammatory Diseases of the Brain and Nervous System) دماغ اور نظام اعصاب کے متعدی اور التہابی امراض** 3.1.1. Sarsām aur uski aqsām (Meningitis and its types) سرسام اور اس کی اقسام 3.1.2. Shafāqalūs, Ḥumra'-i-Dimāghiya, Māshrā شفاقلوس اور حمرہ دماغیہ ماشرہ	2	10	20	30	60

	3.1.3. Bacterial, Viral, Fungal infection of brain and nervous system دماغ اور نظام اعصاب کے بیکٹیریل، وائرل اور فنگل انفیکشن **• M 3U 2 Khurāj-i-Dimāgh aur Istiḥāli A'telāl Dimāghi (Brain Abscess and Metabolic Encephalopathy) خراج دماغ اور استحالی اعتلال دماغ** 3.2.1. Khurāj-i-Dimagh wa Huzāl Ẓahrī (Brain Abscess and Tabes Dorsalis) خراج دماغ و ہزال ظہری 3.2.2. Poliomyelitis, Herpes Zoster and Tuberculous Meningitis پولیومیلائٹس، نملہ اور التہاب غشاء دماغی دقی 3.2.3. Istiḥāli A'telāl Dimāghi (Metabolic Encephalopathy) استحالی اعتلال دماغ					
	M-4 Amrāz Urūqi Dimāghi, Sakta, Ṣara', wa Tashannuji Daure (Cerebrovascular Diseases, Coma, Epilepsy and Seizures) امراض عروقی دماغی، قوما، صرع و تشنجی دورے This module consists of three units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. Unit 1 of this module covers Cerebrovascular Diseases and Stroke (causes and types of cerebrovascular syndromes, including ischemic and hemorrhagic strokes) and management and strategies for stroke prevention. Unit 2 covers Coma and Related Disorders viz. syncope, delirium, and acute confusional states etc. Unit 3 covers Epilepsy and Seizures disorders, epilepsy, and related syndromes including Ri'sha (Tremors), Dā' al-Raqṣ (Chorea) and 'Aḍalātī Tashannuj (Dystonia-Myoclonus, Torticollis) etc. **• M 4U 1 Amrāz Urūqi Dimāghi wa Sakta (Cerebrovascular Diseases and Stroke) امراض عروقی دماغی و سکتہ** 4.1.1. Nazf al-Dam Dimāghi (Cerebral Heamorrhage) نزف الدم دماغی 4.1.2. Takhaththur-i-Dimāghi (Cerebral Thrombosis), تخثر دماغی 4.1.3. Tasaddud-i-Dimāghi (Cerebral Embolism) تسدد دماغی	2	10	20	30	60

	4.1.4. Fālij (Paralysis) فالج 4.1.5. Fālij Niṣfī (Hemiplegia) فالج نصفی **• M 4U 2 Coma aur Muta'allaqa 'Awāriz (Coma and Related Disorders) کوما اور متعلقہ عوارض** 4.2.1. Ghashī, Sakta Dimāghi (Syncope, Coma) غشی، سکتہ دماغی 4.2.2. Sakta (Syncopal attack) سکتہ 4.2.3. Istirkhā', Jamūd wa Shakhūṣ (Flaccidity, Catalepsy) استرخاء، جمود و تشخوص **• M 4U 3 Ṣara' aur Daure ke 'Awāriz (Epilepsy and Seizure Disorders) صرع اور دورے کے عوارض** 4.3.1. Ṣar' wa Aqsām (Epilepsy and Types) صرع و اقسام 4.3.2. Ri'sha (Tremors) رعشہ 4.3.3. Dā' al-Raqs (Chorea) داء الرقص 4.3.4. 'Aḍalātī Tashannuj (Dystonia-Myoclonus, Torticollis) عضلاتی تشنج					
		4	20	40	60	120

Semester No : 5

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-5 'Asbi 'Azlāti 'Awāriz wa Sal'āt Dimāghi (Neuromuscular Disorders and Brain Tumours) عصبی عضلاتی عوارض و سلعات دماغی	2	10	20	30	60

	This module consists of two units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. Unit 1 focuses on diagnosis and management of Neuromuscular and Movement disorders including Sciatica, Parkinson's disease, Alzheimer Disease, Gullien Barre Syndrome, Syringomyelia, Neurogenic Bladder, Tashanuj, Tetanus, Muscular Dystrophy etc. Unit 2 of this module covers diagnosis and management of Brain tumours, Meningocele, Hydrocephalus, Neurofibromatosis and Multiple Sclerosis etc. **• M 5U 1 'Asbi 'Azlāti 'Awāriz Ḥirki wa Dīgar Amrāz (Neuromuscular Disorders/Movement Disorders and Neuroimmunopathies) عصبی عضلاتی عوارض، حرکی و دیگر امراض** 5.1.1. 'Irq al-Nasā (Sciatica) عرق النساء 5.1.2. 'Iṣāba (Trigeminal Neuralgia) عصابہ 5.1.3. Maraz-i-Parkinson (Parkinson's disease) مرض پارکنسن 5.1.4. Maraz-i-Alzheimer (Alzheimer's Disease) مرض الزائمر 5.1.5. Guillain-Barré Syndrome (GB Syndrome) ملتزمہ گلین بارے 5.1.6. Iltihab 'Azli 'Arazī (Transverse Myelitis) التہاب عضلی عرضی 5.1.7 Syringomyelia, Syringobulbia مرض سیرنگومیلیا 5.1.8 Neurogenic Bladder مرض مثانہ العصبی 5.1.9 Carpel Tunnels Syndrome متلازمہ کارپل ٹنل 5.1.10. Tashannuj (Spasm) تشنج 5.1.11. Kuzāz (Tetanus) کزاز 5.1.12. Myasthenia gravis مائیستھینیا گریوس 5.1.13. Muscular Dystrophy تحلل عضلی 5.1.14. Polyneuropathy پولی نیوروپیتھی					

	• **M 5U 2 Sal'āt Dimāgh wa Amrāz Nash-o-Numa (Brain Tumours/ Developmental Disorders) سلعات دماغ/امراض نشوونما** 5.2.1. Sal'āt Dimāgh (Brain tumours) سلعات دماغ 5.2.2. Qīla Sahāya (Meningocele) قیلہ سحایا/منغوب 5.2.4. Istisqā' Dimāgh (Hydrocephalus) استسقاء دماغ 5.2.5. Taza'zu' Dimāgh (Concussion) تزعزع دماغ 5.2.6. Neurofibromatosis نیوروفائبرومیٹوسس 5.2.7. Multiple Sclerosis ملٹیپل سکلیروسس					
	M-6 'Awāriz-i-Nawm wa Amrāz 'Asbi Shaykhūkhi (Sleep Disorders and Neurogeriatrics) عوارض نوم وامراض عصبی شیخوخی This module consists of two units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. Unit 1 explores the evaluation and management of sleep disorders viz. Subāt (Narcolepsy), Sahar (Insomnia), Kābūs (Nightmare), Somnambulism emphasizing the importance of assessment, accurate diagnosis and management. Unit 2 covers diagnosis and managemet of Neurogenerative disorders including SunStroke, Talyīn-i-Dimāgh, Ḍamūr-i-Dimāgh (Brain Atrophy-Age related) • **M 6U 1 'Awāriz-i-Nawm (Sleep Disorders) عوارضِ نوم** 6.1.1. Tazkira-i-Nawm (Description of Sleep) تذکرہ نوم 6.1.2. Subāt (Narcolepsy) سبات 6.1.3. Sahar (Insomnia) سہر 6.1.4. Kābūs (Nightmare) کابوس 6.1.5. Somnambulism (Sleep walking) سومنامبولزم	2	10	20	30	60

	• **M 6U 2 Amrāz-i-Dimagh Inḥiṭaṭi (Neurodegenerative Disorders) امراضِ دماغ انحطاطی** 6.2.1. Ḍarab al-Shams (Sun-Stroke) ضربۃ الشّمس 6.2.2. Talyīn-i-Dimāgh (Encephalomalacia) تلیین دماغ 6.2.3. Ḍamūr-i-Dimāgh (Brain Atrophy-Age related) ضمور دماغ					
		4	20	40	60	120
Semester No : 6						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
	M-7 Amrāz-i-Nafsāniyya aur Iski Darjābandi (Psychiatric disorders and its Classification) امراض نفسانیہ اور اسکی درجہ بندی This module consists of two units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. Unit 1 covers Classification diagnosis and management of Psychiatric Disorders viz. Cognitive Disorders, Bipolar Disorders, Schizophrenia & Other Psychotic Disorders, Mood Disorders.	2	10	20	30	60

	Unit 2 deals with the diagnosis and management of Personality Disorders including Sexual and Gender Identity disorders, Suicidal tendency, Mental retardation and Adjustment Disorders. **• M 7U 1 Amrāz-i-Nafsāniyya ki Darjābandi (Comprehensive Classification of Psychiatric Disorders) امراض نفسانیہ کی درجہ بندی** 7.1.1. Ta'aruf wa Darjābandī (Introduction and Classification) تعارف ودرجہ بندی 7.1.2. Delirium, Dementia, and Amnestic and Other Cognitive Disorders سہو،نسیان،نسیانی عارضہ 7.1.3. Bipolar Disorder: Mania مانیا 7.1.4. Mālankhūliyā aur uske aqsām (Melancholia and its types) مالنخولیااوراس کی اقسام 7.1.4.1. Quṭrub قطرب 7.1.4.2. Ṣubārā صبارا 7.1.4.3. Ikhtilāt-i- 'Aql اختلاط عقل 7.1.5. Schizophrenia & Other Psychotic Disorders مرض شیزوفرینیاودیگرو سواسی عوارض 7.1.6. Mood Disorders: Iḍmiḥlāl (Depression) اضمحلال 7.1.7. Anxiety Disorders: Iḍtarāb-i-Nafsāni اضطراب نفسانی **• M 7U 2 Shakhṣiyāti Amrāz (Personality Disorders) شخصیاتی امراض** 7.2.1. Normal Human Sexuality, Sexual and Gender Identity disorders 7.2.1.1 Ishq (Erotomania) عشق 7.2.1.2. Ikhtināq al-Raḥim (Hysteria) اختناق الرحم 7.2.2. Shakhṣiyāti Amrāz (Personality Disorders) شخصیاتی امراض 7.2.2.1. Junūn (Mania) جنون 7.2.2.2. Ru'ūnat wa Ḥumq رعونت وحمق 7.2.3. Mental retardation and learning disorders ضعف ذہانت					

	7.2.4. Drug or alcohol addiction and Withdrawal دواءاورشراب کی لت اورانکاچھوڑنا 7.2.5. Adjustment Disorders/Obsessive-Compulsive Disorders امراض ترمیم وتصحیح،عارضہ اضطراری					
	M-8 'Awāriz Ghudad-i-Laqanāti (Endocrine Disorders) عوارض غدد لاقناتی This module consists of three units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. Unit 1 of this module focusses on general endocrinological consideration Disorders of Hypothalamus and Pituitary gland viz. Kibr al-Iẓam (Acromegaly), Qazāmah (Dwarfism), Diabiṭus Sāda (Diabetes Insipidus) and Sal'āt Nukhāmiya. Unit 2 dwells upon Thyroid and Parathyroid Disorders including Hyperthyroidism, Thyrotoxicosis, Hashimoto Thyroiditis, Graves Disease, Hypothyroidism, Tumours of Thyroid gland, Hyper parathyriodism etc. Unit 3 of this modules deals with Adrenal glands Pancreatic and Gonadic Disorders including Diabetes mellitus, Diabetic Ketoacidosis, Pancreatic Tumors, Cushing's Syndrome, Phoechromocytoma and Addison's disease etc. **• M 8U 1 Amrāz Ghudda Tahat-Al Mahād wa Ghudda Nukhamiya (Disorders of Hypothalamus and Pituitary) امراض غدہ تحت المہاد وغدہ نخامیہ** 8.1.1. Ghudud-i-Laqanāti aur unke ifrāzāt ka tasawwur atibba ki nazar mein (Umoomi jayaeza) (Description of Endocrine glands and its secretion acording to Unani Physician) غدہ لاقناتی اوران کے افرازات کا تصور اطباء کی نظر میں (عمومی جائزہ) 8.1.2. Ghudud-i- Nukhamia ke ifrazāt ki qillat wa ifrāt se hone wale Amrāz (Hypothalamus and Pituitary disorders) ہائپو تھیلمس اور پچوٹری: غدۂ نخامیہ کے افرازات کی قلت وافراط سے ہونے والے امراض 8.1.3. Kibr al-Iẓam (Acromegaly) کبرالعظم 8.1.4. Qazāmah (Dwarfism) قزامہ 8.1.5. Diabiṭus Sāda (Diabetes Insipidus) ذیابطسِ سادہ	2	10	20	30	60

	8.1.6. Sal'āt Nukhāmiya سلعۃ نخامیہ **• M 8U 2 Amrāz-i-Darqiya (Thyroid Disorders) امراض درقیہ** 8.2.1. Faṛt-i-Darqiyā (Hyperthyroidism) فرط درقیہ 8.2.2. Tasammum-i-Darqiyā (Thyrotoxicosis) تسمم درقیہ 8.2.3. Hashimoto Thyroiditis التہاب درقیہ ہاشیموٹو 8.2.4. Graves Disease مرض گریوس 8.2.5. Qillaṭ-i-Afrāz Darqiyā (Hypothyroidism) قلت افراز درقیہ 8.2.6. Ghoṭar (Goiter) غوطر 8.2.7. Cretinism کریٹینزم 8.2.8. Sal'ā-i-Darqiyā سلعات درقیہ 8.2.9. Faṛt-i-Duraiqiyā (Hyper Parathyriodism) فرط دریقیہ 8.2.10. Quṣūre-i-Duraiqiyā (Hypo Parathyroidism) قصور دریقیہ **• M 8U 3 Amrāz-i-Ghudda Fawqul Kulya wa Tanāsuli (Adrenal glands Pancreatic and Gonadic Disorders) امراض غدہ فوق الکلیہ و تناسلی** 8.3.1. Diabetes mellitus ذیابطیس سکری 8.3.2. Diabetic Ketoacidosis ذیابیطسی کیٹواسڈوسس 8.3.3. Sal'ā-i-Bānqarās (Pancreatic Tumors) سلعۃ بانقراس 8.3.4. Mutalāzma Cushing (Cushing's Syndrome) متلازمہ کوشنگ 8.3.5. Aldosteroma ایلڈوسٹیروما 8.3.6. Phoechromocytoma فیوکروموسائٹوما 8.3.7. Addison's disease مرض ایڈیسنز 8.3.8. Hypo aldosteronism ہائپوایلڈوسٹیرونزم					
		4	20	40	60	120

		16	80	160	240	480
Paper No : 2 Moalajat (Medicine) Paper II						
Semester No : 3						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
	M-9 Amrāz-i Nizām-i-Tanaffus 01 (Diseases of Respiratory system-01) امراض تنفس ا This module consists of three units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours is 1:2:3, respectively. First Unit covers mainly Obstructive & Occupational Lung diseases, viz. Ḍīq al-Nafas (Astham), Waram Shu'ba al-Ri'a (Bronchitis, acute and chronic), Chronic obstructive pulmonary disease (COPD), Ittisā'-i Shu'ba al-Ri'a (Bronchiectasis) and Nafkha al-Ri'a (Emphysema). Second Unit covers Restrictive Lung diseases, viz. Pulmonary and Cystic fibrosis, Asbestosis, Silicosis and Pneumoconiosis. The Third Unit covers Neoplastic lung diseases. **• M 9U 1 Amrāz-i-Riya Suddiya wa Mahniyya (Obstructive & Occupational Lung diseases) امراض ریہ سدیہ ومہنیہ** 9.1.1. Itlaqi Tashreeh wa Munafeul Aza (Applied anatomy and physiology) اطلاقی تشریح ومنافع الاعضاء	2	10	20	30	60

	9.1.2. Ḍīq al-Nafas (Asthma) ضیق النفس 9.1.3. Waram Shu'ba al-Ri'a (Bronchitis-acute and chronic) ورم شعبۃ الرئۃ 9.1.4. Dā al-Insidād Rewi Muzmin (Chronic obstructive pulmonary disease-COPD) داء الانسداد رؤی مزمن 9.1.5. Ittisā'-i Shu'ba al-Ri'a (Bronchiectasis) اتساع شعبۃ الریۃ 9.1.6. Nafkha al-Ri'a (Emphysema) نفخۃ الرئۃ **• M 9U 2 Amrāz-i-Riya Muqayyad wa Khalāli (Restrictive and Interstitial Lung Diseases) امراض ریہ مقید و خلالی** 9.2.1. Pulmonary fibrosis پلمونری فائبروسس 9.2.2. Cystic fibrosis سسٹک فائبروسس 9.2.3. Asbestosis ایسبیسٹوسس 9.2.4. Silicosis سلی کوسس 9.2.5. Coal worker's Pneumoconiosis کول ورکرس نیوموکونیوسس **• M 9U 3 Amrāz-i-Riya Sarṭaniyya (Neoplastic lung diseases) امراض ریہ سرطانیہ** 9.3.1. Saraṭān al-Ri'a (Lungs Cancer) سرطان الرئۃ 9.3.2. Saraṭān Shu'ba al-Ri'a (Bronchial Cancer) سرطان شعبۃ الرئۃ 9.3.3. Sarcoidosis سارکوئڈوسس 9.3.4. Mesothelioma میزوتھیلیوما 9.3.5. Pulmonary Hamartoma پلمونری ہامارٹوما 9.3.6. Secondary Tumours of lung الأورام الثانویۃ فی الرئۃ 9.3.7.Tumours of Mediastinum أورام المنصف					
	M-10 Amrāz-i Nizāme Tanaffus 02 (Diseases of Respiratory system-02) امراض نظام تنفس ۲	2	10	20	30	60

	This module consists of three units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. The module describes various Infectious Diseases of respiratory system. First Unit covers Dhāt al-Ri'a (Pneumonia) and Tadarrun al Ri'wī (Pulmonary Tuberculosis). Second Unit covers Khurāj al-Ri'a (Lung Abscess) and Dhāt al-Janb (Pleurisy). Third Unit covers Istisqā' al-Ṣadr (Pleural Effusion), Taqayyuḥ al-Ṣadr (Empyema Thoracis), Coccidioidomycosis etc. **• M 10U 1 Amrāz-Muta'ddi Nizām-i-Tanaffus-01 (Infectious Diseases of the Respiratory System 01) امراض متعدی نظام تنفس ۱** 10.1.1. Dhāt al-Ri'a (Pneumonia) ذات الریۃ 10.1.2. Tadarrun al Ri'wī (Pulmonary Tuberculosis) تدرن روی **• M 10U 2 Amrāz-Muta'ddi Nizām-i-Tanaffus-02 (Infectious Diseases of the Respiratory System 02) امراض متعدی نظام تنفس ۲** 10.2.1. Khurāj-i-Ri'a (Lung Abscess) خراج ریۃ 10.2.2. Dhāt al-Janb (Pleurisy) ذات الجنب **• M 10U 3 Amrāz-Muta'ddi Nizām-i-Tanaffus-03 (Infectious Diseases of the Respiratory System 03) امراض متعدی نظام تنفس ۳** 10.3.1. Istisqā' al-Ṣadr (Pleural Effusion) استسقاء الصدر 10.3.2. Taqayyuḥ al-Ṣadr(Empyema Thoracis) تقیح الصدر 10.3.3. Coccidioidomycosis کوکسی ڈیوئڈومائکوسس 10.3.4. Bronchopulmonary aspergillosis برونکوپلونری اسپرجلوسس					
		4	20	40	60	120

Semester No : 4						
2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-11 Amrāz-i Nizām-i-Tanaffus 03 (Diseases of Respiratory system-03) امراض نظام تنفس ۳ This module consists of three units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. The module describes various infectious respiratory diseases and some miscellaneous diseases of the respiratory system. The diseases covered in this module includes Waram-i-Qaṣaba'-i-Ri'a (Tracheitis), Covid-19, Nafth al-Dam (Haemoptysis), Su'āl (Cough) Buḥḥat al-Ṣawt (Hoarseness of voice etc. **• M 11U 1 Amrāz-Muta'ddi Nizām-i-Tanaffus-04 (Infectious Diseases of the Respiratory System 04) امراض متعدی نظام تنفس** 11.1.1. Waram-i-Qaṣaba'-i-Ri'a (Tracheitis) ورم قصبہ الریۃ 11.1.2. Other Tracheal Disorders (Obstruction, Tumours) اضطرابات الحجاب الحاجز **• M 11U 2 Amrāz-Muta'ddi Nizām-i-Tanaffus-05 (Infectious Diseases of the Respiratory System 05) امراض متعدی نظام تنفس ۵** 11.2.1. Covid-19 کووڈ ۱۹ 11.2.2. Nafth al-Dam (Haemoptysis) نفث الدم	2	10	20	30	60

	11.2.3. RSV (Respiratory Syncytial Virus) Infection تعدیہ رِسپائریٹری سِنسیٹیئل وائرس **• M 11U 3 Amrāz Mutafarriqa Nizām-i-Tanaffus-01 (Miscellaneous diseases of the respiratory system 01) امراض متفرقہ نظام تنفس ۱** 11.3.1. Su'āl (Cough) سعال 11.3.2. Buḥḥat al-Ṣawt (Hoarseness of voice) بحۃ الصوت 11.3.3. Diyaphragma ke 'Awāriz (Disorders of the diaphragm) دیافراغمہ کے عوارض 11.3.4. Deformities of the chest wall					
	M-12 Amrāz-i-Nizām-i-Tanaffus 04 (Diseases of Respiratory system-04) امراض نظام تنفس ۴ This module consists of three units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. The module describes various respiratory diseases like haemothorax, pneumothorax, Suqūṭ al-Ri'a (Atelectasis) ,Tahabbuj al-Ri'a (Pulmonary oedema), Suqūṭ-i-Tanaffus (Respiratory failure) and Pulmonary hypertension etc. **• M 12U 1 Amrāz Mutafarriqa Nizām-i-Tanaffus-02 (Miscellaneous diseases of the respiratory system 02) امراض متفرقہ نظام تنفس ۲** 12.1.1. Nazf al-Ṣadr (Haemothorax) نزف الصدر 12.1.2. Nafkha al-Ṣadr (Pneumothorax) نفخۃ الصدر **• M 12U 2 Amrāz Mutafarriqa Nizām-i-Tanaffus-03 (Miscellaneous diseases of the respiratory system 03) امراض متفرقہ نظام تنفس ۳** 12.2.1. Suqūṭ al-Ri'a (Atelectasis) سقوط الرئۃ 12.2.2. Tahabbuj al-Ri'a (Pulmonary oedema) تہبج الریہ 12.2.3. Suqūṭ-i-Tanaffus (Respiratory failure) سقوط تنفس	2	10	20	30	60

	• **M 12U 3 Amrāz Mutafarriqa Nizām-i-Tanaffus-04 (Miscellaneous diseases of the respiratory system 04) امراض متفرقہ نظام تنفس ۴** 12.3.1. Acute Respiratory Distress Syndrome ایکیوٹ ریسپائریٹری ڈسٹریس سنڈروم 12.3.2. Pulmonary hypertension ضغط الدم قوی رؤی					
		4	20	40	60	120
Semester No : 5						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
	M-13 Amrāz-i-Qalb wa Daurāne Khūn-01 (Diseases of Cardiovascular system-01) امراض قلب ودوران خون ۱ This module consists of three units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. The module describes various cardiac diseases mentioned in the Unani classical literature and the conventional system of medicine. The topics covered in this module include Sūi Mizāj Qalb, Ḍuʿf-i-Qalb, Khafqān (Palpitation), Inflammatory and Infective Cardiac Conditions like Pericarditis, Myocarditis, Endocarditis, Rheumatic Heart Diseases etc. and Iflās-i-Qalb wa Suqūṭ-i-Qalb etc.	2	10	20	30	60

	• M 13U 1 Sū-i Mizāj Qalb, Ḍu'f-i-Qalb, Khafqān سوءمزاج قلب، ضعف قلب، خفقان 13.1.1. Sū-i Mizāj Qalb سوءمزاج 13.1.2. Ḍu'f-i-Qalb ضعف قلب 13.1.3. Khafqān (Palpitation) خفقان **• M 13U 2 Iltihābi wa 'Ufūni Amrāz-i-Qalb (Inflammatory and Infective Cardiac Disorder) التہابی وعفونی امراض قلب** 13.2.1. Waram Ghilaafe qalb (Pericarditis) ورم غلاف القلب 13.2.2. Constrictive pericarditis کانسٹرکٹیو پیری کارڈائٹس 13.2.3. Waram 'Azlat-i-qalb (Myocarditis) ورم عضلات قلب 13.2.4. Waram Baṭana-i-qalb (Infective Endocarditis) ورم بطانہ قلب 13.2.5. Waram Baṭana-i-qalb hudaari (Rheumatic heart disease) ورم بطانہ قلب حدارى **• M 13U 3 Ghashī, Iflās-i-Qalb, Suqūṭ-i-Qalb, Corpulmonale, غشی، افلاس القلب، سقوط قلب وسقوط قلب ریوی** 13.3.1. Ghashī (Syncope) غشی 13.3.2. Iflās-i-Qalb (Cardiac Ischaemia) افلاس القلب 13.3.3. Suqūṭ-i-Qalb (Cardiac Failure) سقوط قلب 13.3.4. Corpulmonale متلازمہ ریوی قلبی					
	M-14 Amrāz-i-Qalb wa Daurāne Khūn-02 (Diseases of Cardiovascular system-02) امراض قلب ودوران خون ۲ This module consists of three units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. The module describes various cardiac diseases viz. Cardiomyopathy, Zagḥtuddam Qawī, Suqūṭ-i Daurān-i-Khūn Saṭḥī, Arrhythmias, Khilqī Amrāz Qalb, Cardiac Arrest, Pericardial	2	10	20	30	60

	Effusion and diseases only mentioned in Classical Unani books viz. Ḍaghṭ al-Qalb, Taqashshur al-Qalb, Qadhf al-Qalb etc. **• M 14U 1 Maraz-i-Qalb 'Azli, Zaghṭuddam Qawī, Suqūṭ-i Daurān-i-Khūn Saṭḥī (Cardiomyopathy, Hypertension, Peripheral Circulatory Failure) مرض قلب عضلی،ضغط الدم قوی،سقوط دوران خون سطحی** 14.1.1. Amarāz Aḍalāt Qalbi (Cardiomyopathy) امراض عضلات قلبی 14.1.2. Zaghṭuddam Qawī (Hypertension) ضغط الدم قوی 14.1.3. Suqūṭ-i Daurān-i-Khūn Saṭḥī (Peripheral Circulatory Failure) سقوط دوران خون سطحی **• M 14U 2 Ikhtilāj-i-Qalb, Khilqī Amrāz-i-Qalb, Tawaqqaf al-Qalb, Istisqa al-Qalb (Arrhythmias, Congenital Heart diseases, Cardiac Arrest, Cardiac tamponade) اختلاج قلب،خلقی امراض قلب،توقف القلب،استسقاء القلب** 14.2.1. Arrhythmias عدم انتظام ضربات قلب 14.2.2. Khilqī Amrāz Qalb (Congenital Heart Diseases) خلقی امراض قلب 14.2.3. Cardiac Arrest توقف قلب 14.2.4. Pericardial Effusion and Cardiac tamponade استسقاء قلب **• M 14U 3 Waram Udhun al-Qalb, Ḍaghṭ al-Qalb, Taqashshur al-Qalb, Qadhf al-Qalb, Iḥtiwā' al-Rụtūba 'ala'l Qalb, Jadhb al-Qalb ورم اذن القلب،ضغط القلب، تقشر القلب، قذف القلب،احتواء الرطوبۃ علی القلب،جذب القلب** 14.3.1. Waram Udhun al-Qalb ورم اذن القلب 14.3.2. Ḍaghṭ al-Qalb ضغط القلب 14.3.3. Taqashshur al-Qalb تقشر قلب 14.3.4. Qadhf al-Qalb قذف القلب 14.3.5. Iḥtiwā' al-Rụtūba 'ala'lQalb احتواء الرطوبۃ علی القلب					

	14.3.6. Jadhb al-Qalb جذب القلب					
		4	20	40	60	120
Semester No : 6						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
	M-15 Amrāz-i-Shiryān wa, Awrida wa Lymphāwiya (Diseases of Arteries, Veins and Disorders of Lymphatic system) امراض شریان، اوردہ و لمفاویہ This module consists of three units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. The module describes various vascular, and lymphatic diseases including Taṣallub al-Sharāyīn, Anūrasmā Awrṭā (Aortic aneurysm), Jānibi Sharyāni Amrāz (Peripheral arterial diseases), Iltihāb al-Warīd Khathārī (Thrombophlebitis), Khathār al-Warīd ‘Amīq (Deep vein thrombosis and Amrāz Sayyāla ‘Uqda (Lymphadenopathy) etc. **• M 15U 1 Amrāz-i-Sharāyīn (Diseases of Arteries) امراض شرائین** 15.1.1. Taṣallub al-Sharāyīn (Arteriosclerosis/ Atherosclerosis) تصلب شرائین 15.1.2. Anūrasmā Awrṭā (Aortic aneurysm) انورسما اورطی 15.1.3. Aortic dissection ڈسیکشن اورطی	2	10	20	30	60

	15.1.4. Jānibi Sharyāni Amrāz (Peripheral arterial diseases) جانبی شریانی امراض **• M 15U 2 Amrāz-i-Awrida (Diseases of Veins) امراض اوردۃ** 15.2.1. Iltihāb al-Warīd Khathārī (Thrombophlebitis) التہاب الورید خثاری 15.2.2.Khathār al-Warīd 'Amīq (Deep vein thrombosis) خثار الورید العمیق 15.2.3. Insdād al-Ri'a (Pulmonary Embolism) انسداد الریہ **• M 15U 3 Amrāz-i-Lymphāwiya (Diseases of Lymphatic system) امراض لمفاویہ** 15.3.1. Tahabbuj Sayyāla 'Uqda (Lymphoedema) تہبج سیالہ عقدہ 15.3.2. Amrāz Sayyāla 'Uqda (Lymphadenopathy) امراض سیالہ عقدہ					
	M-16 Amrāz-i-Tawlīd Dam wa Amrāz-i-Ṣamāmāt-i-Qalb (Diseases of Haemopoietic system and Valvular Heart Disease) امراض تولید دم و امراض صمامات قلب This module consists of three units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours is 1:2:3respectively. The module describes various haemopoietic disorders viz. Faqr al-Dam wa Aqsām (Anemia and its types), Abyāzuddam (Leukemia), Thalassemia, Coaugulation Disorders and and Valvular heart diseases. **• M 16U 1 Amrāz-i-Tawlīd Dam (Diseases of Haemopoietic system) امراض تولید دم** 16.1.1. Faqr al-Dam wa Aqsām (Anemia and its types) فقر الدم و اقسام 16.1.2. Abyāzuddam (Leukemia) ابیاض الدم 16.1.3. Thalassemia تھیلیسّیما **• M 16U 2 Amrāz-i-Injamāduddam (Coaugulation Disorders) امراض انجماد الدم** 16.2.1. Haemophilia ہیموفیلیا 16.2.2. Thrombocytopenia قلت الصفیحات الدمویہ 16.2.3. Disseminated Intravascular Coagulation (DIC) ڈِسّے مِنیٹیڈ اِنٹراوا سکولر کوگولیشن	2	10	20	30	60

	• **M 16U 3 Amrāz-i-Ṣamāmāt-i-Qalb (Valvular Heart Disease) امراض صمامات قلب** 16.3.1. Amrāz Ṣamām-i-Tājī (Mitral Valve Diseases) امراض صمام تاجی 16.3.2. Amrāz Ṣamām-i-*Awṛitā (*Aortic Valve Diseases) امراض صمام اورطیٰ 16.3.3. Amrāz Ṣamām-i-Thlāthi (Tricuspid valve Diseases) امراض صمام ثلاثی 16.3.4. Amrāz Ṣamām-i-Ri'wī (Pulmonary Valve Diseases) امراض صمام ریوی 16.3.5. Ṣamām-i-Qalb Ṣanā'ī (Prosthetic Heart Valve) صمام قلب صناعی					
		4	20	40	60	120
		16	80	160	240	480

Paper No : 3 Moalajat (Medicine) Paper III

Semester No : 3

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-17 Amrāz-i-Nizām-i-Hazm Bālāyi (Diseases of The Upper Gastrointestinal System) امراض نظام ہضم بالائی This module consists of three units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. This module	2	10	20	30	60

	provides a comprehensive understanding of gastrointestinal anatomy, function, diseases, and the associated diagnostic and therapeutic approaches. This module also provides a comprehensive understanding of oral and esophageal disorders focusing on pathophysiology, diagnosis, treatment, and management. **• M 17U 1 Amrāz-i-Hazm ke Marīz se rujū‘ ka Zābta (Approach to the patient with gastrointestinal disease) امراض ہضم کے مریض سے رجوع کا ضابطہ** 17.1.1. Qanāt Ghizāyi ka ịtlāqi Tashrīh wa Manāfe‘ (Applied anatomy and functions of the gastrointestinal tract) قناۃ غذائی کا اطلاقی تشریح و منافع 17.1.2. Amrāz-i-Hazm ka Jāiza wa Taqsīm (Overview and classification of gastrointestinal disease) امراض ہضم کا جائزہ و تقسیم 17.1.3. Tajziya Marīz (Evaluation of the patient: history, physical examination) تجزیہ مریض 17.1.4. Bạtan Hād (Acute Abdomen) بطن حاد 17.1.5. Tashkhīs Maraz ki Taftīshāt wa Zarāye (Investigations and tools for patient evaluation; laboratory, luminal contents, endoscopy, radiography/nuclear medicine, histopathology, functional testing. تشخیص مرض کی تفتیشات و ذرائع 17.1.6. Amrāz-i-Hazm ka Uṣul-i-Ilāj (Principles of treatment of gastrointestinal disease) امراض ہضم کا اصول علاج **• M 17U 2 Amrāz-i-Fam (Diseases of Mouth) امراض فم** 17.2.1. Izm-i-Lisān (Macroglossia) عظم لسان 17.2.2. Warm-i-Lisān (Glossitis) ورم لسان 17.2.3. Hurqat-i-Lisān (Burning Mouth Syndrome) حرقت لسان 17.2.4. Qulā‘ wa Qurūh-i-Khabīsa (Aphthous Ulcers) قلاع و قروح خبیثہ 17.2.5. Bakhr (Halitosis) بخر					

	17.2.6. Busūr-i-Fam (Candidiasis) بثورِفم 17.2.7. Saṛtān-i-Fam (Oral Cancer) سرطانِ فم **• M 17U 3 Amrāz-i-Marī (Diseases of Oesophagus) امراضِ مری** 17.3.1. 'Usr al-Bal' (Dysphagia) عسرالبلع 17.3.2. Waram-i-Marī (Oesophagitis) ورمِ مری 17.3.3. Taqahqur Mi'dī Marī (Gastro-Oesophageal Reflux Disease) تقہقرِ معدی مری 17.3.4. Fataq-i-Furjavi (Hiatus Hernia) فتقِ فرجوی 17.3.5 Istirkhā' al-Marī, Intebāq al-Marī (Motility disorders of the esophagus, Diffuse oesophageal spasm) استرخاءِ مری، انتباقِ مری					
	M-18 Amrāz-i-Mi'da wa Am'ā' (Diseases of Stomach and Intestine) امراضِ معدہ و امعاء This module consists of three units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. This module explores the study of various diseases of the stomach viz. Sū'-i-Mizāj-i-Mi'da, Ḍu'f al-Shahwa (Decreased Appetitie) Bṭlān al-Shahwa (Loss of Appetite), Functional Upper Gastrointestinal disorders etc. and diseases of small intestine viz. Dharab-o-Khilfa, and Disorders of Absorption etc. **• M 18U 1 Amrāz-i-Mi'da-01 (Diseases of Stomach-01) امراضِ معدہ ا** 18.1.1. Sū'-i-Mizāj-i-Mi'da (morbid temperament of Stomach) سوءِ مزاجِ معدہ 18.1.2. Ḍu'f al-Shahwa (Decreased Appetitie) ضعف الشھوۃ, Bṭlān al-Shahwa (Loss of Appetite) بطلان الشھوۃ, Fasād al-Shahwa (Impaired Appetite) فساد الشھوۃ 18.1.3. Ḍu'f al-Haḍm (Delayed digestion) ضعف الھضم, Sū'al-Haḍm (Dyspepsia) سوءِ الھضم, Al-Tukhma (Indigestion) التخمۃ 18.1.4. Aṭash Mufṛiṭ (Polydipsia) عطشِ مفرط	2	10	20	30	60

	18.1.5. Waja‘ al-Fuwād (Cardalgia) وجع الفواد Waja‘ al-Mi‘da (Gastralgia) وجع المعدۃ 18.1.6. Ḥurqat-i-Mi‘da (Burning sensation of stomach) حرقت معدہ 18.1.7. Kathrat-i-Jushā’ (Excessive belching) کثرت جشاء ، Fuwāq (Hiccup) فواق 18.1.8.Qay’ (Vomiting) قیء, Al-Tahawwu (Retching) التھوع,Al-Ghathayān (Nausea) الغثیان 18.1.9. Qay’ al-Dam ((Hematemesis/Upper GI bleeding) قیءالدم **• M 18U 2 Amrāz-i-Mi‘da-02 (Diseases of Stomach-02) امراض معدہ ۲** 18.2.1. Waram-i-Mi‘da ma Aqsām (Gastritis; Acute/Chronic/Atrophic) ورم معدہ مع اقسام 18.2.2. Qurūḥ-i-Mi‘da wa Isna Ashari (Ulcers of Stomach and deuodenum) قروح معدہ واثنا عشری 18.2.3. Kasrat wa Qillate Hamuzate Mi‘di (Achlorhydria/ hypochlorhydria and Zollinger–Ellison syndrome) کثرت وقلت حموضت معدی 18.2.4. Ḍu‘f al-Mi‘da (gastric debility) ضعف المعدۃ 18.2.5. Sartān-i-Mi‘da (Carcinoma of Stomach) سرطان معدہ 18.2.6. Nafsiyāti Amrāz Mi‘di (Functional Upper Gastrointestinal disorders) نفسیاتی امراض معدی 18.2.6.1. Nafsiyāti Waja‘ al-Fuwād (Functional chest pain) نفسیاتی وجع الفواد 18.2.6.2. Nafsiyāti Hurqat al-Mi‘da (Functional heartburn) نفسیاتی حرقت المعدۃ 18.2.6.3. Nafsiyāti Sū’al-Haḍm (Functional Dyspepsia) نفسیاتی سوء الہضم 18.2.6.4. Rumination syndrome رومینیشن سنڈروم 18.2.7. Insāni Mi‘wi microbiome: iski ahmiyat aur Mo‘āljāti itlāq (Human gut microbiome; its Importance and therapeutic application) انسانی معوی مائکروبایوم: اسکی اہمیت اور معالجاتی اطلاق **• M 18U 3 Amrāz-i-Am‘ā’ Daqīq (Diseases of small intestines) امراض امعاء دقیق** 18.3.1. Ishāl (Diarrhoea) اسہال 18.3.1.1. Dharab-o-Khilfa ذرب وخلفہ 18.3.1.2. Zalq al-Am‘ā’ (Lienteric diarrhoea) زلق الامعاء					

	18.3.1.3. Hayḍa (Gastroenteritis) ہیضہ 18.3.1.4. Eosinophilic gastroenteritis ایسنوفِلک ہیضہ 18.3.1.5. Ishaal Mi'dī اسہال معدی 18.3.1.6. Ishaal Mi'wī Bilā Saḥaj اسہال معوی بلا سحج 18.3.2. Amrāz Jadhb (Disorders of Absorption) امراض جذب 18.3.2.1. Coeliac disease سیلیک مرض 18.3.2.2. Tropical sprue ٹروپیکل اسپرو 18.3.2.3. Small bowel bacterial overgrowth امعاء صائم میں جرثومہ کی زیادتی 18.3.2.4. Protein-losing enteropathy پروٹین لوزینگ اینٹیروپیتھی 18.3.2.5. Lactose intolerance لیکٹوز انٹولیرینس 18.3.2.6. Food allergy حساسیت غذاء					
		4	20	40	60	120

Semester No : 4

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-19 Amrāz-i-Nizām-i-Mi'da wa Am'ā' Zerīn (Diseases of Lower Gastrointestinal System) **امراض نظام معدہ وامعاء زیریں**	2	10	20	30	60

	This module consists of three units and will be completed in 2 credits (60 National hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. This module offers an in-depth exploration of diseases affecting the lower gastrointestinal (GI) system. This module covers Zaḥīr Am‘ā’, Diqq-i-Am‘ā’ (Intestinal Tuberculosis) and Dīdān al-Am‘ā’ (worm infestations) in Unit 1; Inflammatory Bowel Disease viz. Warme Qawlon Qarhi (Ulcerative colitis) and Crohn'sdisease Intestinal Obstruction, colic and Īlā’ūs, Dhūsanṭāriyā etc. in Unit 2 and Bawāsīr (Haemorrhoids), Ḥikka al-Maq‘ad (Pruritus ani) and Shiqāq al-Maq‘ad (Anal fissure) etc. in Unit 3. **• M 19U 1 Amrāz-i-Ta‘diya wa al'iisabat bialdīdān wa Jurūḥ Iflās al-Dam (Diseases of infections, infestation, and ischaemic injury) امراض تعدیہ والایصابات بالدیدان وجروح الافلاس الدم** 19.1.1. Ta‘diya wa al'iisabat bi al-dīdān (Infections and Infestation) تعدیہ والایصابات بالدیدان 19.1.2. Zaḥīr Am‘ā’ wa Aqsām (Dysentery, Giardiasis, Amoebiasis) زحیر امعاء واقسام 19.1.3. Diqq-i-Am‘ā’ (Intestinal Tuberculosis) دق امعاء 19.1.4. Dīdān al-Am‘ā’ (worm infestations) دیدان امعاء 19.1.5. Jurūḥ Iflās al-Am‘ā’ (Ischaemic Gut Injury: Acute small bowel ischemia, Acute colonic ischemia, Acute Mesenteric Ischaemia (AMI), Chronic Mesenteric ischemia) جروح افلاس الامعاء **• M 19U 2 Amrāz-i-Iltihab, Tasaddud wa Nafsiyati Amrāz (Diseases of inflammation, obstruction, and functional disorders امراض التہاب، تسدد و نفسیاتی امراض** 19.2.1. Waram, Saḥaj wa Qurūḥ Am‘ā’ (Inflammatory Bowel Disease) ورم، سحج و قروح امعاء 19.2.1.1. Warme Qawlon Qarhi (Ulcerative colitis) ورم قولون قرحی 19.2.1.2. Crohn'sdisease کرونس ڈِسیز 19.2.2. Tasaddud-i-Am‘ā’ (Intestinal Obstruction) تسدد امعاء					

	19.2.3. Waja‘ al-Am‘ā’ (Intestinal Colic) وجع الامعاء 19.2.3.1. Maghṣ (Tenesmus/ Gripes) مغص 19.2.3.2. Īlā’ūs (severe colicky pain of small intestine) ایلاؤس 19.2.3.3. Qūlanj (Large intestinal colic) قولنج 19.2.4. Amraz Qolon Hirki (Motility Disorders of Colon) امراض قولون حرکی: Ḥād Insdād-i- Kādhib Qolon (Acute colonic pseudo-obstruction) حاد انسداد کاذب قولون 19.2.5. Dhūsanṭāriyā / Ishāl al-Dam (Bloody diarrhoea, Lower GI Bleeding, Malena) ذوسنطاریا/اسہال الدم 19.2.6. Nafsiyāti Amrāz Am‘ā’ Zeri (Functional Gastrointestinal Disorders of Lower GIT) 19.2.6.1. Irritable bowel syndrome اِرّیٹیبل بوویل سنڈروم 19.2.6.2. Nafsiyāti Qabz (Functional constipation) نفسیاتی قبض 19.2.6.3. Nafsiyāti Ishāl (Functional diarrhea) نفسیاتی اسہال 19.2.6.4. Nafsiyāti Nafakh-i-Shikam (Functional abdominal bloating/distension) نفسیاتی نفخ شکم **• M 19U 3 Amrāz-i-Maq‘ad, Zāyad A‘or wa Bāritūn (Diseases of Anorectum, Appendix and Peritoneum) امراض مقعد، زائد اعور و باریطون** 19.3.1. Constipation and Disorders of Defecation: Qabḍ قبض/ I‘tiqāl al-Baṭn اعتقال البطن/Ḥuṣr حصر/Iḥtibās al-Baṭn احتباس البطن/Iḥtibās al-Ṭabī‘a احتباس الطبیعۃ/I‘tiqāl al-Ṭabī‘a اعتقال الطبیعۃ/Imsāk al-Baṭn امساک البطن/ Ehtibās Thufl احتباس ثفل/ Hirschsprung’s disease ہرسچ پرنگس ڈسیز 19.3.2. Amrāz Mıq‘ad wa Am‘ā Mustaqīm (Anorectal Disorders) امراض مقعد وامعاء مستقیم 19.3.2.1. Bawāsīr (Haemorrhoids) بواسیر 19.3.2.2. Ḥikka al-Maq‘ad (Pruritus ani) حکۃ المقعد 19.3.2.3. Shiqāq al-Maq‘ad (Anal fissure) شقاق المقعد					

	19.3.2.4. Nawāṣīr wa Nawāṣīr Nafiza (Anorectal abscesses, and fistula in ano) نواصیرونواصیر نافذہ . 19.3.2.5. Waram al-Maq'ad (Proctitis) ورم المقعد 19.3.3. Saṛtān Am'ā (Tumours of the colon and rectum) سرطان امعاء 19.3.4. Polyps and polyposis syndromes (Familial adenomatous polyposis, Peutz–Jeghers syndrome. Diverticulosis) پولیپس اینڈ پولیپوسس سنڈروم 19.3.5. Iltihāb Zāyad al-Dūdiya (Appendicitis) التہاب الزائدہ الدودیہ 19.3.6. Waram Bāritūn (Peritonitis) ورم باریطون					
	M-20 Amrāz-i-Kabid (Diseases of Liver) امراض کبد This module consists of three units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. The module describes various diseases of the Liver and Gall bladder including Hepatitis and Hyperbilirubinemia, 'Izm-i-Kabid (Hepatomegaly) Suqūt al-Kabid (Hepatic Failure), Fatty liver diseases, Amrāz-i-Kabid Morūthi (Inherited Liver Diseases) viz.. Haemochromatosis and Wilson's disease etc. **• M 20U 1 Amrāz-i-Kabid wa Marāra ke Marīz se rujū' ka Zābta (Approach to The Patient with Liver, Biliary System, and Gallbladder Disease امراض کبد و مرارہ کے مریض سے رجوع کا ضابطہ** 20.1.1. Applied anatomy and functions of the Liver, Biliary system, and Gallbladder. کبد و مرارہ کا اطلاقی تشریح و منافع 20.1.2. Presenting problems and patient evaluation (history, physical examination) موجودہ شکایات اور مریض کا تجزیہ 20.1.3. Investigations and tools for patient evaluation: laboratory and Imaging تفتیشات و ذرائع تشخیص	2	10	20	30	60

	20.1.4. Abnormal liver function tests and management of abnormal LFTs in asymptomatic patients غیر طبعی ایل ایف ٹی اور اسکا تدارک 20.1.5. Principles of treatment of Liver and Hepatobiliary Disease: nutritional manipulation, pharmacotherapy امراض کبد و مرارہ کا اصول علاج **• M 20U 2 Waram-i-Kabid wa Yarqān Damwi (Hepatitis and Hyperbilirubinemia) ورم کبد و یرقان دموی** 20.2.1. Sū' Mizāj al-Kabid / Sū' i-Mizāj-i-Jigar (Morbid temperament of liver) سوء مزاج کبد/سوء مزاج جگر 20.2.2. Ḍu'f al-Kabid / Ḍu'f-i Jigar (Hepatic insufficiency) ضعف جگر/ ضعف الکبد 20.2.3. 'Izm-i-Kabid (Hepatomegaly) عظم کبد 20.2.4. Suqūt al-Kabid (Hepatic Failure) سقوط کبد 20.2.5. Ta'diya Kabid (Infections of the Liver) تعدیہ کبد 20.2.5.1. Waram al-Kabid / Waram-i-Jigar (Hepatitis - Viral and other forms of hepatitis) ورم جگر/ ورم الکب 20.2.5.2. Dubayla al-Kabid / Dubayla'-i-Jigar (Amoebic and Pyogenic Liver abscess) دبیلہ جگر / دبیلۃ الکبد / 20.2.5.3. Hydatid cysts ہائڈیٹڈ سسٹ 20.2.6. Khud Manā'ti Amrāz-i-Jigar (Autoimmune Liver and Biliary Disease): Khud Manā'ti Waram Jigar (Autoimmune Hepatitis) خود مناعتی ورم جگر,Talayyuf al-Kabid Ibtidāyī (Primary Biliary Cirrhosis) تلیّف الکبد ابتدائی 20.2.7. Maraz-i-Kabid Khumri (Alcoholic Liver Disease) مرض کبد خمری 20.2.8. Tasḥaḥum-i-Kabid (Fatty Liver Disease) تشحم الکبد					

	20.2.81.1 Ghayr Khumri Tasḥaḥum-i-Kabid (Non-Alcoholic Fatty Liver Disease (NAFLD) غیرخمری تشحم الکبد 20.2.8.2. Istiḥālāti Tasḥaḥum-i-Kabid (Metabolic-associated fatty liver diseases (MAFLD) استحالاتی تشحم الکبد. 20.2.9. Yarqān (Jaundice) یرقان (Pre-hepatic jaundice, Hepatocellular jaundice, Obstructive (cholestatic) jaundice) 20.2.10. Amrāz Dimāgh Kabadi (Hepatic encephalopathy) امراض دماغ کبدی **• M 20U 3 Amrāz-i-Mawrūsi, Talayyif, Sal'āt wa Urūq-i-Kabid (Inherited Diseases, Cirrhosis, Tumors, and Diseases of Vessels of The Liver) امراض موروثی، تلیف، سلعات وعروق کبد** 20.3.1. Amrāz-i-Kabid Morūthi (Inherited Liver Diseases) امراض کبد موروثی 20.3.1.1. Haemochromatosis ہیموکرومیٹوسس 20.3.1.2. Hereditary haemochromatosis ہیموکرومیٹوسس موروثی 20.3.1.3. Wilson's disease ولسنز ڈیز 20.3.1.4. Alpha1-antitrypsin deficiency قلت الفاا اینٹی ٹرپسن 20.3.1.5. Gilbert's syndrome گلبرٹ سنڈروم 20.3.2. Talayyuf al-Kabid (Cirrhosis of liver) تلیف الکبد 20.3.3. Sal'āt-i-Kabid (Liver Tumours) سلعات کبد 20.3.3.1. Saraṭān Khalayyat Kabid (Hepatocellular carcinoma) سرطان خلیات کبدی 20.3.3.2. Saraṭān Qanat-i-Ṣafrāwiya Cholangiocarcinoma سرطان قناۃ صفراویہ 20.3.4. Amrāz-i-Urūqi Kabdi (Diseases of vessels of the Liver) امراض عروق کبدی 20.3.4.1. Budd–Chiari syndrome بڈچیری سنڈروم 20.3.4.2. Portal hypertension پورٹل ہائپرٹینشن 20.3.4.3. Portal vein thrombosis تخثر ورید الکبد					

	20.3.4.4. Istisqā' Ziqqī (Ascitis) استسقاء زقی 20.3.5. Jurūḥ al Kabid Dawāyi (Drug-induced liver injury) جروح الکبد دوائی					
		4	20	40	60	120
Semester No : 5						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
	M-21 Amrāz-i-Qanāt-i-Ṣafrā, Banqrās wa Ṭiḥāl (Diseases of the Biliary Tract, Pancreas and Spleen) امراض قناۃ صفراء، بانقراس وطحال This module consists of three units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. The module describes various Diseases of the Biliary Tract, Pancreas and Spleen viz. Cholestatic and Biliary Disease (Caroli's disease, Congenital hepatic fibrosis, Choledochal cysts, Secondary biliary cirrhosis), Tumors of the Gallbladder and Bile Duct and Other Biliary Diseases, Acute and Chronic pancreatitis, Tumours of pancreas, Waram-i-Ṭiḥāl etc. **• M 21U 1 Jumūd al-Ṣafrā wa Amrāz-i-Ṣafrāwiyya (Cholestatic and Biliary Disease) جمود الصفراء وامراض صفراویہ** 21.1.1. Dākhil al-Kabid Amrāz Ṣafrāwiya (Intrahepatic biliary disease) داخل الکبد امراض صفراویہ	2	10	20	30	60

	21.1.1.1. Iltihābi wa Manā'ti Maraz (Inflammatory and immune disease) التہابی ومناعتی مرض 21.1.1.2. Caroli's disease کیرولیز ڈِسیز 21.1.1.3. Congenital hepatic fibrosis خلقی کبدی فائبروسِس 21.1.1.4. Cystic fibrosis سِسٹک فائبروسِس 21.1.2. Khārij al-Kabid Amrāz Ṣafrāwiya (Extrahepatic biliary disease) خارج الکبد امراض صفراویہ 21.1.2.1.Choledochal cysts کولیڈوکل سِسٹ 21.1.2.2. Secondary biliary cirrhosis تلیف صفراوی ثانوی 21.1.2.3.Hisātul Marāra (Cholelithiasis/ Gallstones) حصاۃ المرارہ 21.1.2.4.Choledocholithiasis کولیڈوکولیتھیسِس 21.1.2.5. Recurrent pyogenic cholangitis ورم صفراوی صدیدی متکرر 21.1.3. Warm-i-Marāra (Cholecystitis) ورم مرارہ 21.1.3.1. Acute cholecystitis ورم مرارہ حاد 21.1.3.2. Chronic cholecystitis ورم مرارہ مزمن 21.1.3.3. Acute cholangitis ورم مجاری صفراویہ **• M 21U 2 Sal'āt Marara wa Qanāt-i-Ṣafrā wa Digar Amrāz-i-Ṣafrāwiyya (Tumors of the Gallbladder and Bile Duct and Other Biliary Diseases) سلعات مرارہ وقناۃ صفراء ودیگر امراض صفراویہ** 21.2.1. Sal'āt Marāra wa Majāri Ṣafrā (Tumors of the Gallbladder and Bile Duct) سلعات مرارۃ و مجاری صفراء 21.2.1.1. Sartān Marāra (Carcinoma of the gallbladder) سرطان مرارۃ 21.2.1.2. Sartān Majāri Ṣafrā (Cholangiocarcinoma) سرطان مجاری صفراء 21.2.1.3. Carcinoma at the ampulla of Vater سرطان ایمپولا آف ویٹر 21.2.2. Dīgar Amrāz Ṣafrāwiya (Other Biliary Diseases) دیگر امراض صفراویہ 21.2.2.1. Post-cholecystectomy syndrome					

	21.2.2.2. Sphincter of Oddi dysfunction 21.2.2.3. Cholesterolosis of the gallbladder 21.2.2.4. IgG4-associated cholangitis. 21.2.3. Pregnancy-Associated Liver Disease 21.2.3.1. Acute cholestasis of pregnancy, 21.2.3.2. Toxemia of pregnancy and HELLP **• M 21U 3 Amrāz-i-Banqrās wa Ṭiḥāl (Diseases of the Pancreas and Spleen) امراض بانقراس وطحال** 21.3.1. Amrāz Bānqarās (Diseases of Pancreas) امراض بانقراس 21.3.1.1. Waram-i-Bānqarās (Acute pancreatitis, Chronic pancreatitis, Autoimmune pancreatitis) ورم بانقراس 21.3.1.2. Cystic fibrosis سسٹک فائبروسس 21.3.1.3. Sartān-i-Bānqarās (Tumours of the pancreas, Pancreatic neuroendocrine tumors) سرطان بانقراس 21.3.2. Amrāz-i-Ṭiḥāl (Diseases of Spleen) امراض طحال 21.3.2.1. Sū' Mizāj al-Ṭiḥāl (Morbid temperament of Spleen) سوء مزاج الطحال 21.3.2.2. Waja' al-Ṭiḥāl (Pain of Spleen) وجع الطحال 21.3.2.3. Waram-i-Ṭiḥāl (Inflammation of spleen) ورم طحال 21.3.2.4. Ṣalābat Ṭiḥāl (Stiffness of Spleen) صلابت طحال 21.3.2.5. Ḍu'f al-Ṭiḥāl (Debility of Spleen) ضعف الطحال 21.3.2.6. 'Iẓam al-Ṭiḥāl (Splenomegaly) عظم الطحال 21.3.2.7. Sudad al-Ṭiḥāl (Obstruction within Spleen) سدد الطحال					
	M-22 Amrāz-i-Kulya (Diseases of The Kidney) امراض کلیہ	2	10	20	30	60

	This module consists of three units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. This module provides basic introduction to applied anatomy and physiology and approach to the patient. The diseases covered in this module include Ḍu'f -i-Kulya (Renal insufficiency), Huzāl al-Kulya (Renal atrophy), Bawl fi'l Farāsh (Nocturia/ Bed wetting), Salas al-Bawl (Urinary incontinence), Suqūṭ-i-Kulya, Acute and Chronic interstitial nephritis etc. **• M 22U 1 Amrāz-i-Kulya wa Nizam-i-Bawl ke Marīz se rujū' ka Zābta (Approach to the patient with Diseases of the Kidney and Urinary System) امراض کلیہ ونظام بول کے مریض سے رجوع کا ضابطہ** 22.1.1. Applied anatomy and functions of Kidney and Urinary System 22.1.2. Presenting problems and patient evaluation (history, physical examination). 22.1.3. Investigations and tools for patient evaluation; laboratory and Imaging. 22.1.4. Principles of treatment of Kidney and Urinary System: nutritional manipulation, pharmacotherapy **• M 22U 2 Amrāz-i-Kulya-01:Glomerular Amrāz (Diseases of Kidney-01:Glomerular Diseases) امراض کلیہ ا: گلومیرولر امراض** 22.2.1. Sū'-i-Mizāj Kulya (Morbid temperament of Kidney) سوءمزاج کلیہ 22.2.2. Ḍu'f -i-Kulya (Renal insufficiency / Renal debility) ضعف کلیہ 22.2.3. Huzāl al-Kulya / Ḍumūr al-Kulya (Renal atrophy) اھزال الکلیہ ضمور الکلیہ 22.2.4. 'Usr al-Bawl (Dysuria) عسر البول 22.2.5. Waja' al-Kulya (Loin pain) وجع الکلیہ 22.2.6. Qillat al-Bawl (Oliguria/ Anuria) قلت البول 22.2.7. Kathrat al-Bawl (Polyuria) کثرت البول 22.2.8. Bawl fi'l Farāsh (Nocturia/ Bed wetting) بول فی الفراش					

	22.2.9. Salas al-Bawl (Urinary incontinence) سلسل البول 22.2.10. Bawl al-Dam (Haematuria) بول الدم 22.2.11. Suqūṭ-i-Kulya Ḥād (Acute Kidney Injury) سقوط کلیہ حاد 22.2.12. Suqūṭ-i-Kulya Muzmin (Chronic Kidney Disease) سقوط کلیہ مزمن **• M 22U 3 Amrāz-i-Kulya-02:Glomerular Amrāz (Diseases of Kidney-02:Glomerular Diseases) امراض کلیہ ۲: گلومیرولر امراض** 22.3.1. Waram al-Kulya wa Aqsām (Glomerulonephritis and its types) ورم کلیہ واقسام 22.3.2. Inherited Glomerular Diseases مرض گلومیرولس موروثی 22.3.3. Alport's syndrome الپورٹس سنڈروم 22.3.4. Thin glomerular basement membrane disease تھن گلومیرولر بیسمینٹ میمبرین ڈِزیز 22.3.5. Tubulointerstitial Diseases ٹیوبیولوانٹر سٹیشیل ڈزیز 22.3.6. Acute interstitial nephritis انٹر سٹیشیل نیفرائٹس حاد 22.3.7. Chronic interstitial nephritis انٹر سٹیشیل نیفرائٹس مزمن 22.3.8. Reflux nephropathy ریفلکس نیفروپیتھی 22.3.9. Renal papillary necrosis رینل پیپلّری نیکروسس					
		4	20	40	60	120

Semester No : 6

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning	2G Total

					including Modular Assessment	
	M-23 Amrāz-i-Kulya wa Majārī-i-Bawl (Diseases ofthe Kidney and Urinary Tract) امراض کلیہ و مجری بول This module consists of three units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. This module includes three interconnected units that cover renal and urological diseases. The topics covered include Cystic and Renal Vascular Diseases, polycystic kidney disease (PKD) and hypertensive nephropathy; Collecting System Diseases and UTIs; Kidney Stones, Prostate and Urethra Diseases, and Tumors. **• M 23U 1 Cystic disease wa Amraz Kulya Uruqi (Cystic diseases and Renal Vascular Diseases) سسٹک ڈزیز و امراض کلیہ عروقی** 23.1.1. Jarab al-Kulya (Renal irritability) جرب الکلیہ 23.1.2. Polycystic kidney disease پالی سسٹک مرض کلیہ 23.1.3. Medullary sponge kidney disease میڈلری اسپنج مرض کلیہ 23.1.4. Medullary cystic kidney disease میڈلری سسٹک مرض کلیہ 23.1.5. Amrāz ‘Urūq Kulya (Renal Vascular Diseases) امراض عروق کلیہ 23.1.5.1. Tazayyuq ‘Urūq Kulya (Renal artery stenosis) تضیق عروق کلیہ 23.1.5.2. Tanakhkhur Kulya Ḥād (Acute renal infarction) تنخر کلیہ حاد 23.1.5.3. Amrāz Dākhil al-Kulya Shiryān-i-Ṣaghīra (Diseases of small intrarenal vessels -- Haemolytic uraemic syndrome, Thrombotic thrombocytopenic purpura, Disseminated intravascular coagulation, Systemic sclerosis, Cholesterol emboli, Small-vessel vasculitis) امراض داخل الکلیہ شریان صغیرہ	2	10	20	30	60

	• M 23U 2 Amrāz Nizām Tajmī‘ wa Ta‘diya Majra-i-Bawl (Diseases of the Collecting System and Urinary Tract Infection) امراض نظام تجمیع وتعدیہ مجری بول 23.2.1. Takhlīqi Naqāiṣ (Congenital abnormalities-Single kidneys, Ureterocele, Ectopic ureters and duplex kidneys, Obstructive megaureter) تخلیقی نقائص 23.2.2. Pelvic-ureteric junction obstruction 23.2.3. Retroperitoneal fibrosis ریٹروپیریٹونیل فائبروسس 23.2.4. Diabetic nephropathy 23.2.5. Amrāz-i-Kulya Basabab Adviya (Drug-induced renal diseases) امراض کلیہ بسبب ادویہ 23.2.6.Ta‘diya Majra-i-Bawl (Urinary tract infection) تعدیہ مجریٰ بول 23.2.7. Waram-i-Hauzul Kulya (pyelonephritis) مجریٰ حوض الکلیہ 23.2.8. Diqul Kuliya wa Quruhul Kuliya (Tuberculosis of the kidney) دق الکلیہ وقروح الکلیہ **• M 23U 3 Hisāt Kulya wa Amrāz Ghudda-i-Mazī w Majra-i-Bawl wa Sal‘āt (Renal Calculi and Diseases of the Prostate and Urethra and Tumours حصاۃ کلیہ وامراض غدہ مذی ومجری بول وسلعات** 23.3.1 Ḥaṣāt al-Mathāna wa Kulya (Stone of the Urinary Tract) حصاۃ المثانہ وکلیہ 23.3.2. Waram al-Mathāna (Cystitis) ورم المثانہ 23.3.3. Ḍu‘f al-Mathāna (Insufficiency of Urinary bladder) ضعف المثانہ 23.3.4. Istirkhā’ wa Khal‘ al-Mathāna (atonia of urinary bladder) استرخاوخلع المثانہ 23.3.5. ‘Iẓm Ghudda Mazī Salīma (Benign Prostatic Enlargement) عظم غدہ مذی سلیمہ 23.3.6. Waram-i-Ghudda Mazī (Prostatitis) ورم غدہ مذی 23.3.7. Waram al-Qaḍīb (Inflammation of penis) ورم القضیب 23.3.8. Sudda Majārī al-Qaḍīb (obstruction of penile urethra) سدۃ مجاری القضیب 23.3.9. Sal‘āt Kulya wa Majra-i-Bawl (Tumors of The Kidney and Urinary Tract) سلعات کلیہ ومجریٰ بول					

	23.3.10. Sarṭan Kulya (Renal adenocarcinoma) سرطان کلیہ 23.3.11. Sal'āt Masālik Bauliya (Urothelial tumors) سلعہ مسالک بولیہ 23.3.12. Sarṭan Ghudda Mazī (Prostate cancer) سرطان غدہ مذی 23.3.13. Sal'āt Khuṣṣiya (Tumors of the testes) سلعات خصیہ					
	M-24 Amrāz-i-Nizām-i-Tawlīd wa Istiḥāla (Diseases of The Reproductive System and Metabolism) امراض نظام تولید واستحالہ This module consists of three units and will be completed in 2 credits (60 Notional hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. The module describes various Diseases of Reproductive System and Metabolism; the topics covered include Ḍu'f al-Bāh wa Shahwa (Deceased Desire/ Libido), Kathra al-Shahwa (Increased Desire/ Libido), Disorders Erection and Orgasm. This modudle also covers disorders of Amino Acid Metabolism Carbohydrate Metabolism, disorders of Blood Lipids and Lipoproteins; Dyslipidaemia, disorders of Haem Synthesis and Metabolic Syndrome etc. **• M 24U 1 Amrāz-i-Bāh wa Nizām Taulīd ke Marīz se rujū' ka Zābta (Approach to the patient with Diseases of the Reproductive System and Sexual Disorders) امراض باہ و نظام تولید کے مریض سے رجوع کا ضابطہ** 24.1.1. Applied anatomy and functions of the Reproductive System اطلاقی تشرح و منافع نظام تولید 24.1.2. Manifestations and evaluation of patients of the Reproductive System نظام تولید کے ظواہر و تجزیہ مریض 24.1.3. Diagnosis of a Sexual Disorder (Parameters of The Reported Sexual Dysfunction) Examination and Investigations. امراض باہ کی تشخیص 24.1.4. Principles of treatment of Reproductive System امراض نظام تولید کا اصول علاج	2	10	20	30	60

	• **M 24U 2 Amrāz-i-Bāh wa Amrāz Nizām Taulīd (Sexual Disorder and Diseases of the Reproductive System) امراض باہ وامراض نظام تولید** 24.2.1. Amrāz-i-Bāh (Sexual Disorders) امراض باہ 24.2.1.1. Ḍu'f al-Bāh wa Shahwa (Deceased Desire/ Libido) ضعف الباہ والشہوۃ 24.2.1.2. Kathra al-Shahwa (Increased Desire/ Libido) کثرۃ الشہوۃ 24.2.2. Amrāz-i-Na'ūz (Disorders of Erection) امراض نعوظ 24.2.2.1. Nuqsān wa Butlāne Na'ūz (Decreased or absence of erection) نقصان وبطلان نعوظ 24.2.2.2. Istirkhā' al-Qaḍīb (Penile flaccidity / incomplete erection of penis) استرخاء قضیب 24.2.2.3. Farīsmūs (Priapism) فریسموس 24.2.2.4. I'wijāj al-Qaḍīb (Chordee) اعوجاج القضیب 24.2.3. Disorders of Orgasm امراض لذت شہویہ 24.2.3.1. Classification of Orgasmic Disorders تقسیم امراض لذت شہویہ 24.2.3.2. Sur'a al-Inzāl (Early Orgasmic Response/ Premature ejaculation) سرعۃ الانزال 24.2.3.3. Delayed Orgasmic Response (DOR) لذت شہویہ کا سست ردعمل 24.2.3.4. Impaired Orgasmic Response (IOR) لذت شہویہ کا ناقص ردعمل 24.2.3.5. Absent Orgasmic Response (AOR) لذت شہویہ کا مفقود ردعمل 24.2.4. Qilla al-Manī (Decreased quantity of semen) قلۃ المنی 24.2.5. Sailan-I-Manī wa Mazī (Discharge of Seminal fluid) سیلان منی ومذی 24.2.6. Kathra al-Iḥtilām (Increased nocturnal emission) کثرت احتلام 24.2.7. Adhyūṭ / 'Adhīṭa (involuntary passage of stool during coitus) عزیطہ/اعزیوط 24.2.8. 'Āqūnā / Ikhtilāj Tanāsulī (Penile tremors) اختلاج تناسلی /عقونا 24.2.9. Waram al-Khuṣyatayn (Orchitis) ورم الخصیتین 24.2.10. 'Ānaniyat (Male Infertility) عنانیت					

	• **M 24U 3 Amrāz-i-Istiḥala (Diseases of Metabolism) امراض استحالہ** 24.3.1. Istiḥāla ka buniyādi Jāyza (Basic Considerations of Metabolism) استحالہ کا بنیادی جائزہ 24.3.2. Amrāz-i-Istiḥala Amino Acid: Phenyketonuria, Homocystinuria (Disorders of Amino Acid Metabolism: Phenylketonuria, Homocystinuria) امراض استحالہ امینو ایسڈ: فینائل کیٹونوریا، ہوموسسٹینوریا 24.3.3. Disorders of Carbohydrate Metabolism; Inborn Errors of Galactose Metabolism (Galactosaemia), Glycogen storage diseases. امراض استحالہ کاربوہائڈریٹ 24.3.4. Disorders of Blood Lipids and Lipoproteins; Dyslipidaemia امراض شحم الدم ولائپوپروٹین 24.3.5. Disorders of Purine Metabolism; Hyperuricaemia and Gout امراض استحالہ پیورین: افراط حامض بول دموی ونقرس 24.3.6. Disorders of Haem Synthesis: The Porphyrias امراض تولید ہیم 24.3.7. Iron Metabolism and Iron Overload Syndrome; Hereditary Haemochromatosis استحالہ فولاد ومتلازمہ زائد فولاد 24.3.8. Wilson's Disease وِلسنس ڈزیز 24.3.9. Lysosomal Storage Disorders لائسوزومل اٹوریج امراض 24.3.10. Amyloidosis امائلوئڈوسِس 24.3.11. Disorders of Adipose Tissue and Obesity نسیج شحمی کے امراض وسمن مفرط 24.3.12. Metabolic Syndrome میٹابولک سنڈروم					
		4	20	40	60	120
		16	80	160	240	480
Paper No : 4 Moalajat (Medicine) Paper IV						
Semester No : 3						

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-25 Amrāz-i-Mut'diyah (Infectious diseases)امراض متعدیہ This module consists of two units and will be completed in 2 credits (60 National hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. The module on Amrāze-i-Muta'ddiyah (Infectious Diseases) provides an in-depth understanding of infectious diseases, particularly from the perspective of Unani medicine. This module emphasizes the concept of Manā'at (immunity or resistance) and Ta'diya (contagion or transmission), detailing how the body's natural defense mechanisms play a critical role in disease prevention and control. This module also covers Amrāz-i-Ghayr Mudawwana (Undescribed diseases) including Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS), Ebola, Avian Flu, Swine Flu and COVID-19 etc. **• M 25U 1 Mana'at wa Ta'diya (Immunity and Infection) مناعت وتعدیہ** 25.1.1. Manā'at and Ta'diyā مناعت وتعدیہ 25.1.2. Muta'ddi Amrāz ke Ilāj men Manā'at ki Ahmiyat Importance of Manā'at in the treatment of infectious diseases متعدی امراض کے علاج میں مناعت کی اہمیت 25.1.3. Micro-organism and host interaction	2	10	20	30	60

	25.1.4. Amrāz-i-Muta'ddi ka Uṣul Ilāj (Principles of management of infectious disease) امراض متعدی کا اصول علاج **• M 25U 2 Naye Ubharte hue Amrāz-i-Muta'ddiya (Emerging infectious diseases) نئے ابھرتے ہوئے امراض متعدیہ** 25.2.1. T'āruf Amrāz-i-Ghayr Mudawwana (Inroduction of Undescribed Diseases) تعارف امراض غیر مدونہ 25.2.2. Mutalāzima Tanaffus Hād Shadīd (Severe Acute Respiratory Syndrome) متلازمہ تنفس حاد شدید 25.2.3. Mutalāzima Tanaffus Mashriq Wuṣta (Middle East Respiratory Syndrome-MERS) متلازمہ تنفس مشرق وسطیٰ 25.2.4. Ebola اِبولا 25.2.5. Avian Flu ایوین فلو 25.2.6. Zika Virus Disease مرض زیکا ویروسی 25.2.7. Swine Flu سوائن فلو 25.2.8. COVID-19 کووڈ ۱۹					
	M-26 Amrāz-i-Jarāsīm wa Vairūsī (Bacterial and Viral Diseases) امراض جراثیم و ویروسی This module consists of two units and will be completed in 2 credits (60 National hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. The module on Bacterial and Viral Diseases integrates conventional understanding of microbial diseases with the principles of Unani medicine. The module explores bacterial diseases viz. Hummae Hudariya (Rheumatic fever), Hummae me'vi (Typhoid Fever /Enteric Fever), Juzam (Leprosy /Hansen Disease) and Viral diseases viz. Hummae Danaj (Dengue fever), Chikungunya Fever, Japanese Encephalitis etc. This module also deals	2	10	20	30	60

	with their transmission and treatment strategies and role of vaccines. This module emphasises immune modulation techniques to support the body's natural healing processes through Unani medicine with an integrative approache. **• M 26U 1 Jarāsīmi Amrāz (Bacterial diseases) جراثیمی امراض** 26.1.1. Ḥummā-i-Ḥudāriya (Rheumatic fever) حمیٰ حدار یہ 26.1.2. Ṭā'ūn (Plague) طاعون 26.1.3. Ḥummā-i-Mi'wī (Typhoid Fever /Enteric Fever) حمیٰ معوی 26.1.4. Kuzāz (Tetanus) کزاز 26.1.5. Juzām (Leprosy /Hansen Disease) جزام 26.1.6. Ātshak (Syphilis) آتشک **• M 26U 2 Vairūsī Amrāz (Viral diseases) ویروسی امراض** 26.2.1. Ḥummā-i-Danaj (Dengue fever) حمیٰ دنج 26.2.2. Waram Aṣl al-Udhun (Mumps / Parotitis) ورم اصل الاذن 26.2.3. Fālij-i-Atfāl (Poliomyelitis) فالج اطفال 26.2.4. Chikungunya Fever حمیٰ چکنگنیا 26.2.5. Japanese Encephalitis جاپانی ورم دماغ 26.2.6. Dā' al-Kalb (Rabies) داء الکلب 26.2.7. AIDS علت قلت مناعت مکسوبی					
		4	20	40	60	120
Semester No : 4						
2A	**2B** **Modules & units**	**2C**	**Notional Learning hours**			
			2D	**2E**	**2F**	**2G**

Module Number		Number of Credits	Lectures	Practical Training	Experiential Learning including Modular Assessment	Total
	M-27 Dīgar Amrāz-i-Mut'ddiya (Other infectious diseases) دیگرامراض متعدیہ This module consists of two units and will be completed in 2 credits (60 National hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. This module offers a comprehensive understanding of basic and related diagnostic techniques and their application in detecting and managing infectious diseases. It covers molecular and serological methods such as RT-PCR, Nested PCR, Immunofluorescence, ELISA, and specific diagnostic tests like Monospot, Malaria Antigen Spot Test, Typhi Dot, and Tubex Test. Emphasis is placed on culture techniques for blood, urine, stool, and bone marrow, alongside procedures like Lumbar Puncture. The module explores nosocomial infections and major parasitic and bacterial diseases, including Kāla Azār (Leishmaniasis), Dā' al-Fīl (Filariasis), Hydatid Disease, and Suzāk (Gonorrhoea), The unit also explores Unani therapeutic strategies utilizing modern advancements for the preventive measures and their community health implications. **• M 27U 1 Buniyādi mut'allaqa Taftīshāt (Basic Related Investigations) بنیادی متعلقہ تفتیشات** 27.1.1. RT PCR 27.1.2. Nested PCR 27.1.3. Immunofluorescence and ELISA 27.1.4. Monospot test 27.1.5. Malaria antigen Spot test	2	10	20	30	60

	27.1.6. Direct Agglutination Test 27.1.7. Blood Culture 27.1.8. Bone Marrow Culture 27.1.9. Typhi dot / Typhi dot M 27.1.10. Tubex test 27.1.11. Urine Culture 27.1.12. Stool Culture 27.1.13. Lumbar Puncture **• M 27U 2 Mustashfawi wa Dīgar Amrāz Muta'ddiya (Nosocomial and other infectious diseases) مستشفوی ودیگر امراض متعدیہ** 27.2.1. Mustashfawī Ta'diya (Nosocomial infections) مستشفوی تعدیہ 27.2.2. Kāla Azār (Lieshminiasis) کالاازار 27.2.3. Dā' al-Fīl (Filariasis) داءالفیل 27.2.4. Hydatid Disease ہائڈیٹڈ دیسیز 27.2.5. Suzāk (Gonorrhoea) سوزاک					
	M-28 Ḥummayāt (Fevers) حمیات This module consists of two units and will be completed in 2 credits (60 National hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. This module provides an in-depth study and the Unani understanding and management of "Ḥummā" (the fever), covering its different types and treatment approaches as well as specific classifications of fevers and focusing on humoral balance and the application of various therapeutic interventions. It explores the general principles of treating fever (Hummiyate Ufoonia), including dietary guidelines (Aḥkām-i-Ghiza) and therapeutic strategies for	2	10	20	30	60

	various fever types such as Pyrexia of Unknown Origin, Ḥummā-i-Wabā'ī, Ḥummā-i-Damawi, Ḥummā-i-Ṣafrāwī, Ḥummā-i-Balghami and Ḥummā-i- Sawdāwī. The module also addresses chronic fevers (Ḥummā-i-Diq) and provides insights into their prevention and holistic treatment using Unani principles. **• M 28U 1 Ḥummayāt ka Umūmi Taṣawwur (General considerations of Fevers) حمیات کا عمومی تصور** 28.1.1. Ta'rīf-i-Ḥummā (Introduction of Fever) تعریف حمیٰ 28.1.2. Ḥummā 'Ufūniyya ka 'Ām Uṣūle Ilāj (General Principles of treatment of infective fever) حمیٰ عفونیہ کا عام اصول علاج 28.1.3. Awāriḍ-wa-Tadāruk عوارض کا تدارک 28.1.4. Aḥkāmāt-i-Ghidhā' احکامات غذاء 28.1.5. Ḥummā Shamsiyya (Sun Stroke) حمیٰ شمسیہ 28.1.6. Pyrexia of unknown origin 28.1.7. Ḥummā Wabā'iyya (Epidemic Fever) حمیٰ وبائیہ **• M 28U 2 Ḥummā 'Ufūniyya (Infective Fever) حمیٰ عفونیہ** 28.2.1. Ḥummā Damawī/ Ḥummā Muṭbiqa (Sanguineous Fever) حمیٰ دموی/حمیٰ مطبقہ 28.2.2. Ḥummā Ṣafrāwī/ Ḥummā Ghibb (Bilious Fever) حمیٰ صفراوی/ حمیٰ غب 28.2.2.1. Ḥummā Ghibb Dā'ira (Bilious intermittent Fever) حمیٰ غب دائرہ 28.2.2.2. Ḥummā Ghibb Lāzima (Bilious continuous Fever) حمیٰ غب لازمہ 28.2.2.3. Ḥummā Ghibb Muḥarriqa (High grade bilious fever) حمیٰ غب محرقہ 28.2.3. Ḥummā Balghamī (Phlegmatic Fever) حمیٰ بلغمی 28.2.3.1. Ḥummā Lathiqa (Phlegmatic continuous Fever) حمیٰ لثقہ 28.2.3.2. Ḥummā Muwāẓiba (Phlegmatic intermittent Fever) حمیٰ مواظبہ					

	28.2.4. Ḥummā Sawdāwī (Melancholic Fever) حمیٰ سوداوی 28.2.4.1. Ḥummā Rib‘ Dā’ira (Melancholic intermittent Fever) حمیٰ ربع دائرہ 28.2.4.2. Ḥummā Rib‘ Lāzima (Melancholic continuous Fever) حمیٰ ربع لازمہ 28.2.5. Ḥummā-i-Diqq (Tuberculous Fever/ Hectic Fever) حمیٰ دق					
		4	20	40	60	120
Semester No : 5						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
	M-29 Amrāz-i-Jild 1 (Skin Diseases -1) امراض جلد ا This module consists of two units and will be completed in 2 credits (60 National hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. This module will explore about Diagnostic approach and Principles of Treatment. It will also describe the disease of nails.This module focuses on the examination and diagnosis of skin diseases (Amrāz-i-Jild) and related disorders of pigmentation, nails, and hair. Students will learn to perform comprehensive skin examinations, identify key diagnostic features, and apply Unani principles in treatment approaches. This modules covers Fasād-i-Lawn (Diseases of Pigmentation) viz. Barṣ (Vitiligo), Kalaf (Melasma/Cholasma), Barsh (Freckles)	2	10	20	30	60

	etc.; Amrāz-i-Zufr (Disorders of nails) viz. Zufra-i-Talqiya (Onychomycosis), Iltihāb-i-Azfār /Daakhis (Paronychia) etc.; Amrāz-i-Sha'r (Diseases of Hair) viz. Intithār al-Sha'r (Hair Fall), Sā'fa, Sal'a (Baldness), Bafā (Seborrhoea of Scalp) and Qummal (Pediculosis) etc. **• M 29U 1 Tashkīsi Nuqta Nazar wa Uṣūl-i-Ilāj (Diagnostic approach and Principles of Treatment) تشخیصی نقطہ نظر واصول علاج** 29.1.1. Jild kā Imtihān aur Amrāz Jild kā tashkhīsī Nuqta Nazar (Examination of Skin and approach to diagnose skin diseases) جلد کا امتحان اور امراض جلد کا تشخیصی نقطہ نظر 29.1.2. Amrāz Jild kā Buniyādi Uṣūl-i-Ilāj (Basic principles of treatment of skin diseases) امراض جلد کا بنیادی اصول علاج **• M 29U 2 Amrāz-i-Lawn, Zufr wa Sha'r (Disorders of Pigmentations, Nails and Hairs) امراض لون، ظفر و شعر** 29.2.1. Fasād-i-Lawn (Diseases of Pigmentation) فساد لون 29.2.1.1. Barṣ (Vitiligo) برص 29.2.1.2. Bahaq (Pityriasis) aur uski aqsām بہق اور اسکی اقسام 29.2.1.3. Kalaf (Melasma/Cholasma) کلف 29.2.1.4. Barsh (Freckles) برش 29.2.1.5. Namash (Nevus) aur uski aqsām نمش اور اسکی اقسام 29.2.2. Amrāz-i-Zufr (Disorders of nails) امراض ظفر 29.2.2.1. Zufra-i-Talqiya (Onychomycosis) ظفر طلقیہ 29.2.2.2. Iltihāb-i-Azfār /Dākhis (Paronychia) التہاب اظفار یا داخس 29.2.3. Amrāz-i-Sha'r (Diseases of Hair) امراض شعر 29.2.3.1. Intithār al-Sha'r (Hair Fall) انتثار شعر 29.2.3.2. Sā'fa, Sal'a (Baldness) سعفہ، سلع					

	29.2.3.3. Shaib (Premature Graying of Hair) شیب 29.2.3.4. Bafā (Seborrhoea of Scalp) بفاء 29.2.3.5. Qummal (Pediculosis) قمل 29.2.3.6. Piedra پیدرا					
	M-30 Amrāz-i-Jild 2 (Skin Diseases -2) امراض جلد ۲ This module consists of two units and will be completed in 2 credits (60 National hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. This module will give a brief description of different skin disorders and their Unani Uṣūl-i-Ilāj wa ilāj This module will explore comprehensive knowledge and practical skills in dermatological assessment and Unani cosmetology, enabling them to diagnose and manage various skin conditions effectively while promoting overall health and beauty. This module covers diagnosis and management of Qūbā, Dā' al-Ṣadaf, Jarb, Nārfārsi, Diqq al-Jild, Jildi Kālāzār, Sartān-i-Jild, Namlā, and SLE, applying appropriate Unani diagnostic methods and principal of treatment. **• M 30U 1 Amrāz-i-Jild (Skin Disorders) امراض جلد** 30.1.1. Qūba (Dermatophytosis /ring worm) aur uski Aqsām قوبااوراسکی اقسام 30.1.2. Dā-us-Ṣadaf (Psoriasis) داءالصدف 30.1.3. Nār Fārsi (Eczema) نارفارسی 30.1.4. Jarb (Scabies) aur uski Aqsām جرب اوراسکی اقسام 30.1.5. Buthūr-i-Labniyā (Acne) بثورلبنیہ 30.1.6. Thālīl (Warts) ثالیل 30.1.7. Sal'āt (Tumors) سلعات	2	10	20	30	60

	30.1.8. Sarạtān-i-Jild aur uski Aqsām (Melanoma, Basal Cell Carcinoma, Squamous cell carcinoma) سرطان جلد اور اسکی اقسام 30.1.9. Nizāmi Amrāz ki Jildi ‘Alamāt (Skin manifetations in systemic diseases) نظامی امراض کی جلدی علامات 30.1.10. Namlā aur uski Aqsām (Herpes and its types) نملہ اور اسکی اقسام 30.1.11. Diqq al-Jild (Tuberculosis of Skin) دق الجلد 30.1.12. Jildi Kālazār (Cutaneous Leishmaniasis) جلدی کالازار 30.1.13. Syslemic Lupus Erythematosus (SLE) سسٹمک لیوپس ایریتھروماٹوسس **• M 30U 2 Tazīniyāt (Cosmetology) تزینیات** 30.2.1. Tazīniyāt ka Umūmi Bayān (Introduction of Cosmetology) تزینیات کا عمومی بیان 30.2.2. Jild kā Taghziyā wa Taḥaffuz (Nutrition and Care of Skin Health) جلد کا تغزیہ و تحفظ 30.2.3. Chehrā aur Zīnat-i-Jild ke liye Umūmi Tadābīr چہرہ اور زینت جلد کے لئے عمومی تدابیر 30.2.4. Bālon ki Zīnat se Muta‘lliq Tadābīr بالوں کی زینت سے متعلق تدابیر					
		4	20	40	60	120

Semester No : 6

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total

	M-31 Amrāz-i-Mafāṣil (Diseases of Joints) امراض مفاصل This module consists of two units and will be completed in 2 credits (60 National hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. This Module explores common musculoskeletal diseases, their etiology, pathophysiology, clinical features, investigative methods, and Unani treatment approaches. This module covers applied anatomy, approach Niqris (Gout), Waja‘ al-Mafāṣil (Arthritis - Osteoarthritis, Rheumatoid Arthritis, Infective Arthritis, Psoriatic Arthritis) Taḥajjur-i-Mafāṣil (Stiffness of joints), Waja‘ al-Ẓahr (Backache)/ Waja‘ al-Khāṣira (Low Backache)/ Waja‘ al-Quṭn (Lumbago) etc. **• M 31U 1 Amrāz-i-Mafāsil ka Tashkīsi Nuqta Nazar (Diagnostic Approach for Amraze Mafasil) امراض مفاصل کا تشخیصی نقطہ نظر** 31.1.1. Iṭlāqi Tashrīh, Manāfi‘ al-A‘ḍā’ wa Taftīshāt (Applied Anatomy, Physiology and Investigations) اطلاقی تشریح، منافع الاعضاء و تفتیشات 31.1.2. Nizām ‘Aḍalāti wa Haikali kā Ṭibbi Imtiḥān (Clinical examination of musculoskeletal system) نظام عضلاتی و ہیکلی کا طبی امتحان 31.1.3. Amrāz ‘Aḍalāti wa Haikali kā Usūl-i-Ilāj (Principles of management of musculoskeletal disorders) امراض عضلاتی و ہیکلی کا اصول علاج 31.1.4. Amrāz ‘Aḍalāti wa Haikali ke Zawāhir Kabīra (Major manifestations of musculoskeletal diseases) امراض عضلاتی و ہیکلی کے ظواہر کبیرہ **• M 31U 2 Amrāz-i-‘Azlāti wa Haikali (Musculoskeletal Diseases) امراض عضلاتی و ہیکلی** 31.2.1. Niqris (Gout) نقرس 31.2.2. Awrām-i-Mafāṣil (Arthritis - Osteoarthritis, Rheumatoid Arthritis, Infective Arthritis, Psoriatic Arthritis) اورام مفاصل	2	10	20	30	60

	31.2.3. Taḥajjur al-Mafāṣil (Stiffness of joints) تحجر مفاصل 31.2.4. Waja‘ al-Ẓahr (Backache) وجع الظہر/Waja‘ al-Khāṣira (Low Backache) وجع الخاصرہ/Waja‘ al-Quṭn (Lumbago) وجع القطن 31.2.5. Taḥajjur al-Mafāṣil al-Fiqāriyya (Ankylosing spondylosis) تحجر المفاصل الفقاریہ 31.2.6. Ḥadaba wa Riyāḥul Afrasā (Gibbus) حدبہ ورياح الافرسہ 31.2.7. Muta‘laqa Taftīshat wa Tashkīsi ‘Amaliyāt (Related Investigations and Diagnostic procedures) متعلقہ تفتیشات وتشخیصی عملیات 31.2.7.1. DEXA scans ڈیکسا اسکین 31.2.7.2. Synovial biopsy سائنوویل بایوپسی 31.2.7.3. CT and MRI سی ٹی اور ایم آر آئی 31.2.7.4 Isotopic and Other Advanced diagnostic scanning آیسوٹوپک ودیگر جدید تشخیصی اسکیننگ 31.2.7.5. Rheumatoid factor and Anti CCP رؤمیٹوئید فیکٹر اور اینٹی سی سی پی 31.2.7.6. Antinuclear Antibodies (ANA) اینٹی نیوکلیر اینٹی باڈیز					
	M-32 Hangāmi wa Hād Ṣūrat mien Ṭib Unani (Unani medicine in emergency and acute conditions) ہنگامی وحاد صورت میں طب یونانی This module consists of two units and will be completed in 2 credits (60 National hrs.). The ratio of learning, practical, and experiential hours are 1:2:3 respectively. This module provides training on conducting initial patient assessments in emergencies using the ABCDE (Airway, Breathing, Circulation, Disability, Exposure) approach. Students will learn to apply Unani treatment principles, known as *Mamoolate Matab wa Tadabeer*, in managing various acute disease conditions, integrating practical skills with traditional Unani approaches.	2	10	20	30	60

	This module prepares students with essential skills in emergency assessment and the application of Unani medicine, equipping them to handle acute conditions with confidence and traditional knowledge. **• M 32U 1 Hād Hālāt-1 (Acute conditions-1) حادحالات۱** 32.1.1. Ḟarānīṭus (Sarsām Ḥār) (Acute Severe Meningitis) فرانیطس(سرسام حار) 32.1.2. Tashannuj Istamrārī (Persistent Spasm) تشنج استمراری 32.1.3. Iḍṭrāb-i-Nafsānī Shadīd (Severe Anxiety) اضطراب نفسانی شدید 32.1.4. Ikhtināq al-Raḥim (Hysteria) اختناق الرحم 32.1.5. Sahar Mufraṭ (Insomnia) سہر مفرط 32.1.6. Ḍīq al-Nafas Shadīd/ Intiṣab al-Nafas (Severe Bronchospasm/ Status Asthmaticus) ضیق النفس شدید/ انتصاب النفس 32.1.7. Zaghtuddam Qawī Shadīd (Malignant Hypertension) ضغط الدم قوی شدید **• M 32U 2 Hād Hālāt-2 (Acute conditions-2) حادحالات۲** 32.2.1. Qai Shadīd (Severe Vomiting) قے شدید 32.2.2. Fawāq Shadīd (Severe Hiccupss) فواق شدید 32.2.3. Waja'ul me'da Shadīd (Severe Pain in Abdomen) وجع المعدہ شدید 32.2.4. Qaiuddam Shadīd(Severe Haemoptysis) قے الدم شدید 32.2.5. Ishāl Shadīd (Severe Diarrhoea) اسہال شدید 32.2.6. Zahire Hād (Severe Dysentry) زحیر حاد 32.2.7. Hummae Muharriqa (High Grade Fever) حمی محرقہ 32.2.8. Waja'ul Mafāsil Shadīd (Severe Arthralgia) وجع المفاصل شدید 32.2.9. Bohrān aur uski Tadabīr بحران اور اسکی تدابیر					
		4	20	40	60	120

		16	80	160	240	480
		64	320	640	960	1920

Table 3 : Modules - Unit - Module Learning Objectives and Session Learning Objective- Notional Learning Hours- Domain- Level- TL Methods

Paper No : 1(Moalajat (Medicine) Paper I)

Semester No : 3

Module 1 : Ilmul A'sab se Muta'lliq Buniyādi Science (Basic Sciences Related to Neurology) علم الاعصاب سے متعلق بنیادی سائنس

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describe the functional Anatomy of the Central Nervous System, Peripheral Nervous System and Autonomic Nervous System with special emphasis on the development of neuroaxis, the blood-brain barrier, CSF Pathways, and the Sensory and Motor Pathways.
2. Demonstrate proficiency in neurological history taking and physical examination assessing higher mental functions, cranial nerves, motor and sensory systems, muscle tone, reflexes, and neurodevelopmental markers.
3. Perform and interprete electrophysiological studies viz. electroneurograms, electromyograms, evoked potentials, EEG, and imaging techniques viz. CT, MRI, transcranial Doppler, and duplex scanning to evaluate neurological and vascular conditions.

Unit 1 Nizāme A'sāb ki Fi'li Tashrīḥ (Functional Anatomy of Nervous system) نظام اعصاب کی فعلی تشریح

1.1.1. Functional Anatomy of the Central Nervous system and Peripheral Nervous System with special emphasis on the development of Neuroaxis. اعصابی محور کی نشوونما پر خصوصی توجہ کے ساتھ مرکزی اعصابی نظام اور محیطی اعصابی نظام اور خود مختار اعصابی نظام کی تشریح فعلی کی وضاحت۔

1.1.2. Vascular Anatomy with specific emphasis on Blood Brain Barrier and C S F Pathways دموی دماغی حد اور دماغی نخاعی رطوبت کے طریقوں پر خاص توجہ کے ساتھ عروقی تشریح

1.1.3. Sensory and Motor Pathways with Special emphasis on Muscle Control حسی اور حرکی مسالک کے ساتھ عضلاتی تسلط پر خصوصی وضاحت

1.1.4. Comparative Neurology تقابلی علم الاعصاب

References: 4,5,8,10,14,16,17,21,27,29,30

3A	3B	3C	3D	3E	3F	3G

Course Outcome	Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	Notional learning Hours	Lecture/ Practical Training/ Experiential Learning	Domain/ Sub Domain	Level (Does/Shows how/Knows how/Know)	Teaching Learning Methods
CO1,CO2	Illurstrate and Differentiate the Functional Anatomy of the Central Nervous system, Peripheral Nervous System and Autonomic Nervous System with special emphasis on the development of Neuroaxis.	2	Lecture	CC	Knows-how	L&PPT ,L&GD,L_VC
CO1,CO2	Interpret Vascular Anatomy with specific emphasis on Blood Brain Barrier and C S F Pathways	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2	Describe the Sensory and Motor Pathways with special emphasis on muscle control, and assess how drugs or toxins affect neurotransmitter release at the synapse. Summarise the applied aspects of Areas of Brodmann	2	Lecture	CC	Knows-how	L&PPT
CO1,CO2	Demonstrate the histopathology of the Cerebrum, Cerebellum, Pituitary gland, Brain stem and Spinal cord, nerves and related neuromuscular junction and muscle.	5	Practical1.1	CC	Shows-how	PT,D
CO1,CO2	Compare and assess the depth of understanding of basic sciences relevant to neurology with the principles of classical Unani concepts.	5	Practical1.2	PSY-ADT	Shows-how	IBL,D,PAL,CBL

CO1,CO2	Compare how hands-on neurophysiology experiments enhanced the understanding of key neurophysiological concepts.	4	Experiential-Learning1.1	PSY-ADT	Does	BS,D-BED,CBL
CO1,CO2	Evaluate the connection between neuroanatomical structures and neurological disorders (e.g., stroke) while effectively demonstrating these concepts to junior students.	5	Experiential-Learning1.2	PSY-GUD	Does	SIM,D,RP
CO1,CO2	Evaluate and assess how individual structural variations (e.g., brain asymmetry, regional size differences) may impact brain function and behaviour.	4	Experiential-Learning1.3	AFT-CHR	Does	PAL,DIS,PL
CO1,CO2	Describe Unani Principles of Diagnosis and encourage to integrate Modern medicine into clinical practice	1	Lecture	CAN	Knows-how	L&PPT

Unit 2 Clinical Neurology & Diagnostics مطبی علم الاعصاب اور ذرائع تشخیص

1.2.1. Comprehensive history taking, Physical examination Signs and symptoms associated with CNS مرکزی نظام اعصاب سے متعلق روئداد، طبی معائنہ، علامات، کا جامع بیان

1.2.2. Mental State Examination دماغی/ذہنی حالت کا معائنہ

1.2.3. Cranial Nerves Testing اعصاب دماغیہ کا معائنہ

1.2.4. Reflexes انعکاسات

1.2.5. Integration of Unani with Modern diagnostics طب یونانی اور طب جدید کے تفتیشی ذرائع کا باہمی انضمام

1.2.6. Description of CT, MRI, PET SCAN جدید تشخیصی ذرائع مثلاً CT, MRI, PET SCAN کی تفصیل

1.2.7. Lumbar Puncture and C S F analysis بزل قطنی اور دماغی و نخاعی رطوبت کا معائنہ

References: 1,2,4,5,7,8,16,19,29,30

3A	3B	3C	3D	3E	3F	3G

CO1,CO2	Discuss how to take comprehensive history, perform full physical examination, recognize and differentiate between various neurological disorders based on patient history, symptomatology and make a clinical diagnosis	2	Lecture	CAN	Knows-how	L&GD
CO1,CO2	Describe how to Perform Mental State Examination, test Cranial nerves and reflexes	2	Lecture	CC	Does	L&PPT
CO1,CO2	Demonstrate the neurological examination comprehensively pointing out differential clinical features of different diseases	5	Practical1.3	PSY-GUD	Shows-how	D-BED,CBL,CD
CO1,CO2	Demonstrate how to Perform Mental State Examination, and test Cranial nerves and reflexes.	5	Practical1.4	PSY-GUD	Shows-how	CD,D-BED
CO1,CO2	Conduct a structured approach in diagnosing neurological diseases by systematically pointing out potential causes and narrowing down options	5	Experiential-Learning1.4	PSY-MEC	Does	DIS,PBL
CO1,CO2	Appraise the ethical reasoning and professional empathy in neurological practice by blending Unani and modern concepts while encouraging critical thinking through academic discussion.	4	Experiential-Learning1.5	AFT-VAL	Does	CBL,PBL,Mnt
CO1,CO2	Appraise the performance and interpretation of special investigations such as Polysomnography, Video EEG monitoring, EEG-Telemetry, and autonomic function tests by demonstrating it to junior students	4	Experiential-Learning1.6	PSY-MEC	Does	PBL
Practical Training Activity						
Practical Training 1.1 Histopathology of Neuroanatomical Structures						

Total Learning Hours (5) Activity 1: Introduction & Teacher Demonstration (1 hr) Quick refresher on neuroanatomy and histopathology basics. Teacher presents high-resolution slides (microscope/virtual) highlighting key features and clinical correlations. Activity 2: Guided Hands-On Examination (2 hr) Students work in small groups using microscopes/virtual slides. Focus on: Cerebrum & Cerebellum: Cortical layers, white vs. gray matter. Pituitary Gland & Brain Stem: Cellular organization. Spinal Cord & Nerves: Myelin sheaths, neuronal bodies. Neuromuscular Junction & Muscle: Motor endplates, muscle fiber types. Activity 3: Group Correlation & Discussion (1 hr) Compare normal vs. pathological features. Link findings to clinical scenarios (e.g., stroke, demyelinating diseases). Activity 4: Log Book Documentation & Peer Presentation (1 hr) Document observations, correlations, and clinical implications. Prepare a summary presentation. Peer-led Q&A to reinforce concepts and address uncertainties.
Practical Training 1.2 Classical Unani Concepts related to Neurology (Neurology – Modern vs. Classical Unani Concepts)
Total Learning Hours (5) Activity 1: Introduction & Teacher Demonstration (1 hr) The teacher will illustrate key principles using case examples and visual aids and briefly review the basic neurological sciences and Classical Unani concepts that have been already discussed in the previous lecture. Activity 2. Student Group Exploration (1 hr) Hands-On Activity: In small groups, students review provided materials (articles, diagrams, case studies) on both modern neurology and Unani theories. Activity 3. Case-Based Analysis (1 hr)

Case Scenarios: Groups analyze cases that highlight contrasts (e.g., stroke, epilepsy) using both paradigms and prepare key points for comparison. Activity 4: Peer Demonstration (1 hr) Presentation: Each group presents their analysis and demonstrates understanding through role-play or visual models; interactive Feedback with Peers and faculty. Activity 5: Mentor-Led Academic Discussion & Reflection (1 hr) Engage in a guided discussion with the mentor on integrating and comparing the two approaches.
Practical Training 1.3 Comprehensive neurological examination and differential clinical diagnosis
Total Learning Hours (5) Activity 1. Teacher Demonstration (1 hr) A faculty-led live demonstration of a full neurological exam, covering higher mental functions & MSE, cranial nerves, motor & sensory systems, cerebellar function, gait, reflexes, and autonomic testing. The instructor highlights key differences in conditions such as stroke, Parkinson's, neuropathy, and myopathies. Activity 2. Student Hands-on Practice (2 hrs) Students will perform a structured neurological exam on peers and identify distinguishing features of neurological disorders through guided cases under mentor supervision with real-time feedback. Activity 3. Case-Based Scenarios (1 hr) Students will be assigned cases in groups or individually: Stroke vs. Bell's palsy, Parkinson's vs. essential tremor, and UMN vs. LMN lesions. Students may perform focused exams on simulated patients and discuss differential features. Activity 4: Discussion & Log Book Documentation (1 hr) Case presentations & findings, along with mentor critique on technique & diagnostic accuracy. and students will document their findings in log books.
Practical Training 1.4 Mental State Examination focuses on multiple domains.
Total Learning Hours (5) Activity 1. Teacher Demonstration (1 hr)

Faculty-led live demonstration of MSE (cognition, mood, perception, thought process), cranial nerve testing (I–XII with interpretation), reflex examination (deep tendon, superficial, pathological) and explanation of common abnormalities & clinical significance. Activity 2. Student Hands-on Practice (2 hrs) Students perform full neurological assessments on each other: MSE assessment using structured questions, cranial nerve testing with proper techniques, reflex testing and interpretation of findings. Followed by Faculty supervision and real-time feedback. Activity 3. Case-Based Application (1 hr) Receive case scenarios and perform targeted neurological exams followed by peer review and group discussion on findings. Activity 4. Group Discussion & Log Book Entry (1 hr) Each group presents case presentations & findings while the mentor critiques technique & diagnostic accuracy and students document findings in log books.
Experiential Learning Activity
Experiential-Learning Learning 1.1: Neurophysiology Concepts & Clinical Relevance
Total Learning Hours (4) Activity 1: Introduction & Demonstration (1 hr) A brief presentation on core neurophysiology concepts (e.g., synaptic transmission, action potentials, neural circuitry). Video clips showcasing key experiments and their clinical correlations and discuss how these experiments illustrate real-life neurophysiological processes. Activity 2: Hands-On Experimentation (1.5 hrs) Small Group Rotation: Each group performs a set of neurophysiology experiments (e.g., nerve conduction studies, synaptic plasticity simulations). Students record observations and relate them to theoretical concepts. Faculty circulate to offer guidance and answer queries. Activity 3: Case-Based Group Discussion (1 hr) Students in groups analyze case scenarios where neurophysiological processes are critical (e.g., epilepsy, neuromuscular disorders) and discuss how understanding neurophysiology aids in diagnosis and treatment followed by students comparing their experimental findings with the case scenarios. Activity 4: Reflection, Presentation & Peer Feedback (30 min)

Students write a brief log entry on how hands-on experiments enhanced their understanding and share key insights on the clinical relevance of neurophysiology. It will be followed by an open discussion to consolidate learning points and identify areas for further exploration.
Experiential-Learning Learning 1.2: Neuroanatomy & Neurological Disorders
Total Learning Hours (5) Activity 1: Neuroanatomy & Imaging Correlation (1 hr) Students analyze brain MRI/CT scans of stroke cases and identify affected neuroanatomical structures and correlate them with clinical deficits followed by group discussion on lesion localization & functional impact. Activity 2: Case-Based Discussion (1.5 hrs) Simulated stroke cases with different lesion sites (e.g., MCA infarct vs. brainstem stroke) and students predict symptoms, compare with actual clinical findings, and discuss prognosis. Activity 3: Hands-on Demonstration to Junior Students (1.5 hrs) Students teach junior learners using neuroanatomy models, imaging studies, and patient case scenarios. Demonstrate stroke-related deficits (e.g., hemiparesis, aphasia, ataxia) through role-playing. Activity 4: Reflection & Logbook Entry (1 hr) Each student records key insights, challenges encountered, and personal growth during the teaching experience and summarizes case correlations and teaching experiences, highlighting key learnings in the logbook. The logbook entries will be assessed by the teacher.
Experiential-Learning Learning 1.3: Structural Brain Variations & Functional Impact.
Total Learning Hours (4) Activity 1: Brain Imaging Analysis (1 hr) Students analyze MRI/CT scans to identify structural differences and compare functional impacts (e.g., hippocampus size & memory, language asymmetry) followed by group discussion on findings. Activity 2: Case-Based Learning (1 hr)

Students assess cases such as Einstein's brain, split-brain patients, and neurodevelopmental disorders. Predict functional outcomes and discuss clinical implications. Activity 3: EEG & Functional Testing (1 hr) Hands-on use of EEG simulators to study brain activity variations and cognitive testing (memory, reflexes, perception) linked to different brain regions. Activity 4: Self-Guided Reflection and Peer Learning (1 hr) Students select a neurological case, analyze its impact, and present key findings. Peer-led discussion on recent research, ethical considerations, and clinical applications. Peer review & log book documentation.
Experiential-Learning Learning 1.4: Diagnostic accuracy, structured clinical reasoning and effective case documentation.
Total Learning Hours (5) Activity 1. Clinical Framework & Demonstration (1 hr) Stepwise diagnosis: History ⟶ Exam ⟶ Localization ⟶ Differentials ⟶ Investigations. Activity 2. Paired Role-Play (Clinician & Patient) (2 hrs) Clinician performs: Focused history & neurological exam, identifies key findings, and formulates differentials, narrowing diagnosis through reasoning. Roles switch every 30 minutes. Activity 3. Group Discussion & Peer Feedback (1 hr) Case presentations & diagnostic reasoning. Mentor critique & best practice discussion. Activity 3. Log Book Documentation & Reflection (1 hr) Students record cases, differentials, and key takeaways. Peer review & final mentor insights.
Experiential-Learning Learning 1.5: Ethics, Integration, and Insight in Neurology
Total Learning Hours (4) Activity 1. Ethical Dilemmas in Neurology (1 hr) Case-based discussion on real-world ethical challenges.

Role-play activity: Students act as doctors, patients, and ethics committees to debate cases. Activity 2. Classical Unani Concepts in Neurology (1 hr) Demonstration of Unani neurological principles (Asbab, Mizaj, Akhlat). Illustration: Compare Unani theories with modern neurological understanding. Activity 3. Student Presentations & Comparative Analysis (1 hr) Group presentations: Students explain Unani & Modern perspectives on neurological disorders. Comparative debate: Strengths, limitations & clinical applications. Activity 4. Academic Discussion & Feedback (1 hr) Hold a roundtable discussion with mentor guidance. Conclusion & reflections on integrating Unani and modern neurology in practice.
Experiential-Learning Learning 1.6: Special investigations/reports such as Polysomnography, Video EEG monitoring, EEG-ToTelemetry, autonomic function tests
Total Learning Hours (4) Activity 1. Demonstration (1 hr) Overview of test principles, setup, and clinical relevance. Live demo of Polysomnography setup & recording, EEG-Telemetry & Video EEG setup, and Autonomic Function Tests (Tilt Table, HRV, etc.). Activity 2. Hands-on Practice (1 hr) Students divided into subgroups) Polysomnography – Setup & recording, EEG-Telemetry – Real-time recording & artifact recognition, and Autonomic Testing – HRV & Tilt Table Test. Activity 3. Case-Based Interpretation (1 hr) Groups analyze real patient reports and Identify abnormalities & present findings. Activity 4. Clinical Correlation & Quiz (1 hr)

Case discussions & diagnostic reasoning and Rapid quiz & group challenge.	
Modular Assessment	
Assessment	**Hour**
Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per table 6 C Case-Based Assessment (50 Marks): Each student will be given a case or problem situation to clinically Examine and evaluate the patient and create a treatment/ management plan with justification. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or Direct observation of Procedure or Observed Structured Clinical Examination (OSCE) Evaluate a student's ability to explain and demonstrate a neurological examination. (50 Marks) • History Taking / Communication Skills (15 Marks) • Clinical Examination / Procedural Skills (15 Marks) • Clinical Reasoning / Interpretation (10 Marks) • Decision-Making / Management Plan (10 Marks) Or Practical on Simulator: Neuroanatomical dissections and pathway tracing. (50 Marks) Or	4

Any practical in converted form can be taken for assessment. (25 Marks) and Any of the experiential as portfolios/ reflections/ presentations can be taken as an assessment. (25 Marks)	

Module 2 : Ṣudā‘, Duwār, Laqwa, wa Amrāz Hawās-i-Makhsūsa (Headaches, Vertigo, Facial Palsy, and Disorders of Special Senses) صداع،دوار،لقوہ وامراض حواس مخصوصہ

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describe headaches, vertigo, facial palsy and disorders of special senses.

2. Conduct history taking, physical examination, differentiation and evaluation for headaches, vertigo, neurological disorders of facial nerves, special senses and recognition of associated clinical features.

3. Develop and Formulate the line of treatment of appropriate Unani pharmacologic and non-pharmacologic management and write prescriptions for Headaches, Vertigo, Facial Palsy, and disorders of special senses, tailored to specific disorders.

Unit 1 Ṣudā‘ aur Duwār (Headaches and Vertigo) صداع اور دوار

2.1.1. Ṣudā‘ aur uske aqsām (Headache and its Types) صداع اور اسکے اقسام

2.1.2. Sadr-o-Duwār (Vertigo) سدر و دوار

2.1.3. Benign Paroxysmal Positional Vertigo دوار وضعی انتیابی/نوبتی حمیدی

2.1.4. Meniers Disease مرض مینیئرس

References: 1,4,5,14,16,17,19,21,23,24,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4	Discuss and interpret key clinical features and history taking techniques that differentiate different types of Suda’a and outline the diagnostic approaches and management.	2	Lecture	CC	Shows-how	DIS,L&GD,L&PPT

CO1,CO2, CO4	Describe the underlying physiological and neurological mechanisms involved in the causation of Vertigo, describing key symptoms associated with various types of vertigo.	2	Lecture	CC	Shows-how	DIS,FC,L&PPT
CO1,CO2, CO4	Illustrate the causes, physiopathology, treatment and management strategies, pharmacological and non-pharmacological approaches in the management of BPPV, Menier's disease.	1	Lecture	CC	Does	L_VC
CO1,CO2, CO4	Demonstrate comprehensive neurological examinations to accurately differentiate between various headache disorders, utilizing clinical evaluation techniques to identify specific diagnostic indicators.	5	Practical2.1	CK	Does	D
CO1,CO2, CO4	Demonstrate specialized neurological examination for vertigo in atypical clinical scenarios by integrating targeted positional maneuvers, clinical observations, and diagnostic strategies to distinguish central from peripheral causes.	5	Practical2.2	PSY-GUD	Shows-how	LRI,PT,D-BED,SIM
CO1,CO2, CO4	Develop the skill to diagnose and manage various headache disorders—including those due to raised intracranial pressure, migraines, cranial neuralgias, vascular malformations, meningeal irritation, and psychogenic factors—through immersive, patient-centered experiential learning.	4	Experiential-Learning2.1	PSY-GUD	Does	CBL
CO1,CO2, CO4	Apply differential diagnostic skills by distinguishing between Sidr-o-Dawar (vertigo) and other conditions with similar presentations through comprehensive clinical evaluation and neurodiagnostic assessments.	3	Experiential-Learning2.2	PSY-ADT	Does	PBL,D-BED,CD

CO1,CO2, CO4	Formulate immediate management strategies for Benign Paroxysmal Positional Vertigo and Ménière's disease using evidence-based maneuvers and interventions to relieve symptoms and enhance patient outcomes.	4	Experiential-Learning2.3	PSY-ADT	Does	DL,CBL
CO1,CO2, CO4	Assess and evaluate randomly selected cases of headaches, vertigo, facial palsy, or disorders of special senses through comprehensive history-taking, clinical examination, and diagnostic reasoning.	4	Experiential-Learning2.4	PSY-ORG	Does	PSM,CBL,W,PL

Unit 2 Laqwa wa Hawāsi Makhsūsa ke Amrāz (Facial Palsy and disorders of Special Senses) لقوہ وحواس مخصوصہ کے امراض

2.2.1. Laqwa (Facialy Palsy) لقوہ

2.2.2. Hawāsi Makhsūsa ke Amrāz (Disorders of Special Senses) حواس مخصوصہ کے امراض

2.2.2.1. Fasāde-i-Shamm (Smell disorder) فسادِ شم

2.2.2.2. Fasāde-i-Dhā'iqa (Taste disorders) فسادِ ذائقہ

2.2.2.3. Amrāz-i-Baṣar (Disorders of Vision) امراضِ بصر

2.2.2.4. Fasād-i-Samā'at (Hearing Disturbances) فسادِ سماعت

References: 1,2,4,7,16,23,24,27,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4	Describe the underlying physiological and neurological mechanisms involved in the causation of Facial Palsy (Laqwa), describing key symptoms associated with Facial Palsy Vs Bell's Phenomenon, required investigations, and treatment options.	2	Lecture	CC	Knows-how	CD,BS,L&PPT

CO1,CO2, CO4	Discuss comprehensive general, physical and Special senses examination based on clinical presentation, to establish clinical diagnosis of the disorder of Smell/Taste/Hearing or Vision Disorder	2	Lecture	CC	Knows-how	L&PPT ,CBL,DIS
CO1,CO2, CO4	Discuss Special Senses disorders mention in Unani Classics such as Fasad e Sham	1	Lecture	CC	Knows-how	L&PPT ,L,BS
CO1,CO2, CO4	Demonstrate clinical and neurological examination focused on the affected branches of the Facial Nerve taking care of other nerves in diagnosing Facial Palsy.	5	Practical2.3	PSY-GUD	Shows-how	D-BED,CD,LRI
CO1,CO2, CO4	Develop comprehensive clinical skills in assessing and managing disorders of smell/taste, hearing, or vision.	5	Practical2.4	PSY-GUD	Shows-how	CBL,D-BED,LRI
CO1,CO2, CO4	Integrate skills in analyzing various causes of Facial Palsy (infectious, traumatic, neurologic, neoplastic) and formulate proper management plans.	4	Experiential-Learning2.5	CE	Does	PBL,PL,CD
CO1,CO2, CO4	Formulate Acute Pharmacologic and non pharmacologic protocols for the management of Facial Palsy and Bell's Phenomenon avoiding complications	4	Experiential-Learning2.6	PSY-SET	Does	PrBL
CO1,CO2, CO4	Develop or formulate acute management protocols for special sense disorders	3	Experiential-Learning2.7	CS	Does	PSM,BS
Practical Training Activity						
Practical Training 2.1 Neurological Examination for Headache Differentiation						

Total Learning Hours (5) Activity 1: Focused Demonstration (1.5 hrs) The teacher demonstrates a comprehensive headache evaluation, highlighting red flags for secondary (traumatic) headaches. Activity 2: Case-Based Examination (1.5 hrs) In groups, students assess simulated or real patients with various headache types with an emphasis on history-taking and targeted neurological exams to distinguish primary from secondary causes. Activity 3: Diagnostic Correlation (1 hr) Students analyze relevant investigations (CT/MRI, lumbar puncture) to refine differential diagnoses and correlate clinical findings with diagnostic data. Activity 4: Peer Presentation & Reflection (1 hr) Students present findings and reasoning with discussion and feedback to enhance clinical decision-making.
Practical Training 2.2 Neurological Examination for Vertigo in Special Situations
Total Learning Hours (5) Activity 1: Teacher Demonstration (1 hr) The teacher demonstrates a step-by-step neurological examination for vertigo, including modifications for special populations (pregnant/nursing patients, drivers, risky occupations) with tailored exam techniques and safety considerations. Activity 2: Simulation-Based Case Assessment (2 hrs) Students in small groups assess simulated or real patients with vertigo from different special scenarios with a focus on history-taking, risk evaluation, and examination modifications to varied clinical contexts. Activity 3: Case Analysis & Management Planning (1 hr) Students review and interpret findings from simulations or patients and develop management protocols that consider safety and specific risks (e.g., advice for drivers, and occupational hazards) and also formulate comprehensive, individualized management plans. Activity 4: Peer Presentation & Reflection (1 hr)

Present case findings and management strategies to peers and mentors and engage in discussion to refine clinical reasoning and safety measures to enhance communication skills and integrate feedback into practice.
Practical Training 2.3 Facial Palsy
Total Learning Hours (5) Activity 1. Teacher Demonstration (1 hr) The teacher demonstrates a step-by-step clinical assessment for facial palsy, including patient history, facial inspection, and evaluation of muscle function, focusing on identifying key signs (asymmetry, synkinesis). Activity 2. Case-Based Clinical Examination (1 hr) Students in groups, examine simulated patients with various types of facial palsy (e.g., Bell's palsy, traumatic, neoplastic) and record clinical findings and discuss differential features. Activity 3. Diagnostic Test Interpretation (1 hr) Students analyze diagnostic reports (EMG, nerve conduction studies, MRI/CT) related to facial nerve function and correlate test results with clinical presentations to refine the diagnosis. Activity 4. Personalized Treatment Planning (1 hr) Students develop individualized management plans, integrating pharmacologic (Unani and modern) and non-pharmacologic interventions (Ilaj bit tadbeer, facial exercises, physiotherapy) while considering strategies for preventing complications and facilitating rehabilitation. Activity 5. Case Presentation & Peer Discussion (1 hr) Students present each case, including history, examination, diagnostic data, and treatment plan and engage in peer discussion and receive mentor feedback to improve clinical reasoning and management strategies.
Practical Training 2.4 Special Senses Disorders Smell/Taste/Hearing or Vision Disorder.
Total Learning Hours (5) Activity 1: Teacher Demonstration (1 hr)

The teacher demonstrates a step-by-step clinical assessment for special senses disorders, which includes patient history, inspection, and basic functional tests (e.g., visual acuity, hearing screening, olfactory testing). Activity 2: Case-Based Clinical Examination (1 hr) The students in groups, examine simulated patients/patients presenting with various disorders (e.g., anosmia, ageusia, hearing loss, visual deficits) and document key clinical findings. Activity 3: Diagnostic Test Interpretation (1 hr) Students analyze test reports (audiometry, visual field tests, olfactory function tests) and correlate diagnostic results with clinical presentations to refine diagnosis. Activity 4: Personalized Treatment Planning (1 hr) Students develop individualized management plans, incorporating Unani management, Ilaj bit tadabeer, and medical, rehabilitative, and surgical approaches where appropriate. Activity 5: Case Presentation & Peer Discussion (1 hr) Each group presents a complete case (history, exam, diagnosis, treatment plan) and engages in feedback and discussion on best practices under mentor guidance.
Experiential Learning Activity
Experiential-Learning Learning 2.1: Headache Diagnosis & Management
Total Learning Hours (4) Activity 1: Imaging and Clinical Data Correlation (1 hr) Students review and analyze the provided imaging (CT/MRI) alongside clinical data for different headache types, including raised intracranial pressure, migraine, cranial neuralgia, vascular malformations, meningeal irritation, and psychogenic headaches. Students identify and note key diagnostic clues from both the imaging and clinical information and document observations and insights for future reference and discussion Activity 2: Case-Based Group Analysis (1 hr)

In small groups, analyze real or simulated headache case studies covering diverse etiologies, develop differential diagnoses and propose tailored management plans while documenting the diagnostic rationale and decision-making process in the logbook. Faculty facilitators guide the discussion with targeted questions to prompt critical thinking. Activity 3: Peer Teaching & Simulation (1 hr) Each group prepares and delivers a mini-lesson to junior students, focusing on clinical examination, a specific diagnostic or management strategy drawn from their case discussions, Activity 4: Reflective Debrief (1 hr) Reconvene for a structured debriefing session where students review their logbook entries and recorded teaching sessions and reflect on insights, discuss challenges, and share key learnings. A brief interactive quiz or discussion-based Q&A is conducted, and mentor-guided feedback is given to refine clinical reasoning and documentation.
Experiential-Learning Learning 2.2: Clinical Evaluation and Neurodiagnostic Assessment of Sidr-o-Dawar (vertigo)
Total Learning Hours (3) Activity 1: Clinical Case Analysis and Differential Diagnosis (1 hr) Students collaborate in small groups to review patient case studies presenting symptoms indicative of either Ṣidr or Dawār (vertigo) and identify key clinical features. They utilize neurodiagnostic data to distinguish between different conditions, such as benign paroxysmal positional vertigo (BPPV), Ménière's disease, and vestibular neuritis. Students formulate and document differential diagnoses and proposed management plans in their logbooks. Activity 2: Peer Teaching Demonstration (1 hr) Students prepare and deliver a concise teaching session to junior students, focusing on the diagnostic approach and management of vertigo. They incorporate clinical examination techniques, interpret neurodiagnostic findings, and employ patient counseling strategies. Students engage junior students through interactive methods and provide clarifications as needed. Activity 3: Reflective Practice and Feedback Session (1 hr)

Students participate in a mentor-facilitated group discussion to share insights, challenges faced, and lessons learned. They record personal reflections and feedback received in their logbooks, engage in peer discussions, and receive mentor-guided feedback to refine their clinical reasoning and documentation.
Experiential-Learning Learning 2.3: Mastering Immediate Management of BPPV and Ménière's Disease
Total Learning Hours (4) Activity 1: Case-Based Analysis & Strategy Formulation (1 hr) Students are given real or simulated patient cases (OPD/IPD) with BPPV or Ménière's disease. In small groups, they analyze patient history, symptoms, and diagnostic findings. Students formulate an immediate management strategy, including appropriate maneuvers and pharmacological interventions. Discuss their plan with a mentor for feedback and record it. Activity 2: Hands-on Maneuver Practice & Delivering Maneuver Demonstrations to Juniors (1 hr) Students practice Dix-Hallpike, Epley, and Semont maneuvers under mentor supervision. They then teach and guide junior students in performing these maneuvers correctly. The mentor provides real-time feedback on technique, explanation clarity, and patient handling. Activity 3: OPD/IPD Case Presentation & Discussion (1 hr) Students present their case study, management approach, and reasoning to a mentor and peers in an OPD/IPD setting. Engage in a structured Q&A session where peers and the mentor challenge their decision-making. Discuss alternative management approaches and refine their strategies based on feedback. Activity 4: Self-Reflection & Mentor Feedback Session (1 hr) Each student reflects on their performance, identifying strengths and areas for improvement. Discussion on real-world challenges in managing BPPV and Ménière's disease in clinical practice. The mentor provides individual and group feedback on clinical reasoning, hands-on skills, and teaching effectiveness.
Experiential-Learning Learning 2.4: Diagnosis of headaches, vertigo, facial palsy, and disorders of special senses case
Total Learning Hours (4) Activity 1: Case-Based Clinical Examination (1 hr) In groups, students randomly select a case (Headaches, Vertigo, Facial Palsy, or Special Senses Disorder) and perform a structured history-taking and neurological examination under mentor supervision.

Activity 2: Diagnostic Workup & Analysis (1 hr) Review clinical findings, interpret relevant investigations (e.g., MRI, audiometry, vestibular tests), and differentiate between possible diagnoses. Activity 3: Management Planning & Ethical Considerations (1 hr) Students develop individualized treatment plans that integrate clinical and investigation findings and formulate therapeutic strategies, explain the plan to the patient/relatives, and document the complete process. Activity 4: Case Presentation & Peer Discussion (1 hr) Present findings, diagnosis, and management plans to peers and mentors, followed by critical discussion and feedback.
Experiential-Learning Learning 2.5: Facial Palsy (infectious, traumatic, neurologic, neoplastic)
Total Learning Hours (4) Activity 1: Case-Based Analysis (1 hr) The students in small groups will review and analyze simulated cases of Facial Palsy with different etiologies and focus on history, physical findings, and diagnostic tests to identify the underlying cause. Activity 2: Management Protocol Formulation (2 hrs) Student develops tailored management plans for each case, incorporating both modern and Unani options as appropriate and discusses treatment strategies, potential complications, and follow-up plans. Activity 3: Peer Presentation & Reflective Discussion (1 hr) Student groups present their analyses and management plans to peers and engage in a mentor-guided discussion to compare approaches and refine clinical reasoning.
Experiential-Learning Learning 2.6: Acute Pharmacologic and non pharmacologic protocols
Total Learning Hours (4) Activity 1: Hands-On Protocol Formulation (1 hr) In small groups, students analyze case scenarios to develop step-by-step acute management protocols, including drug and Ilaj bit tadbeer regimens.

Activity 2: Peer Teaching & Demonstration (1 hr) Student presents and explain their formulated protocols to junior students through role-play and simulated patient scenarios. Activity 3: Simulation Practice (1 hr) Students apply their protocols in simulated clinical settings, practising patient communication and management steps under guided supervision. Activity 4: Logbook Documentation & Reflection (1 hr) Students record their protocols, case details, and reflections on the exercise in their logbooks, followed by a group discussion on best practices and lessons learned.	
Experiential-Learning Learning 2.7: Acute Management Protocols for Special Sense Disorders	
Total Learning Hours (3) Activity 1: Test Recording & Data Collection (1 hr) Students will conduct assessments (e.g., vision, hearing, vestibular tests) on simulated patients and record all test results meticulously. Activity 2: Diagnosis & Management Protocol Formulation (1 hr) Student will analyze recorded data to diagnose acute conditions and develop and document acute management protocols, including treatment steps and criteria for OPD/IPD referral. Activity 3: Patient Explanation & Mentor Feedback (1 hr) Student will explain findings and management plan to the patient (simulated) and discuss the need for further assessment or referral. Followed by mentor feedback and refine documentation.	
Modular Assessment	
Assessment	**Hour**

Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per table 6 C. Case-Based Assessment (50 Marks): Each student will be given a case history or problem situation to clinically examine and evaluate the patient and create a treatment/ management plan with justification. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or Direct observation of Procedure or Observed Structured Clinical Examination (OSCE) of any condition covered in this module. (50 Marks) • History Taking / Communication Skills (15 Marks) • Clinical Examination / Procedural Skills (15 Marks) • Clinical Reasoning / Interpretation (10 Marks) • Decision-Making / Management Plan (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any of the experiential, such as portfolios, reflections, or presentations, can be taken as an assessment. (25 Marks)	4
Semester No : 4	
Module 3 : Nizāme A'sab ke Muta'addi aur Iltihābi Amrāz (Infective and Inflammatory Disorders of Nervous System) نظام اعصاب کے متعدی اور التہابی امراض	

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describe and explain the pathophysiology, clinical features, and diagnostic approaches for Infectious and inflammatory disorders of the nervous system, brain abscess and metabolic encephalopathy.

2. Conduct or Perform comprehensive history-taking and physical examination to assess patients with Inflammatory disorders of the nervous system, brain abscess and metabolic encephalopathy. Identifies the key clinical signs and symptoms to aid in diagnosis.

3. Develop and Formulate the line of treatment and write accurate and complete prescriptions aligned with the treatment plan, for infectious and inflammatory disorders of the nervous system, brain abscess and metabolic encephalopathy, considering patient-specific factors such as age, Mizaj, comorbidities, and potential drug interactions.

Unit 1 Dimāgh aur Nizām-i-A'sāb ke Muta'addi aur Iltihābi Amrāz (Infective and Inflammatory Diseases of the Brain and Nervous System) دماغ اور نظام اعصاب کے متعدی اور التہابی امراض

3.1.1. Sarsām aur uski aqsām (Meningitis and its types) سرسام اور اس کی اقسام

3.1.2. Shafāqalūs, Ḥumra'-i-Dimāghiya, Māshrā شفاقلوس اور حمرہ دماغیہ ماشرہ

3.1.3. Bacterial, Viral, Fungal infection of brain and nervous system دماغ اور نظام اعصاب کے بیکٹیریل، وائرل اور فنگل انفیکشن

References: 1,2,4,7,10,14,17,24,27,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO7	Discuss the underlying aetiology, pathophysiology, clinical manifestations, and diagnostic test for Sarsam and its types Faranetus, Lesarghus, Utaash, Barsaam and their management	2	Lecture	CC	Knows-how	L&PPT ,L,L_VC
CO1,CO2, CO4,CO7	Illustrate the clinical signs and symptoms of common and rare infectious and inflammatory neurological disorders with special emphasis on Shafaqaloos, Humra, Dimaghiya and Ma'ashra	2	Lecture	CC	Knows-how	L&GD,SIM,L&PPT

CO1,CO2, CO4,CO7	Discuss comprehensive neurological examination and appropriate tests based on clinical presentation, to establish clinical diagnosis of Bacterial, Viral, Fungal, Tuberculous and Malarial Meningitis.	1	Lecture	CC	Knows-how	L&PPT ,L&GD,PSM
CO1,CO2, CO4,CO7	Record a detailed history and perform a comprehensive general physical and neurological examination based on clinical presentation, to establish clinical diagnosis of Sarsam or its types	5	Practical3.1	PSY-GUD	Shows-how	CD,CBL,D-BED
CO1,CO2, CO4,CO7	Demonstrate diagnostic skills using appropriate laboratory tests and imaging techniques for evaluating suspected brain infections	5	Practical3.2	PSY-GUD	Shows-how	L_VC
CO1,CO2, CO4,CO7	Develop and apply case-based communication strategies to explain complex diagnoses and treatment plans for neuroinfections—such as brain abscess and inflammatory disorders—to patients and caregivers, addressing their concerns effectively.	5	Experiential-Learning3.1	CE	Does	PSM
CO1,CO2, CO4,CO7	Develop skills to differentiate bacterial, viral, fungal, tuberculous, and malarial meningitis using diagnostic results, and effectively communicate diagnoses to patients and caregivers, and demonstrate the same to the students	5	Experiential-Learning3.2	PSY-MEC	Does	FV,CBL,PBL
CO1,CO2, CO4,CO7	Develop and implement acute management protocols for life-threatening neuroinfectious and inflammatory disorders, ensuring prompt and effective intervention in time-sensitive scenarios.	3	Experiential-Learning3.3	CS	Does	BS,CBL

CO1,CO2, CO4,CO7	Describe the Causes, Clinical features of rare infectious diseases such as Poliomyelitis, Herpes Zoster and Tuberculous Meningitis and unani concepts of management	2	Lecture	CC	Knows-how	CD,L&PPT ,L&GD
CO1,CO2, CO4,CO7	Discuss comprehensive neurological examination based on clinical presentation, to establish clinical diagnosis of Metabolic Encephalopathy and line of treatment	1	Lecture	CC	Knows-how	L&GD,L&PPT
Unit 2 Khurāj-i-Dimāgh aur Istiḥāli A'telāl Dimāghi (Brain Abscess and Metabolic Encephalopathy) خراج دماغ اور استحالی اعتلال دماغ 3.2.1. Khurāj-i-Dimagh wa Huzāl Ẓahrī (Brain Abscess and Tabes Dorsalis) خراج دماغ و ہزال ظہری 3.2.2. Poliomyelitis, Herpes Zoster and Tuberculous Meningitis پولیومیلائٹس، نملہ اور التہاب غشاء دماغی دقی 3.2.3. Istiḥāli A'telāl Dimāghi (Metabolic Encephalopathy) استحالی اعتلال دماغ **References:** 1,2,4,17,21,24,26,27,28,29,30						
3A	**3B**	**3C**	**3D**	**3E**	**3F**	**3G**
CO1,CO2, CO4,CO7	Describe the Etiopathology of Brain Abscess (Khuraje Dimagh) and Tabes Dorsalis (Huzale Zuhri), describing potential red flags with special emphasis on treatment protocols.	2	Lecture	CC	Knows-how	CBL,L&GD,L&PPT
CO1,CO2, CO4,CO7	Record a detailed history and perform a neurological, diagnostic examination based on clinical presentation, and establish clinical diagnosis of Brain Abscess or Tabes Dorsalis with the help of investigation results	5	Practical3.3	PSY-GUD	Shows-how	D,D-BED,LRI
CO1,CO2, CO4,CO7	Demonstrate diagnostic skills using appropriate laboratory tests and imaging techniques for evaluating suspected Metabolic Encephalopathy.	5	Practical3.4	PSY-GUD	Shows-how	CD

CO1,CO2, CO4,CO7	Develop and demonstrate effective communication strategies to explain complex neurological conditions—including brain abscess, metabolic encephalopathy, poliomyelitis, herpes zoster, and tuberculous meningitis—to patients and caregivers and effectively demonstrate these approaches to junior colleagues.	5	Experiential-Learning3.4	PSY-MEC	Does	CBL
CO1,CO2, CO4,CO7	Integrate clinical, laboratory, and imaging data to differentiate accurately among metabolic encephalopathy subtypes, thereby refining differential diagnostic skills.	5	Experiential-Learning3.5	PSY-MEC	Does	PER,PL,CBL
CO1,CO2, CO4,CO7	Develop evidence-based protocols for the acute management of life-threatening neurological conditions in time-sensitive situations, such as brain abscess and metabolic encephalopathy, and effectively communicate and illustrate these strategies to junior team members to ensure high-quality patient care.	3	Experiential-Learning3.6	CE	Does	PL,DIS,PER,D-BED
Practical Training Activity						
Practical Training 3.1 Comprehensive Evaluation and Management of Infectious and Inflammatory Neurological Disorders						
Total Learning Hours (5) Activity1. Clinical Case Demonstration by Mentor (1 hr) The teacher presents a patient case of brain abscess, TB meningitis, or Sarsam, focuses on history taking, physical and neurological examination, and discusses diagnostic approach and management. Activity 2. Supervised History Taking and Examination (1.5 hrs)						

Each student examines a real/simulated patient in OPD/IPD. Elicit full history (including the Unani perspective), perform general and neurological examination, and the mentor provides feedback during/after the interaction. Activity 3. Investigations Interpretation (1 hr) Students review lab results, CSF reports, imaging (MRI/CT), and Unani signs/symptoms and integrate findings with the clinical picture to form a diagnosis. The mentor highlights differences between Sarsam types (e.g., Sarsam Damvi, Safravi) and correlates with modern diagnostics. Activity 4. Management Planning & Unani Integration (1 hr) Create a treatment plan including modern (antibiotics, antivirals, steroids) and Unani approaches (regimens, diet, Unani drugs, etc.). Emphasize treatment principles for different Sarsam types. Activity 5. Case Presentation, Feedback, & Log Book Entry (30 Minutes) Students present the case they examined, diagnosis, and treatment plan to the group. The mentor gives feedback on clinical reasoning, diagnostic accuracy, and communication. Students document cases in their logbooks with reflections.
Practical Training 3.2 Diagnostic Approach to Suspected Brain Infections Using Lab and Imaging Tools
Total Learning Hours (5) Activity 1: Faculty Demonstration: Diagnostic Process Overview (1 hr) The teacher demonstrates the step-by-step diagnostic evaluation of a suspected brain infection case, including when and how to order CSF analysis, MRI/CT, blood cultures, and serologies. Activity 2: Hands-On Interpretation of Diagnostics (1.5 hrs) Students analyze real/simulated lab reports and imaging (CSF, MRI, CT scans) in small groups and identify diagnostic features for specific infections (e.g., ring-enhancing lesion for abscess). Activity 3: Case-Based Diagnostic Planning (1 hr) Each student is given a brief patient scenario to select appropriate diagnostic tests, justify them, and outline a stepwise approach. The mentor reviews plans and provides feedback.

Activity 4: Bedside/OPD Observational Learning (1.5 hrs) Students observe the mentor performing diagnostic assessments on an actual or recorded patient case while focusing on clinical signs, history-taking related to suspected neurological infection.
Practical Training 3.3 Clinical Evaluation and Diagnosis of Brain Abscess and Tabes Dorsalis
Total Learning Hours (5) Activity 1: Teacher Demonstration of Clinical Examination Techniques (1 hr) The instructor will demonstrate comprehensive history-taking, emphasizing questions that uncover risk factors and symptoms associated with both conditions. A step-by-step demonstration of neurological examination techniques focusing on signs indicative of brain abscess (e.g., focal neurological deficits) and tabes dorsalis (e.g., sensory ataxia, Argyll Robertson pupils). Activity 2: Supervised Student Practice of Clinical Skills (1 hr) The students pair up to role-play patient and clinician scenarios, applying the techniques observed during the demonstration. The instructor circulates among pairs, offering real-time feedback and addressing any technique-related questions. Activity 3: Interpretation of Diagnostic Investigations (1 hr) The students discuss the indications for and interpretation of imaging studies (e.g., CT, MRI) in detecting brain abscesses. Review of serological tests (e.g., VDRL, FTA-ABS) and cerebrospinal fluid analysis pertinent to diagnosing neurosyphilis leading to tabes dorsalis. Activity 4: Case-Based Group Discussion (1 hr) Students are divided into small groups and provided with case scenarios involving patients suspected of having a brain abscess or tabes dorsalis. Each group of students discusses the case, formulates differential diagnoses, and proposes initial management steps, usool ilaj and Ilaj. Activity 5: Feedback and Assessment Session (1 hr) The instructor provides individualized feedback, focusing on strengths and areas for improvement in clinical examination techniques and diagnostic reasoning.
Practical Training 3.4 Diagnostic Evaluation of Metabolic Encephalopathy:
Total Learning Hours (5)

Activity 1: Case-Based Discussion on Clinical Presentation (1 hr) The Teacher provides insights into effective history-taking techniques and highlights critical aspects of patient interviews eliciting and interpreting clinical histories pertinent to metabolic encephalopathy. Engage students in group discussions analyzing patient cases to identify key historical clues indicative of metabolic encephalopathy. Activity 2: Laboratory Test Selection and Interpretation (1 hr) Review and interpret laboratory data, such as liver and renal function panels, electrolyte levels, glucose measurements, complete blood counts (CBC), and ammonia levels to develop competence in selecting appropriate laboratory tests and interpreting results relevant to metabolic encephalopathy. The teacher/ mentor guided discussions on the pathophysiological implications of laboratory findings and their correlation with clinical presentations. Activity 3: Neuroimaging Techniques Review Session (1 hr) Examine computed tomography (CT) and magnetic resonance imaging (MRI) scans to identify patterns associated with metabolic encephalopathy and provide expert analysis of imaging findings and discuss their diagnostic significance. Activity 4: Electroencephalography (EEG) Interpretation Exercise (1 hr) The Teacher will offer guidance on EEG interpretation and its integration into the diagnostic process, and students will analyze EEG recordings to recognize characteristic patterns indicative of metabolic disturbances. Activity 5: Integrated Case Management Simulation (1 hr) Students participate in simulated patient scenarios requiring the integration of diagnostic data to make informed clinical decisions.The teacher facilitates debriefing sessions to discuss decision-making processes and provide constructive feedback.
Experiential Learning Activity
Experiential-Learning Learning 3.1: Case-Based Strategies and Communication in Neuroinfections
Total Learning Hours (5) Activity 1: Faculty Demonstration & Interactive Session (1 hr)

The Mentor presents real/simulated cases (e.g., brain abscess, TB meningitis), diagnosis and treatment plan; demonstration of effective patient explanation. (Bedside or video demonstration with group discussion.) Activity 2. Student Group Work – Designing Communication Plans (1.5 hrs) Small groups are assigned different neuroinfection cases. Design patient/caregiver explanation strategies, including common FAQs and concerns. Activity 3. Role-Play / Simulated Patient Interaction (1.5 hrs) Students take turns presenting diagnosis and treatment plan to a simulated patient/caregiver. The mentor observes, assesses empathy, clarity, and engagement. Activity 4. Reflection, Feedback, & Log Book Entry (1 hr) Debriefing session led by mentor with peer and faculty feedback. Each student writes a short reflection and documents the case and communication strategy in the log book.
Experiential-Learning Learning 3.2: Differential diagnosis of various types of Meningitis
Total Learning Hours (5) Activity 1: Interactive bedside/clinical classroom discussion (1 hr) The Mentor presents 2–3 real or simulated meningitis cases, interpreting CSF, imaging, and lab findings for diagnostic differentiation. Activity 2: Small Group Case Analysis & Diagnosis (1.5 hrs) Students analyze provided case files with lab reports, CSF analysis, and imaging. Identify the type of meningitis and justify the diagnosis. Activity 3: Role-play: Patient/Caregiver Communication (1 hr) Students simulate explaining diagnosis and treatment plan to a caregiver/patient. The mentor observes and gives real-time feedback on clarity, empathy, and accuracy. Activity 4: Reflection, Feedback, and Logbook Documentation (1.5 hrs) Students reflect on their diagnostic process and communication. Feedback to be provided individually. Students complete entries in their logbooks (case summary + reflection).

Experiential-Learning Learning 3.3: Acute Management Protocols for Neuroinfectious and Inflammatory Emergencies
Total Learning Hours (3) Activity 1: Case-Based Analysis of Meningitis Types (1 hr) Students will be divided into small groups and provided with anonymized patient case studies, each presenting with symptoms indicative of meningitis. Each case will include clinical presentations, cerebrospinal fluid (CSF) analysis results, imaging findings, and laboratory data. Student groups will analyze the information to identify the likely type of meningitis, justifying their diagnoses based on the provided data. A guided discussion will follow, with the mentor highlighting key diagnostic indicators for each meningitis subtype. Activity 2: Role-Playing Patient Communication Scenarios (1 hr) Students will pair up, with one assuming the role of the clinician and the other acting as a patient or caregiver. The 'clinician' will practice explaining the diagnosis, its implications, and the proposed treatment plan, utilizing plain language and avoiding medical jargon. Activity 3: Mentor-Led Feedback and Reflective Practice (1 hr) The mentor will facilitate a group debriefing session, encouraging students to reflect on their diagnostic reasoning and communication experiences during the previous activities. Students will discuss challenges encountered, strategies employed, and insights gained. The mentor will provide targeted feedback, highlighting areas of strength and opportunities for further development. Students will document their reflections and feedback in their logbooks, setting personal learning objectives for future practice.
Experiential-Learning Learning 3.4: Communicating Complex Neurological Diagnoses to Patients and Training Junior Colleagues
Total Learning Hours (5) Activity 1: Simulated Patient Interactions (1 hr) Students engage in role-play scenarios with actors portraying patients or caregivers, focusing on conditions like brain abscess or metabolic encephalopathy. The mentor observes and provides feedback on communication techniques and clarity. After feedback, the students demonstrates the communication approach to junior colleagues. Activity 2: Case-Based Group Discussions (1 hr)

Students analyze case studies of patients with conditions such as poliomyelitis or herpes zoster, formulating communication plans. The mentor facilitates discussions, highlighting effective communication principles. Students demonstrate the communication strategies and rationale to junior colleagues. Activity 3: Patient simulation role play (1 hr) Participate in exercises that simulate patient and caregiver conversations, emphasizing understanding and addressing concerns. The mentor provides insights and techniques to enhance empathetic communication. Students conduct a mini-session showcasing these skills for junior colleagues. Activity 4: Review recorded simulated interactions, identifying effective strategies and areas needing enhancement. (1 hr) Activity 5: Presentation and Peer feedback (1 hr) Prepare and deliver brief sessions to junior colleagues on effectively communicating specific neurological diagnoses and treatments. The mentor evaluates teaching methods and provides feedback. (1 Hour)
Experiential-Learning Learning 3.5: Differential diagnosis of Metabolic Encephalopathies
Total Learning Hours (5) Activity 1: Interactive session (1 hr) Students will assess the knowledge and a brief discussion covering key concepts of metabolic encephalopathy, including its clinical presentations, laboratory abnormalities, and imaging features. Activity 2: Case-Based Differential Diagnosis (1.5 hours) In small groups, students engage with realistic or simulated clinical cases that include patient histories, laboratory results, and imaging studies. The groups collaborate to generate a list of potential diagnoses, with the mentor facilitating the discussion and highlighting critical diagnostic signs. Activity 3: Group discussion and Peer feedback (1.5 hrs) Groups reconvene to review peer feedback and refine their differential diagnoses while focusing on integrating data effectively to distinguish between encephalopathy subtypes. Activity 4: Peer Teaching and Reflective Debrief (1 hr)

Each group presents its refined diagnostic approach to junior colleagues, simulating a teaching session. A guided reflection and feedback session follows, where students discuss challenges, key takeaways, and strategies to apply these skills in clinical practice.	
Experiential-Learning Learning 3.6: Acute management protocols for life-threatening neurological conditions such as brain abscess and metabolic encephalopathy.	
Total Learning Hours (3) Activity 1. Case-Based Simulation (1 hr) Divide students into small groups and present two realistic, time-sensitive cases (one for brain abscess and one for metabolic encephalopathy), including patient history, clinical findings, and preliminary imaging data. Each group develops a rapid response protocol (using a flowchart or checklist) based on the evidence and prepares a concise plan for both diagnosis and treatment. Activity 2. Role-Play Communication Workshop (1 hr) Each group role-plays a scenario where they explain their protocol to “junior team members, " focusing on clear, patient-centered language and addressing potential questions or concerns. Activity 3. Wrap-Up & Q&A (1 hr) Summarize key takeaways and allow for a final round of questions and feedback while maintaining their logbooks.	
Modular Assessment	
Assessment	**Hour**
Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per table 6 C Case-Based Assessment (50 Marks): Each student will be given a case history or problem situation to clinically examine and evaluate the patient and create a treatment/ management plan with justification.	4

• Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or Direct observation of Procedure or Observed Structured Clinical Examination (OSCE). (50 Marks) • History Taking / Communication Skills (15 Marks) • Clinical Examination / Procedural Skills (15 Marks) • Clinical Reasoning / Interpretation (10 Marks) • Decision-Making / Management Plan (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any of the experiential as portfolios/ reflections/ presentations can be taken as an assessment. (25 Marks)	
Module 4 : Amrāz Urūqi Dimāghi, Sakta, Ṣara', wa Tashannuji Daure (Cerebrovascular Diseases, Coma, Epilepsy and Seizures) امراض عروقی دماغی، قوما، صرع و تشنجی دورے	
Module Learning Objectives (At the end of the module, the students should be able to) 1. Describe Cerebrovascular diseases, Coma, Epilepsy, Seizures and disorders of Sleep. 2. Conduct History taking and Physical examination for cerebrovascular diseases, coma, epilepsy, seizures and disorders of sleep. 3. Develop and Formulate the line of treatment and write prescriptions for cerebrovascular diseases, coma, epilepsy, seizures and disorders of sleep.	
Unit 1 Amrāz Urūqi Dimāghi wa Sakta (Cerebrovascular Diseases and Stroke) امراض عروقی دماغی و سکتہ 4.1.1. Nazf al-Dam Dimāghi (Cerebral Heamorrhage) نزف الدم دماغی	

4.1.2. Takhaththur-i-Dimāghi (Cerebral Thrombosis), تخثر دماغی

4.1.3. Tasaddud-i-Dimāghi (Cerebral Embolism) تسدد دماغی

4.1.4. Fālij (Paralysis) فالج

4.1.5. Fālij Niṣfī (Hemiplegia) فالج نصفی

References: 2,3,4,5,9,10,11,14,17,19,22,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4	Describe Cerebral Haemorrhage, Thrombosis and Cerebral Embolism and Unani theories on Falij	2	Lecture	CC	Knows-how	L&PPT ,L,L&GD
CO1,CO2, CO4	Discuss the aetiology of Stroke differentiating its types, describing Diagnostic tools, clinical manifestations, and plan of management	1	Lecture	CC	Knows-how	BS,L&PPT ,L_VC
CO1,CO2, CO4	Describe the classification of Falij as mentioned in Unani classics, interpret the Principles of treatment including Ilaj bil Tadbeer and Ilaj bil Dawa for Falij (Hemiplegia) and its types and apply evidence-based principles to guide patient care	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4	Illustrate a detailed clinical history and perform a comprehensive neurological examination tailored to stroke presentation, interpret relevant neurodiagnostic findings, and establish a clinical diagnosis.	3	Practical4.1	PSY-GUD	Shows-how	D-BED
CO1,CO2, CO4	Demonstrate basic clinical skills for assessing patients with Hemiplegia (Falij), including performing a focused neurological examination, interpreting relevant diagnostic tests, and formulating an appropriate management protocol.	4	Practical4.2	PSY-GUD	Shows-how	CBL

CO1,CO2, CO4	Apply theoretical knowledge of cerebrovascular diseases in a simulated clinical environment, enhance clinical understanding through hands-on experience, and effectively demonstrate key concepts and skills to fellow students.	4	Experiential-Learning4.1	PSY-GUD	Does	SIM,CBL
CO1,CO2, CO4	Design and apply effective communication strategies for interacting with patients suffering from cerebrovascular diseases, demonstrating empathy, active listening, and the ability to gather accurate and relevant medical histories.	4	Experiential-Learning4.2	AFT-REC	Does	CBL
CO1,CO2, CO4	Analyze the signs and symptoms of acute stroke and implement and value evidence-based emergency interventions under time constraints, thus enhancing their capacity to make critical decisions in real-world acute care scenarios.	4	Experiential-Learning4.3	AFT-VAL	Does	PBL,BS
CO1,CO2, CO4	Describe the Unani concepts of Sakta, describing its aetiology, clinical features and treatment modalities	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4	Describe Unani concepts of Isterkha and Jumood o Shakhoos describing its aetiology, clinical features and treatment modalities	1	Lecture	CC	Knows-how	L&PPT ,L_VC
CO1,CO2, CO4	Diagnose Sakta and employ empathetic communication techniques to encourage patient adherence to individualised treatment plans.	3	Experiential-Learning4.4	AFT-VAL	Does	CBL,PL,SIM,PAL

Unit 2 Coma aur Muta'allaqa 'Awāriz (Coma and Related Disorders) کوما اور متعلقہ عوارض

4.2.1. Ghashī, Sakta Dimāghi (Syncope, Coma) غشی، سکتہ دماغی

4.2.2. Sakta (Syncopal attack) سکتہ

4.2.3. Istirkhā', Jamūd wa Shakhūṣ (Flaccidity, Catalepsy) استرخاء،جمودوشخوص

References: 2,3,5,7,10,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4	Discuss the aetiology of Coma, Syncope differentiating its types, interpreting Glasgow Coma Scale, describing Diagnostic tools, clinical manifestations, and plan of management.	1	Lecture	CC	Knows-how	BS,L&PPT ,L_VC
CO1,CO2, CO4	Demonstrate the clinical assessment of a patient with Coma and Syncope, differentiate their types, interpret the Glasgow Coma Scale, describe relevant diagnostic tools and clinical features, and formulate an appropriate management plan	3	Practical4.3	PSY-GUD	Shows-how	D-BED,PBL,LRI
CO1,CO2, CO4	Demonstrate the diagnosis of Sakta, Isterkha, and Jumood-o-Shakhoos, differentiate their key clinical features, and formulate appropriate Nuskha (Unani prescriptions) for each condition.	3	Practical4.4	PSY-GUD	Shows-how	D-BED
CO1,CO2, CO4	Diagnose Isterkha and Jumood-o-Shakhoos through clinical evaluation and develop comprehensive, evidence-based treatment plans tailored to individual patient needs.	3	Experiential-Learning4.5	PSY-MEC	Does	PAL,PBL,BS,CBL
CO1,CO2, CO4	Design and evaluate patient-centred communication strategies that translate the complex clinical concepts of Sakta, Isterkha, and Jumood o Shakhoos into clear, culturally sensitive explanations for patients and caregivers, addressing their concerns and enhancing treatment understanding.	2	Experiential-Learning4.6	AFT-CHR	Does	W,TPW,BL

Unit 3 Ṣara' aur Daure ke ‘Awāriz (Epilepsy and Seizure Disorders) صرع اور دورے کے عوارض

4.3.1. Ṣar‘ wa Aqsām (Epilepsy and Types) صرع واقسام

4.3.2. Ri‘sha (Tremors) رعشہ

4.3.3. Dā’ al-Raqṣ (Chorea) داءالرقص

4.3.4. ‘Aḍalātī Tashannuj (Dystonia-Myoclonus, Torticollis) عضلاتی تشنج

References: 1,2,4,7,16,17,21,26,27,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4	Discuss the underlying aetiology, pathophysiology, clinical manifestations of Epilepsy (Sur’a), and diagnostic test including EEG, its types and pharmacological and nonpharmacological management.	1	Lecture	CC	Knows-how	L&PPT ,BS,L_VC
CO1,CO2, CO4	Describe the aetiology, pathophysiology, clinical manifestations, differential diagnosis for Ra’asha (Tremors), Da ul raqs, Tics and their management.	1	Lecture	CC	Knows-how	L&GD,L&PPT ,DIS
CO1,CO2, CO4	Illustrate the aetiology, pathophysiology, clinical manifestations, differential diagnosis for Tashannuj, Dystonia-Myoclonus, Torticollis, and their pharmacological and non-pharmacological management.	1	Lecture	CC	Knows-how	L&PPT ,DIS,L_VC
CO1,CO2, CO4	Conduct a thorough neurological examination, interpret key EEG findings, and utilise this knowledge to diagnose epilepsy or seizure disorders while initiating appropriate immediate management.	4	Practical4.5	PSY-GUD	Shows-how	PBL,CBL,D-BED
CO1,CO2, CO4	Demonstrate a comprehensive neurological examinations to accurately diagnose Ra’asha (tremors), da ul raqs, and tics, using appropriate	3	Practical4.6	PSY-GUD	Shows-how	D-BED,LRI,D

	diagnostic tests, and formulate immediate management plans for each condition.					
CO1,CO2, CO4	Demonstrate how hands-on neurophysiology experiments enhance understanding of the neural mechanisms underlying epilepsy and seizure disorders.	2	Experiential-Learning4.7	PSY-ADT	Does	PL,BL
CO1,CO2, CO4	Design strategies interacting with patients who have Ra'asha (Tremors), Da ul Raqs focusing on empathy, communication, and the ability to gather relevant medical histories..	2	Experiential-Learning4.8	AFT-RES	Does	PSM
CO1,CO2, CO4	Evaluate and compare immediate management protocols for Spasm, Dystonia, Myoclonus, and Torticollis, integrating these findings with rehabilitation and long-term care strategies to create comprehensive, patient-centered treatment plans.	2	Experiential-Learning4.9	CAP	Does	CD,DIS
Practical Training Activity						
Practical Training 4.1 Comprehensive Clinical Evaluation and Diagnosis of Stroke.						
Total Learning Hours (3) Activity 1: Faculty Demonstration: Stroke-Oriented Neurological Examination (1 hr) The mentor demonstrates history taking and a comprehensive neurological exam for stroke/Falij, highlighting signs like facial droop, hemiparesis, dysarthria, and time of onset (Emphasis on facial asymmetry, limb weakness, speech issues, reflex changes, and time-critical questioning) Activity 2: Student Hands-On Practice: History & Examination (1 hr) Students practice stroke-specific neurological examinations and focused history taking in pairs/groups, with peer role-play and mentor observation. Activity 3: Neurodiagnostics Interpretation & Management Planning (1 hr)						

Students analyze sample neuroimaging (CT/MRI), lab reports, and clinical signs to determine stroke type (ischemic/hemorrhagic) and location. Students develop and present an integrated management protocol for stroke, including both modern acute care (e.g., antiplatelets, thrombolytics) and Unani-based treatment using classical Unani references, guided group discussion, and case-based planning.
Practical Training 4.2 Clinical Assessment and Management of Hemiplegia (Falij)
Total Learning Hours (4) Activity 1: Faculty Demonstration: Neurological Examination in Hemiplegia (1 hr) The teacher shall demonstrate a focused neurological examination on a simulated or real patient with Hemiplegia, with special emphasis on motor, sensory, reflexes, cranial nerves, and gait assessment. Activity 2: Student Hands-On Neurological Exam Practice (1 hr) Students practice the neurological exam in small groups using peer role-play or manikins, with guidance and correction from the mentor. Activity 3: Interpretation of Diagnostic Tests & Case-Based Discussion (1 hr) Students review and interpret diagnostic materials such as CT/MRI reports, blood tests, and Doppler findings in Hemiplegia cases using real or simulated cases; small groups analyze and present their findings with clinical reasoning. Activity 4: Unani Management Planning & Peer Presentation (1 hr) Students create a comprehensive management protocol (including Unani drugs, regimen, and supportive therapy) and present it to peers for discussion. Refer to classical Unani texts and integrate modern rehabilitation principles. Include justification of drug selection based on temperament and organ involvement.
Practical Training 4.3 Assessment and Management of Coma and Syncope.
Total Learning Hours (3) Activity1: Faculty Demonstration & GCS Interpretation (1 hr) Live demonstration on assessing a patient with altered consciousness, including neurological examination and application of the Glasgow Coma Scale (GCS). The teacher may use a simulated patient or mannequin; explain the step-by-step assessment and scoring of GCS with clinical examples of coma vs. syncope. Activity 2: Case-Based Differentiation (1 hr)

Small groups are given case vignettes of different types of coma (e.g., metabolic, structural) and syncope (e.g., vasovagal, cardiac). Each group analyzes symptoms, duration, recovery pattern, and diagnostic clues to reach a differential diagnosis. Case worksheets, discussion templates, and guided faculty facilitation. Activity 3: Diagnostic Tools & Management Planning (1 hr) Hands-on station with mock diagnostic tools (ECG, CT/MRI reports, lab results) where students interpret findings and create a basic management plan for assigned cases. Stations include imaging reviews, lab interpretation, and basic airway/breathing/circulation (ABC) support planning. Group presentations follow.
Practical Training 4.4 Differential Diagnosis and Unani Management of Sakta, Isterkha, and Jumood o Shakhoos
Total Learning Hours (3) Activity1: Faculty-Led Demonstration & Clinical Orientation (1 hr) The teacher presents the clinical features and diagnostic signs of Sakta, Isterkha, and Jumood o Shakhoos using patient case examples or simulated patients. A live or video-based demonstration of patient assessment techniques relevant to Sakta, Isterkha, and Jumood o Shakhoos highlights key differential signs and Unani diagnostic principles. The use of real or simulated patients, visual aids, and traditional Unani references is encouraged, along with interactive discussions about the diagnostic hallmarks and clinical presentations of each condition within the Unani framework. Activity 2: Clinical Case Analysis & Differential Diagnosis (1 hr) Students are divided into small groups, with each group assigned a case scenario involving one of the three conditions. They engage in role-play (physician-patient interaction), identify diagnostic features, and justify the differential diagnosis. Structured case vignettes, role-play cards, and diagnostic worksheets are provided, along with feedback and clarification from faculty. Activity 3. Nuskha Development & Therapeutic Planning (1 hr) Each group formulates a Nuskha (Unani prescription) for their assigned case, incorporating drug selection, formulation, dosage, and rationale based on temperament, organ system, and disease stage. Using classical Unani texts and modern references, and guidance from faculty, the students present and discuss their Nuskhas.

Practical Training 4.5 Neurological Assessment and EEG in Seizure Diagnosis and Management
Total Learning Hours (4) Activity 1: Faculty-Led Demonstration (1 hr) A live demonstration of a focused neurological examination and EEG interpretation using a simulated or real case of suspected seizure disorder. The demonstration will feature a standardised patient with projected EEG visuals, emphasising clinical signs, technique, and correlation with EEG findings. Activity 2: Supervised Hands-On Practice (1 hr) Students practice neurological examination in pairs or small groups, rotating roles as examiner, patient, and observer. Faculty will circulate to provide feedback on technique, accuracy, and communication skills, helping students develop proficiency in conducting a neurological exam relevant to seizure assessment. Activity 3: Interactive EEG Interpretation Session (1 hr) Small group analysis of various EEG tracings, including normal, focal, and generalized epileptiform discharges. This session will include facilitated discussions using real or simulated EEG cases, complemented by guiding questions and group presentations. Activity 4: Case-Based Clinical Simulation (1 hr) Students will work through structured clinical cases (e.g., first seizure, known epilepsy, status epilepticus) that require examination findings, EEG interpretation, and immediate management planning. The session will consist of small group discussions followed by a whole-class debriefing. The use of manikins or role-play is optional for added realism.
Practical Training 4.6 Comprehensive Neurological Assessment and Immediate Management of Ra'asha (Tremors), Da ul Raqs, and Tics
Total Learning Hours (3) Activity 1: Instructor Demonstration of Neurological Examination (1 hr) Provide students with a comprehensive, step-by-step demonstration of neurological examination techniques pertinent to diagnosing Ra'asha (Tremors), Da ul raqs, and Tics. The instructor performs a detailed neurological examination on a simulated patient, emphasizing the assessment of involuntary movements such as tremors and tics. Each component of the examination is explained, highlighting its relevance in identifying specific neurological signs.Students engage in a discussion to clarify techniques and underlying principles.

Activity 2: Patient History Taking and Clinical Examination Practice (1 hr) Students will engage with standardized patients or peers role-playing as patients presenting with symptoms of tremors, chorea, or tics. Focus on obtaining comprehensive histories, including onset, duration, progression of symptoms, family history, medication use, and potential exposure to neurotoxins. Perform targeted examinations to identify signs indicative of specific movement disorders. The mentor observes, providing real-time feedback on technique, accuracy, and patient interaction. Emphasis is placed on identifying involuntary movements and selecting appropriate diagnostic tests. Activity 3: Case Analysis and Immediate Management Planning (1 hr) Students are presented with patient scenarios exhibiting symptoms of Ra'asha, Da ul raqs, and Tics. Collaborative analysis of examination findings to establish diagnoses. Formulation of immediate intervention strategies, considering current clinical guidelines.
Experiential Learning Activity
Experiential-Learning Learning 4.1: Applied Clinical Skills in Cerebrovascular Diseases through Simulation-Based Learning.
Total Learning Hours (4) Activity 1: Simulation of Clinical Scenarios (1 hr) Students engage with high-fidelity or role-play simulation cases of patients presenting with cerebrovascular events (ischemic stroke, TIA, hemorrhagic stroke). They take history, assess vitals, and perform a focused neurological exam using stroke scales (e.g., FAST, NIHSS). Mentor facilitates and observes. Activity 2: Neurological Examination & Diagnosis Drill (1 hr) Students perform targeted neurological examinations on simulated patients (role-play/manikins) and identify diagnostic features specific to different cerebrovascular conditions. Small group rotations; each student practices while others observe and evaluate. Mentor provides feedback. Activity 3: Diagnostic Interpretation (1 hr) Students interpret sample diagnostic tests — CT/MRI brain images, Doppler reports, ECG, and lab values — and present a complete case workup. Group-based interpretation using printed or projected diagnostics; guided by faculty with feedback. Activity 4: Management Plan & Unani Integration (1 hr)

Students collaboratively create and present a management plan for their case—covering both acute intervention and long-term care, including Unani options. Students present the complete case, including modern and Unani-based management protocols, to junior students. Teaching includes drug rationale, tadbeer (regimen), and rehabilitation steps. Interactive teaching with posters or models; mentor observes, supports, and assesses clarity and confidence.
Experiential-Learning Learning 4.2: Empathic Communication & History-Taking in Cerebrovascular Care.
Total Learning Hours (4) Activity 1: Clinical Observation & Guided Interaction (1 hr) Students accompany a mentor during OPD/IPD rounds with cerebrovascular patients. They observe real patient interactions, noting how the mentor applies empathy and effective questioning techniques for gathering relevant medical histories. Activity 2: Role-Play & Simulation Exercises (1 hr) Students participate in simulated patient encounters designed to replicate common cerebrovascular scenarios. Role-playing allows them to practice empathic communication and history-taking techniques in a controlled environment. Use scenarios that mimic typical patient backgrounds and clinical challenges of cerebrovascular diseases. Activity 3: Peer Discussion & Reflective Debriefing (1 hr) Following the role-play sessions and clinical observations, the group reconvenes for a guided discussion. This debriefing session enables students to share their experiences, discuss challenges, and collaboratively design improved interaction strategies. Encourage open feedback, peer coaching, and the use of a reflective checklist for effective communication. Activity 4: Logbook Documentation & Action Plan Development (1 hr) Students individually document the key insights gained during the session in a logbook. They then develop a personalized action plan for future encounters with cerebrovascular patients, outlining specific strategies to enhance empathy and communication. Reflective writing session: Students record observations, feedback received, and personal reflections on the encounters.
Experiential-Learning Learning 4.3: Enhancing rapid stroke recognition and emergency response skills under time constraints
Total Learning Hours (4)

Activity 1: Clinical Case Analysis and Red Flag Identification (1 hr) Students engage with patients presenting symptoms that may indicate a stroke in the IPD/OPD setting. They conduct comprehensive history-taking and physical examinations. Activity 2: High-Fidelity Stroke Simulation (1 hr) Simulation exercise (40 minutes): Students participate in a high-fidelity simulation that mimics an acute stroke emergency requiring rapid assessment and intervention. Activity 3: Peer Teaching and Demonstration (1 hr) Teaching session (30 minutes): MD students prepare and deliver a session to junior students, demonstrating the identification of red flag symptoms and appropriate emergency responses. Activity 4: Logbook Documentation and Reflective Practice (1 hr) Students document patient interactions, diagnostic findings, and treatment rationales and include copies of written prescriptions. Students reflect on mentor and peer feedback, noting areas for improvement and strategies for future clinical encounters.
Experiential-Learning Learning 4.4: Empathy-driven strategies for sakta diagnosis and treatment compliance
Total Learning Hours (3) Activity 1: Clinical Case Analysis and Diagnosis Confirmation (1 hr) Patient Interaction (30 minutes): Students engage with patients presenting symptoms indicative of Sakta in the IPD/OPD setting. They conduct comprehensive history-taking and physical examinations. Students discuss their findings with the mentor, confirm the diagnosis, and document the process in their logbooks, noting key clinical signs and reasoning pathways. Activity 2: Empathetic Communication Role-Play (1 hr) Students participate in simulated patient interactions, practicing the delivery of a Sakta diagnosis and discussing treatment plans with empathy. Following each role-play, peers and the mentor provide constructive feedback focusing on clarity, empathy, and patient engagement. Activity 3: Teaching Demonstration and Reflective Practice (1 hr)

MD students demonstrate the diagnostic and communication process to junior learners, explaining their approach and reasoning. After each activity, students should document their patient interactions and diagnostic findings, articulate the rationale behind their treatment plans, include copies of their written prescriptions, and reflect on mentor and peer feedback to identify areas for improvement. These reflections should be documented in their logbooks.
Experiential-Learning Learning 4.5: Diagnostic confirmation and treatment planning for Isterkha and Jumood-o-Shakhoos
Total Learning Hours (3) Activity 1: Clinical Case Evaluation and Diagnosis Confirmation (1 hr) In the IPD/OPD, students engage with patients presenting symptoms indicative of Isterkha or Jumood o Shakhoos. They take comprehensive histories and perform physical examinations. Activity 2: Treatment Planning-Usool Ilaj (1 hr) Students collaborate to outline the principles of Usool Ilaj relevant to the confirmed diagnoses, considering factors like patient Mizaj, constitution, severity, and comorbidities. Each student formulates a detailed treatment plan, including dietary recommendations, lifestyle modifications, and therapeutic interventions. Activity 3: Prescription writing and peer review (Nuskha Naweesi) (1 hr) Prescription drafting, students write prescriptions based on their treatment plans, ensuring correct dosages, durations, and instructions. Students exchange prescriptions with peers for review, focusing on clarity, completeness, and adherence to standard formats.
Experiential-Learning Learning 4.6: Diagnoses and Treatments of Sakta, Isterkha, and Jumood o Shakhoos
Total Laerning Hours (2) Activity 1: Strategy Development and Mentor-Guided Reflection (1 hr) The mentor provides an overview of Sakta, Isterkha, and Jumood o Shakhoos, emphasizing key diagnostic complexities and cultural nuances. Outlines session objectives and expected outcomes. Emphasis should be on clarity, cultural appropriateness, and practical solutions to address common questions or concerns from patients and caregivers. Activity 2: Demonstration to juniors and peer feedback (1 hr)

Students shall refines its communication strategy based on previous feedback. Assign specific roles for the demonstration: student as clinician, simulated junior patient/caregiver, and possibly an observer role. Simulation demonstrations: Conduct live role-play scenarios where one student explains the complex diagnosis and treatments to a junior actor (or fellow student assuming the role of patient/caregiver). Each demonstration shall be followed by a brief debriefing session. Juniors, peers, and the mentor share specific feedback and suggestions to refine the communication approach. Focus on what strategies resonated effectively with the audience and how challenges or concerns were addressed.
Experiential-Learning Learning 4.7: Enhancing Understanding of Epilepsy Through Neurophysiology Experiments
Total Learning Hours: 2 Activity 1: Case Study Analysis and Neurophysiology Experimentation (1 hour) Students, guided by a mentor, analyse detailed case studies of individuals with epilepsy, focusing on clinical presentations, diagnostic processes, and treatment strategies. They engage in neurophysiology experiments, such as EEG simulations, to observe and interpret brain activity patterns associated with seizures. Additionally, they compare the findings from the experiments with the case studies to identify correlations between clinical symptoms and neurophysiological data. Activity 2: Peer Teaching and Demonstration (1 hour) Students prepare a presentation summarizing their case study analyses, experimental procedures, and key insights gained. They conduct a practical demonstration of the neurophysiology experiments, explaining how the observed data relates to epilepsy diagnosis and treatment. Moreover, they facilitate a Q&A session with junior students to address queries and discuss the broader implications of neurophysiological assessments in epilepsy care.
Experiential-Learning Learning 4.8: Empathetic Neurodiagnostic Interactions
Total Learning Hours (2) Activity 1: Simulated Patient Interview Role-Play (1 hr)

Students are assigned standardized patient scenarios representing Ra'asha (tremors), da ul raqs, and tics. They conduct one-on-one simulated interviews with standardized patients, focusing on building rapport and gathering relevant medical histories. A mentor observes and provides immediate feedback on communication skills, empathy, and diagnostic approach. Activity 2: Peer Presentation and Mentor Discussion (1 hr) Following the role-play, students work in small groups to consolidate their findings and diagnostic strategies. Each group prepares a brief presentation summarizing their interaction strategies, diagnostic reasoning, and proposed management plans. Presentations are followed by a mentor-led discussion, allowing for group feedback and collaborative refinement of patient interaction strategies.
Experiential-Learning Learning 4.9: Management & Rehabilitation Integration in Movement Disorders (like Tashannuj, Dystonia-Myoclonus, and Torticollis,)
Total Learning Hours (2) Activity 1: Case-Based Discussion (1 hr) In the presence of a mentor, students review three detailed patient case studies—each representing Tashannuj, Dystonia-Myoclonus, and Torticollis. They collaboratively analyze and compare immediate management protocols (e.g., pharmacologic, injection-based, and acute interventions) by mapping out treatment algorithms and discussing underlying clinical rationales. The session concludes with a group discussion to share and critique findings, enhancing critical thinking. Activity 2: Rehabilitation Simulation & Peer Teaching (1 hr) Students develop a comprehensive, multidisciplinary care plan that integrates rehabilitation approaches and long-term care strategies for one of the case studies. Under mentor guidance, they then role-play or simulate a demonstration session to junior learners, explaining their plan, highlighting key rehabilitation techniques, and addressing long-term care considerations. This interactive demonstration helps improve communication, teaching skills, and understanding of integrated care.
Modular Assessment

Assessment	**Hour**

Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per table 6 C. Case-Based Assessment (50 Marks): Each student will be given a case history or problem situation to clinically examine and evaluate the patient and create a treatment/ management plan with justification. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or Direct observation of Procedure or Observed Structured Clinical Examination (OSCE). (50 Marks) • History Taking / Communication Skills (15 Marks) • Clinical Examination / Procedural Skills (15 Marks) • Clinical Reasoning / Interpretation (10 Marks) • Decision-Making / Management Plan (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any of the experiential as portfolios/ reflections/ presentations can be taken as an assessment. (25 Marks)	4
Semester No : 5	
Module 5 : 'Asbi 'Azlāti 'Awāriz wa Sal'āt Dimāghi (Neuromuscular Disorders and Brain Tumours) عصبی عضلاتی عوارض وسلعات دماغی	
Module Learning Objectives	

(At the end of the module, the students should be able to)

1. Describe Neuromuscular disorders, Brain tumours and deveopmental disorder

2. Conduct History taking and Physical examination for Neuromuscular disorders, Brain tumours and Developmental disorders.

3. Develop and Formulate the line of treatment and write prescriptions for Neuromuscular disorders, Brain tumours and Developmental disorder.

Unit 1 'Asbi 'Azlāti 'Awāriz Ḥirki wa Dīgar Amrāz (Neuromuscular Disorders/Movement Disorders and Neuroimmunopathies) عصبی عضلاتی عوارض، حرکی و دیگر امراض

5.1.1. 'Irq al-Nasā (Sciatica) عرق النساء

5.1.2. 'Iṣāba (Trigeminal Neuralgia) عصابہ

5.1.3. Maraz-i-Parkinson (Parkinson's disease) مرض پارکنسن

5.1.4. Maraz-i-Alzheimer (Alzheimer's Disease) مرض الزائمر

5.1.5. Guillain-Barré Syndrome (GB Syndrome) ملتزمہ گلین بارے

5.1.6. Iltihab 'Azli 'Arazī (Transverse Myelitis) التہاب عضلی عرضی

5.1.7 Syringomyelia, Syringobulbia مرض سیرنگومیلیا

5.1.8 Neurogenic Bladder مرض مثانہ العصبی

5.1.9 Carpel Tunnels Syndrome متلازمہ کارپل ٹنل

5.1.10. Tashannuj (Spasm) تشنج

5.1.11. Kuzāz (Tetanus) کزاز

5.1.12. Myasthenia gravis مائیستھینیا گریوس

5.1.13. Muscular Dystrophy تحلل عضلی

5.1.14. Polyneuropathy پولی نیوروپیتھی

References: 4,5,8,12,13,29,30

3A	3B	3C	3D	3E	3F	3G

CO1,CO2, CO5,CO7	Discuss the etiology, pathophysiology, clinical manifestations, and diagnostic test for Sciatica (Irqunnasa) and Trigeminal Neuralgia (Asaba) and its Unani management	2	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO5,CO7	Discuss the etiology, pathophysiology, clinical manifestations, and diagnostic test for Mutlazima e Parkinson, Alzheimer and G B Syndrome and its management	2	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO5,CO7	Describe and critically evaluate the Principles of Treatment, including Ilaj bil Tadbeer and Ilaj bil Dawa for Multiple Sclerosis and Neurofibromatosis, and apply evidence-based principles to guide patient care.	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO5,CO7	Demonstrate focused neurological examinations to accurately diagnose sciatica and trigeminal neuralgia and formulate appropriate treatment plans based on clinical guidelines.	5	Practical5.1	CC	Shows-how	D-BED,CBL,D
CO1,CO2, CO5,CO7	Demonstrate Unani therapeutic approaches—including Ilāj bil Dawā (pharmacotherapy) and Ilāj bit Tadbīr techniques for the integrated management of chronic Parkinson’s disease, Alzheimer’s disease, and Guillain–Barré syndrome.	5	Practical5.2	PSY-GUD	Shows-how	CBL
CO1,CO2, CO5,CO7	Demonstrate the skills to teach self-care techniques and encourage adherence to treatment plans with empathic communication skills, prescribing personalised treatment for Sciatica (Irqunnasa) and Trigeminal Neuralgia (Issaba)	5	Experiential-Learning5.1	PSY-MEC	Does	CBL,BS,DIS,SIM

CO1,CO2, CO5,CO7	Interpret diagnostic test results—including electromyography (EMG), muscle pathology, histochemistry, immunopathology, and genetic studies—to accurately identify and differentiate Parkinson's disease, Alzheimer's disease, and Guillain–Barré syndrome, integrating Unani clinical insights with contemporary diagnostic criteria.	4	Experiential-Learning5.2	PSY-GUD	Shows-how	CD,CBL,LRI
CO1,CO2, CO5,CO7	Design and apply patient-centered communication strategies to effectively explain complex diagnoses and treatment plans for Multiple Sclerosis and Neurofibromatosis, addressing patient and caregiver concerns with empathy and clarity	4	Experiential-Learning5.3	AFT-RES	Does	PAL,PBL,LRI,RP,CBL

Unit 2 Sal'āt Dimāgh wa Amrāz Nash-o-Numa (Brain Tumours/ Developmental Disorders) سلعات دماغ/امراض نشوونما

5.2.1. Sal'āt Dimāgh (Brain tumours) سلعات دماغ

5.2.2. Qīla Sahāya (Meningocele) قیلہ سحایا/منغوب

5.2.4. Istisqā' Dimāgh (Hydrocephalus) استسقاء دماغ

5.2.5. Taza'zu' Dimāgh (Concussion) تزعزع دماغ

5.2.6. Neurofibromatosis نیوروفائبرومیٹوسس

5.2.7. Multiple Sclerosis ملٹپل سکلیروسس

References: 1,2,4,5,8,9,10,11,12,16,17,23,24,26,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO5,CO7	Discuss Brain tumours and distinguish between primary and secondary (metastatic) tumours. Classify brain tumours based on their histological type, grade, and location with special emphasis on classification mention in Unani Classics.	2	Lecture	CC	Knows-how	L&PPT

CO1,CO2, CO5,CO7	Describe Meningocele, Anboobae Nuqra, and Hydrocephalus	2	Lecture	CC	Knows-how	L,L&GD,L&PPT
CO1,CO2, CO5,CO7	Describe Tazazae Dimagh	1	Lecture	CC	Knows-how	L&GD,L,L&PPT
CO1,CO2, CO5,CO7	Demonstrate appropriate neurological examination based on clinical presentation, to establish the clinical diagnosis of Brain Tumours and their treatment	5	Practical5.3	PSY-GUD	Shows-how	CBL,D-BED,LRI
CO1,CO2, CO5,CO7	Demonstrate the ability to assess, diagnose, and formulate comprehensive management plans for Meningocele and Hydrocephalus	5	Practical5.4	PSY-GUD	Shows-how	PBL,CD,RP
CO1,CO2, CO5,CO7	Demonstrate the ability to teach brain tumour patients personalised self-care techniques, encourage adherence to treatment plans through empathetic communication, and prescribe individualised treatment strategies that integrate Unani principles with contemporary clinical guidelines.	4	Experiential-Learning5.4	AFT-RES	Does	PAL,CBL,BS
CO1,CO2, CO5,CO7	Demonstrate skills to teach self-care techniques and encourage adherence to treatment plans with empathic communication skills, prescribing personalised treatment for Meningocele and Hydrocephalus and their management	5	Experiential-Learning5.5	AFT-RES	Does	DIS,CBL
CO1,CO2, CO5,CO7	Formulate immediate management strategies for Tazazae Dimagh	4	Experiential-Learning5.6	CE	Does	SDL,PBL,PAL

Practical Training Activity
Practical Training 5.1 Targeted Neurological Assessment and Management of Sciatica and Trigeminal Neuralgia
Total Learning Hours (5) Activity 1: Faculty Demonstration: Dual Neurological Examination (1 hr) Mentor performs side-by-side examinations for sciatica and trigeminal neuralgia, demonstrating key maneuvers: straight leg raise, dermatomal sensory testing, reflex assessment for sciatica and corneal reflex, sensory mapping, and trigger-zone palpation for trigeminal neuralgia. Activity 2: Guided Peer Practice (1 hr) Straight leg raise, slump test, and lower-limb reflexes on peers. Trigeminal Neuralgia); Facial sensory exam, trigger-point identification, and brief corneal reflex testing. Mentor circulates to correct hand positioning and questioning techniques. Activity 3: Case-Based Diagnostic Interpretation (1 hr) Small group analysis of Lumbar MRI scans demonstrating nerve root compression and correlating with dermatomal pain. Brain MR trigeminal sequences showing neurovascular compression in trigeminal neuralgia Activity 4. Modern Treatment Planning (1 hr) Students develop evidence-based management protocols. Sciatica: NSAIDs, physiotherapy, when to refer for surgical evaluation per NICE. Trigeminal Neuralgia: First-line carbamazepine/oxcarbazepine, indication for microvascular decompression. Formulate comprehensive, guideline-driven acute and follow-up plans. Activity 5: Unani Usool Ilaj, Ilāj bi'd Dawā, Ilāj bi'l Ghidhā' Ilajbit Tadbeer & Integration (1 hr) Sciatica (Irq al-nasa and Trigeminal Neuralgia analogue: Each group justifies their Nuskha, referencing Unani principles and anticipated modern-pharmacologic synergies. Demonstrate the ability to integrate Unani therapeutics with conventional protocols for holistic patient care.
Practical Training 5.2 Holistic Unani Therapeutics for Chronic Neurological Disorders.
Total Learning Hours (5) Activity 1: Faculty Demonstration: Unani Pharmacotherapy (1 hr)

The mentor demonstrates the Usool-e-Ilaj alongside both Ilāj-bil-Dawā and Ilāj-bit-Tadbīr modalities—emphasizing neuroprotective and therapeutic interventions—as prescribed in classical Unani texts and supported by contemporary evidence-based studies. Activity 2: Hands-On Hijāmah (1 hr) Students practice Ḥijāmah on designated sites—for Parkinson's, Alzheimer's, and GBS—learning cup placement, suction timing, and post-care to maximize efficacy and minimize complications. Activity 3: Dalk (Therapeutic Massage) Techniques (1 hr) Under mentor supervision, students perform Dalk maneuvers: for muscle rigidity in Parkinson's, to boost cerebral perfusion in Alzheimer's, and limb mobilisation massage for GBS rehabilitation, applying protocols shown to reduce tremor and rigidity. Activity 4: Hirudotherapy (Leech Therapy) Demonstration (1 hr) The instructor details leech selection, site mapping, aseptic application, and aftercare, illustrating treatment of neuropathic pain and nerve congestion in all three disorders, as documented in neurosurgical and case-report literature. Activity 5: Integrative Case-Based Peer Teaching & Planning (1 hr) In small groups, students draft holistic management plans combining Ilāj bil Dawā and Ilāj bit Tadbīr for assigned Parkinson's, Alzheimer's, and GBS cases, then present their therapeutic rationale, referencing Unani reviews and efficacy data.
Practical Training 5.3 Neurological assessment and management of brain tumours
Total Learning Hours (5) Activity 1: Teacher Demonstration (1 hr) Demonstrate a systematic neurological examination focusing on signs indicative of brain tumours. Assessment of mental status, cranial nerves, motor and sensory systems, coordination, reflexes, and gait. Identification of focal neurological deficits that may suggest tumour location. Discussion on correlating clinical findings with potential tumour sites. Activity 2: Clinical Assessment & History-Taking (1 hr)

Conduct detailed patient interviews focusing on symptom onset, progression, and associated factors. Perform neurological examinations, emphasising areas commonly affected by brain tumours. Document findings and hypothesise potential tumour locations based on clinical presentation. Activity 3: Diagnostic Techniques & Imaging Interpretation (1 hr) Review MRI and CT scans of patients with diagnosed brain tumours and identify tumour characteristics such as size, location, and effect on surrounding structures, as well as correlate imaging findings with clinical symptoms and neurological examination results. Activity 4: Treatment Planning & Multidisciplinary Approach (1 hr) Discuss surgical, radiotherapeutic, and chemotherapeutic options based on tumour type and location and consider patient-specific factors such as age, comorbidities, and functional status in treatment planning, also collaborate in multidisciplinary teams to develop individualised care plans. Activity 5: Patient Communication & Education Strategies (1 hr) Role-play scenarios to practice delivering complex medical information empathetically and develop educational materials to aid patient understanding of their condition and treatment options, also address common patient concerns and questions regarding brain tumour diagnoses and therapies.
Practical Training 5.4 Integrated Clinical Management of Meningocele and Hydrocephalus
Total Learning Hours (5) Activity 1: Teacher Demonstration (1 hr) Integrated Clinical Management of Meningocele and Hydrocephalus: Demonstrate the clinical features, diagnostic procedures, and management strategies for Meningocele and Hydrocephalus, highlighting both Unani and modern medical perspectives. (Anatomy and pathophysiology of Meningocele and Hydrocephalus. Modern diagnostic tools (e.g., MRI, CT scans) and surgical interventions (e.g., shunt placement). Unani concepts related to neurological disorders, including the role of Mizaj (temperament) and Ilaj) Activity 2: Clinical Assessment and History-Taking (1 hr) Students conduct detailed patient history interviews focusing on symptoms, onset, and progression and perform neurological examinations to assess motor and sensory functions as well as analyse the patient's Mizaj and plan Unani treatment. Activity 3: Diagnostic Techniques and Interpretation (1hr)

Review and interpret imaging results (e.g., MRI, CT scans) for signs of Meningocele and Hydrocephalus and correlate imaging findings with clinical symptoms and Unani diagnostic indicators, also discuss the implications of diagnostic results for treatment planning. Activity 4: Treatment Planning and Integration (1 hr) Develop individualised treatment strategies, including surgical options and Unani therapies, and incorporate dietary recommendations (Ilaj bil-Ghiza) and lifestyle modifications. Activity 5: Patient Education and Communication Skills (1 hr) Role-play scenarios to practice explaining diagnoses and treatments in understandable terms, and address common patient concerns and misconceptions with empathy, also develop educational materials that incorporate both Unani and modern medical information.
Experiential Learning Activity
Experiential-Learning Learning 5.1: Patient-Centred Unani Management: Teaching Self-Care and Enhancing Adherence in Irq al-Nasa and Isaba.
Total Learning Hours (5) Activity 1: Patient Assessment and Personalised Treatment Planning (1 hr) Students will independently assess patients presenting with symptoms of Irq al-Nasa or Isaba. They will formulate personalized treatment plans incorporating Unani pharmacotherapy (Ilāj bil Dawā) and regimental therapies (Ilāj bit Tadbeer), such as Ḥijāmah (cupping), Dalk (therapeutic massage), or Hirudotherapy (leech therapy). Mentors will observe and provide immediate feedback on clinical reasoning, diagnostic accuracy, and treatment appropriateness. Activity 2: Patient education: teaching self-care techniques (1 hr) Students will educate patients on self-care strategies tailored to their conditions, including demonstrating specific exercises and postures beneficial for sciatica and trigeminal neuralgia. For Irq al-Nasa: posture correction, stretching exercises, and heat/cold therapy. For Isaba, facial relaxation techniques and avoidance of known triggers. Guiding patients on lifestyle modifications and dietary recommendations aligned with Unani principles and providing instructions on the use of home remedies and preventive measures to manage symptoms effectively. Students will utilise visual aids and demonstrations to ensure patient understanding, with mentors providing guidance on effective teaching methods. Activity 3: Empathic communication for enhancing treatment adherence (1 hr)

Through simulated patient interactions, students will practice active listening and responding to patient concerns with empathy, addressing barriers to treatment adherence and collaboratively developing solutions, utilizing motivational interviewing techniques to encourage patient engagement in their care plans. Activity 4: Case-Based Group Discussion – Integrating Unani and Modern Approaches (1hr) In small groups, students will analyze case studies of patients with Irq al-Nasa and Asaba to develop comprehensive treatment plans that incorporate Unani therapies with contemporary medical practices and discuss the rationale behind selected interventions and anticipated outcomes further evaluate the effectiveness of combined approaches in managing chronic neurological conditions. Activity 5: Reflective Practice – Case Documentation and Mentor Feedback (1 hr) Students will document detailed case reports of patients they have managed, including assessment findings, treatment plans, patient education provided, and follow-up strategies. Mentors will review these reports, provide feedback, and discuss areas for improvement.
Experiential-Learning Learning 5.2: Integrative diagnostic interpretation in neurodegenerative disorders: bridging Unani and modern modalities
Total Learning Hours (4) Activity 1: Supervised Clinical Interpretation of Diagnostic Reports (1 hr) Students will review actual patient diagnostic reports, including EMG results, muscle biopsy findings, histochemical analyses, immunopathology reports, and genetic study outcomes. Under mentor supervision, they will interpret each diagnostic modality's findings, correlate results with clinical presentations of Parkinson’s disease, Alzheimer’s disease, and Guillain–Barré syndrome, and discuss differential diagnoses based on combined diagnostic data. Activity 2: Case-Based Group Discussions (1 hr) Students will be divided into small groups, each assigned a case study of a patient with one of the target neurodegenerative disorders. Each group will analyze the patient's clinical history and diagnostic test results, formulate a comprehensive diagnosis, and present their findings and rationale to the larger group. Activity 3: Peer Teaching Sessions (1 hr) MD students will prepare and deliver mini-lectures to junior students on topics such as the role of EMG in diagnosing neuromuscular disorders, interpreting muscle biopsy and histochemical findings, and understanding genetic markers associated with Parkinson’s and Alzheimer’s diseases.

Activity 4: Reflective Practice and Feedback (1 hr) Students will document their experiences from the day's activities, focusing on challenges faced during diagnostic interpretation for personal learning objectives for future practice.
Experiential-Learning Learning 5.3: Empathetic, patient-centred communication strategies for multiple sclerosis and neurofibromatosis.
Total Learning Hours (4) Activity 1: Practicing Empathetic Communication (1 hr) Students will engage in real-time consultations with patients diagnosed with Multiple Sclerosis (MS) and Neurofibromatosis (NF). They will explain the diagnosis and treatment options in layman's terms and address patient and caregiver concerns with empathy and clarity. They may utilise visual aids or models to enhance understanding. Mentors will provide immediate feedback to refine communication skills. Activity 2: Role-Playing Scenarios: Simulating Challenging Conversations (1 hr) Students will participate in simulated interactions, taking turns as healthcare providers, patients, and caregivers. Scenarios will include delivering a new diagnosis of MS or NF, discussing treatment plans and potential side effects, also handling emotional responses and questions from patients and families. Activity 3: Peer Teaching Sessions: Educating Junior Students (1 hr) MD students will prepare and deliver brief educational sessions to junior students on pathophysiology and clinical presentation of MS and NF; effective communication strategies for complex diagnoses; cultural and ethical considerations in patient interactions. Activity 4: Reflective Practice: Documenting and Discussing Experiences (1 hr) Students will document their communication experiences with patients, focusing on effective and ineffective strategies, emotional responses from patients and caregivers, as well as personal feelings and areas for improvement. These reflections will be discussed in group sessions facilitated by mentors to promote continuous learning and self-awareness.
Experiential-Learning Learning 5.4: Empathetic Communication in Brain Tumour Care and Integrating Unani Principles
Total Learning Hours (4) Activity 1: Supervised Patient Consultations (1 hr)

Students will engage in real-time consultations with brain tumour patients, practicing the delivery of personalised self-care advice and treatment plans. Mentors will observe and provide feedback on communication techniques and the integration of Unani principles. Activity 2: Role-Playing Scenarios (1 hr) Through simulated interactions, students will practice explaining complex diagnoses and treatment options to patients and caregivers, focusing on empathy and clarity. These scenarios will help students anticipate and address common patient concerns. Activity 3: Peer Teaching Sessions (1 hr) Students will prepare and deliver brief educational sessions to junior peers on topics such as Unani approaches to brain tumour management and effective patient communication strategies. Activity 4: Reflective Practice (1 hr) Students will document their experiences from the day's activities, reflecting on the effectiveness of their communication strategies and the integration of Unani principles. Group discussions will follow, facilitated by mentors to promote continuous learning and self-awareness.
Experiential-Learning Learning 5.5: Empathetic, personalised care for meningocele and hydrocephalus management.
Total Learning Hours (5) Activity 1: Supervised Clinical Consultations (1 hr) Students will observe and participate in consultations with patients diagnosed with Meningocele or Hydrocephalus. Under mentor supervision, they will explain diagnoses and treatment options in layman's terms, discuss self-care strategies tailored to individual patient needs, and address patient and caregiver concerns with empathy and clarity. Activity 2: Role-Playing Scenarios (1 hr) Through simulated interactions, students will practice delivering new diagnoses to patients and caregivers, discussing treatment plans, including potential side effects, and handling emotional responses and questions from patients and families. Activity 3: Peer Teaching Sessions (1 hr)

Students will prepare and deliver brief educational sessions to junior peers on the pathophysiology and clinical presentation of Meningocele and Hydrocephalus. Integrating Unani principles with modern treatment approaches and Effective communication strategies for complex diagnoses and Activity 4: Reflective Practice (1 hr) Encourage self-assessment and continuous improvement in communication and patient education skills.) Students will document their experiences from the day's activities, reflecting on effective and ineffective strategies, emotional responses from patients and caregivers, as well as their feelings and areas for improvement. Activity 5: Unani and Modern Treatment Approaches (1 hr) Facilitated by experts in Unani and modern medicine, students will discuss case studies highlighting integrated treatment plans, identify complementary aspects of Unani and modern approaches and develop holistic care plans that incorporate both systems
Experiential-Learning Learning 5.6: Management strategies for Tazazae Dimagh
Total Learning Hours (4) Activity 1: Simulation-Based Emergency Response Drill (1 hr) Students participate in a high-fidelity simulation replicating a patient presenting with symptoms indicative of Tazaza-e-Dimagh. Perform immediate assessments, initiate appropriate interventions, and stabilise the patient. Faculty observe and provide real-time feedback, focusing on clinical reasoning and adherence to emergency protocols. Activity 2: Case-Based Group Discussion and Management Planning (1 hr) Students are divided into small groups and provided with detailed case studies of patients with Tazaza-e-Dimagh. Analyse patient history, identify key clinical features, and develop immediate management strategies integrating Unani principles and modern medical practices. Each group presents their management plan, followed by a peer and mentor-led discussion to evaluate the approaches. Activity 3: Peer Teaching and Demonstration Session (1 hr)

Senior students prepare and deliver a mini-workshop to junior peers on the immediate management of Tazaza-e-Dimagh. Include demonstrations of clinical techniques, discussion of treatment protocols, and integration of Unani therapeutic approaches. Junior peers provide feedback on clarity, engagement, and effectiveness, fostering a reflective learning environment. Activity 4: Reflective Practice and Action Plan Development (1 hr) Students individually reflect on their experiences from the previous activities. Identify strengths, areas for improvement, and develop a personalised action plan to enhance their management skills for acute neurological conditions. Sharing of reflections in a group setting to promote collective learning and support.	
Modular Assessment	
Assessment	**Hour**
Instructions— Conduct a structured Modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C. Case-based assessment: (50 marks) Each student will be given a of Neuromuscular disorder/ Brain tumour or any case covered in this module to establish diagnosis and differential diagnoses, propose appropriate investigations, and develop management strategies. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any experiential, such as portfolios/ reflections/ presentations can be taken as an assessment. (25 Marks)	4

Module 6 : ‘Awāriz-i-Nawm wa Amrāz ‘Asbi Shaykhūkhi (Sleep Disorders and Neurogeriatrics) عوارض نوم وامراض عصبی شیخوخی

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describe Sleep disorders, Sunstroke and Talyīn-i-Dimāgh.

2. Conduct History taking and Physical examination for Sleep disorders disorders, Sunstroke and Talyīn-i-Dimāgh.

3. Develop and Formulate the line of treatment and write prescriptions for Sleep disorders, Sunstroke and Talyīn-i-Dimāgh.

Unit 1 ‘Awāriz-i-Nawm (Sleep Disorders) عوارضِ نوم

6.1.1. Tazkira-i-Nawm (Description of Sleep) تذکرہ نوم

6.1.2. Subāt (Narcolepsy) سبات

6.1.3. Sahar (Insomnia) سہر

6.1.4. Kābūs (Nightmare) کابوس

6.1.5. Somnambulism (Sleep walking) سومنامبولزم

References: 4,7,10,14,17,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO5	Describe types of Sleep, distinguish Subat (Narcolepsy) and their types, taking into consideration ICSD, aetiology, and principles of management and treatment.	2	Lecture	CC	Knows-how	L,L&PPT ,L&GD,DIS
CO1,CO2, CO4,CO5	Describe Sahr (Insomnia), associated aetiology, and principles of management and treatment.	1	Lecture	CC	Knows-how	L&GD,DIS,L&PPT

CO1,CO2, CO4,CO5	Distinguish Kaboos (Nightmare/ Sleep Terror), Somnabulism (Sleep walking), and Nisyan (Amnesia), summarizing the etiophysiopathology and treatment	2	Lecture	CC	Knows-how	FC,L&PPT ,L,L&GD
CO1,CO2, CO4,CO5	Demonstrate Subat (Narcolepsy) and its types associated aetiology, appropriate tests, and treatment in the view of Polysomography.	4	Practical6.1	PSY-GUD	Shows-how	PBL,TBL,EDU,D
CO1,CO2, CO4,CO5	Illustrate Sahr (Insomnia), aetiology, and principles of management and treatment.	4	Practical6.2	PSY-GUD	Shows-how	IBL,Mnt,PBL
CO1,CO2, CO4,CO5	Apply the diagnostic techniques and plan treatment protocols for Sleep as per the cause and temperament of the patient and Polysomography report.	4	Practical6.3	PSY-MEC	Shows-how	DIS,PBL
CO1,CO2, CO4,CO5	Evaluate the causes of Sahar (insomnia) to identify the causative factors and their management modes.	5	Experiential-Learning6.1	CAP	Does	TPW,CBL,SIM,PBL,D-BED
CO1,CO2, CO4,CO5	Appraise the role of Counselling and regiminal therapies for Sleep disorders.	5	Experiential-Learning6.2	AFT-RES	Does	RLE,RP,PBL,CD,SIM
Unit 2 Amrāz-i-Dimagh Inḥiṭaṭi (Neurodegenerative Disorders) امراضِ دماغ انحطاطی 6.2.1. Ḍarab al-Shams (Sun-Stroke) ضربۃ الشمس 6.2.2. Talyīn-i-Dimāgh (Encephalomalacia) تلیین دماغ 6.2.3. Ḍamūr-i-Dimāgh (Brain Atrophy-Age related) ضمور دماغ **References:** 2,4,10,12,22,27,29,30						
3A	**3B**	**3C**	**3D**	**3E**	**3F**	**3G**

CO1,CO2, CO4,CO5	Describe Sun-Stroke, its management and complications	2	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO5	Describe Tal'een Dimagh, its management, and possible complications.	2	Lecture	CC	Knows-how	L&PPT ,L,L&GD,DIS
CO1,CO2, CO4,CO5	Describe the concept of Sinn-e-Shaikhukhat and Related disorders.	1	Lecture	CC	Knows-how	DIS,L&GD,L&PPT
CO1,CO2, CO4,CO5	Demonstrate diagnosis of Sun stroke and Neurogeriatrics related problems	4	Practical6.4	PSY-GUD	Shows-how	CBL,TUT,PrBL,D
CO1,CO2, CO4,CO5	Illustrate age-related changes of the brain and Unani concepts of Tal'een-e-Dimagh, and their management.	4	Practical6.5	PSY-GUD	Shows-how	SIM,D-BED,CBL,D
CO1,CO2, CO4,CO5	Formulate immediate treatment plans for Sun-Stroke to avoid complications.	6	Experiential-Learning6.3	CAP	Does	BS,SIM,RP,RLE,PER
CO1,CO2, CO4,CO5	Formulate longterm treatment plans for Tal'een-e-Dimagh to avoid complications	5	Experiential-Learning6.4	CAP	Does	PL,RP,SIM,RLE,W
CO1,CO2, CO4,CO5	Design strategies for explaining complex diagnoses and treatments to patients and care givers, addressing their concerns of complications of age related disorders	5	Experiential-Learning6.5	CE	Shows-how	W,RP,SIM,CBL,PBL
Practical Training Activity						
Practical Training 6.1 Subat aur uske aqsam (Narcolepsy)						

Total Learning Hours (4) Activity 1: Clinical Assessment & History-Taking (2 hrs) The teacher shall demonstrate Subat (Narcolepsy), its types (Aqsam) and clinical features with an emphasis on Unani & modern perspectivesStudents will perform detailed patient history, temperament analysis (Mizaj), and neurological examination to identify narcolepsy symptoms. Activity 2: Diagnostic Techniques & Polysomnography Interpretation (1 hr) Groups interpret Polysomnography reports and Multiple Sleep Latency Test (MSLT) results, correlating with Unani concepts of Dimaghi Quwat (brain faculties). Activity 3: Treatment Planning & Matching (1 hr) Students formulate treatment strategies, including Ilaj bil-Tadbeer (regimenal therapy like Hijama & Hammam), Ilaj bil-Ghiza (dietary management) and ilaj bil dawa (pharmacotherapy)
Practical Training 6.2 Aetiology and Manangement of Sahr (Insomnia)
Total Learning Hours (4) Activity 1: Bedside Demonstration (1 hr) The teacher shall demonstrate on a case of the Sahr (Insomnia), describe the aetiology (Madda, Sue Mizaj, A'za dysfunction) and principles of Unani & modern management. Activity 2: Clinical Assessment (1 hr) Students will perform history-taking, temperament analysis (Mizaj), and sleep pattern evaluation on simulated or real cases. Activity 3: Identification of Causes & Matching Treatment (1 hr) Groups classify insomnia types (e.g., stress-induced, nutritional, metabolic) and match appropriate Unani interventions (Ilaj bil-Tadbeer, Ilaj bil-Ghiza, pharmacotherapy). Activity 4: Treatment Planning & Application (1 hr) Students create individualized treatment strategies, incorporating Unani regimenal therapies (Dalk, Hijama, Hammam), herbal remedies, and lifestyle modifications.

Practical Training 6.3 Sleep disoerders in view of Polysomography report
Total Learning Hours (4) Activity 1: Diagnostic approach (1 hr) Demonstrate diagnostic techniques for sleep disorders, including clinical history-taking, temperament assessment (Mizaj), and Polysomnography interpretation. Activity 2: Sleep Disorder Diagnosis (1 hr) Under the supervision of teacher, students practice history-taking and temperament analysis on case studies, identifying causes of sleep disturbances (Sahr, Kasrat-e-Naum). Activity 3: Polysomnography Interpretation (1 hr) Groups analyze Polysomnography reports, correlating findings with Unani concepts of brain function and sleep patterns. Activity 4: Treatment Planning (1 hr) Students design personalized treatment protocols using Ilaj bil-Tadbeer (regimenal therapy), Ilaj bil-Ghiza (dietary modifications), and herbal remedies based on the patient's Mizaj.
Practical Training 6.4 Diagnosis of Sun Stroke and Neurogeriatrics related problems
Total Learning Hours (4) Avtivity 1: Bedside demonstration (2 hrs) Teacher Demonstration and Explain clinical signs, symptoms, and diagnostic methods for Sunstroke (Darbat al-Shams) and Neurogeriatrics issues like dementia and Parkinson's, using case presentations and live demonstrations. Avtivity 2: Clinical Examination Practice (1 hr) Students perform GCS assessment, neurological exams, and dehydration status evaluation on simulated patients. Avtivity 3: Management & Unani Approach (1 hr)

Students will apply Unani and modern treatment strategies, including Ilaj bil-Tadbeer (regimenal therapy), Ilaj bil-Ghiza (dietary therapy), and hydration techniques.
Practical Training 6.5 Assessment and Management of Tal'een e Dimagh
Total Learning Hours (4) Activity 1: Brain Aging & Unani Concepts (1 hr) Teacher will explain structural brain changes with age and Unani views on brain health in case of Tal'een e Dimagh. Activity 2: Cognitive Assessment (1 hr) Students will practice memory and cognition tests and relate to Unani aging theories. Activity 3: Hands-on training session for Regimenal Therapy (1 hr) The teacher will demonstrate Dalk (massage), Hammam (steam), and aromatherapy for brain health, and later the students will do hands-on training. Activity 4: Herbal & Diet Therapy (1 hr) Teacher will explain Unani herbs and diet for preventing cognitive decline.
Experiential Learning Activity
Experiential-Learning Learning 6.1: Cause and Management of Sahar
Total Learning Hours (5) Activity 1: Case Study Analysis (1 hr) Students examine patient case studies to identify possible causes of Sahr (e.g., stress, diet, temperament, underlying diseases) and discuss differential diagnoses. Activity 2: Patient Interview & History Taking (1hr) Groups practice taking detailed patient histories, focusing on lifestyle, emotional state, sleep habits, and medical conditions contributing to Sahr. Activity 3: Unani-Based Management Planning (1 hr)

Students develop individualized treatment plans using Ilaj bil-Ghiza (dietary therapy), Ilaj bil-Dawa (herbal medicine), and Ilaj bil-Tadbeer (regimenal therapy). Activity 4: Hands-on perfomance of different Tadbeer (1 hr) Groups perform Dalk (massage), Hammam (steam bath), Itr therapy (aromatherapy), and Riyazat (exercise techniques) to improve sleep. Activity 5: Herbal Remedy Preparation (1 hr) Students prepare and prescribe Unani formulations like Sharbat-e-Bazoori, Roghan Kadu, and Khameera Gaozaban for managing Sahar.
Experiential-Learning Learning 6.2: Management of Sleep disorders
Total Learning Hours (5) Activity 1: Case Analysis & Group Discussion (1 hr) Students analyze real or simulated case studies of sleep disorders (Insomnia, Hypersomnia, Sleep Apnea), identifying causes, symptoms, and Unani approaches. Activity 2: Simulated Counseling Session (1 hr) Groups role-play as practitioners, counseling a patient with sleep disorders, addressing stress management, sleep hygiene, and behavioral changes. Activity 3: Regimenal therapy workshop (2 hrs) Students shall perform Regimenal Therapies (Tadbeer) such as Dalk (massage), Riyazat (exercise), Hammam (steam bath), and aromatherapy for improving sleep. Activity 4: Sleep Pattern Analysis & Management Strategies (1 hr) Students assess and interpret sleep patterns from patient history, formulating individualized management strategies based on Unani and modern principles.
Experiential-Learning Learning 6.3: Immediate treatment of Sun-Stroke
Total Learning Hours (6) Activity 1: Case-Based Group Discussion (1 hr) Students analyze real or simulated cases of Sunstroke, identifying early symptoms, risk factors, and emergency management protocols. Activity 2: Hands-on Cooling Techniques (2 hrs)

Students practice immediate cooling methods, including cold water immersion, wet cloth application, ice packs on vital areas, and hydration strategies. Activity 3: Unani-Based Treatment Formulation (1 hr) Students prepare and discuss the use of Sharbat Bazoori, Sharbat Sandal, Roghan Kadu, and other cooling agents as immediate Unani interventions. Activity 4: Simulated Emergency Response and Case presentation (2 hrs) Students role-play handling a severe Sunstroke patient, coordinating first aid, monitoring vitals, and preparing for possible hospitalization. Prepare complete cases presentation for departmental seminar.
Experiential-Learning Learning 6.4: Long term treatment for Tal'een e Dimagh
Total Learning Hours (5) Activity 1: Case-Based Group Discussion (1 hr) Students analyze patient case studies, identifying risk factors, symptoms, and disease progression, and discuss potential long-term management strategies. Activity 2: Designing Unani-Based Treatment Plans (1 hr) Students formulate individualized treatment plans, incorporating Ilaj bil-Ghiza (dietary modifications), Ilaj bil-Dawa (herbal medicine), and Ilaj bil-Tadbeer (regimen therapy) to prevent complications. Activity 3: Practical Application of Tadbeer Therapies (2 hrs) Students perfom and practice Dalk (massage), Hijama (cupping), and Riyazat (exercise techniques) to improve cognitive function and blood circulation. Activity 4: Presentation & Peer Review (1 hr) Students presents their long-term management plan, receiving feedback from peers and discussing the effectiveness of different approaches in preventing complications.
Experiential-Learning Learning 6.5: Age related disorders
Total Learning Hours (5) Activity 1: Case-Based Role-Playing (1 hr)

Students take turns acting as doctors and caregivers in simulated cases of age-related disorders to practice simplifying complex diagnoses and addressing concerns empathetically.

Activity 2: Group Discussion & Strategy Development (1 hr)

Students brainstorm and create structured communication strategies for explaining disease progression, complications, and treatment plans tailored to elderly patients and their caregivers.

Activity 3: Interactive Presentation & Visual Aid Creation (2 hrs)

Each group designs simple educational materials (posters, pamphlets, or slides) using visuals and easy-to-understand language to convey complex medical information effectively.

Activity 4: Simulated Family Counseling Session (1 hr)

Students conduct mock counseling sessions where they address common concerns of age-related disorders, handling caregiver stress, medication adherence, and lifestyle modifications.

Modular Assessment

Assessment	**Hour**
Instructions— Conduct a structured Modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C. Case-based assessment: (50 marks) Each student will be given a case of any Sleep disorder/ Heat Stroke/ Dementia for Clinical evaluation, Diagnostic and Management strategies. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks)	4

Or Any practical in converted form can be taken for assessment. (25Marks) and Any experiential, such as portfolios/ reflections/ presentations can be taken as an assessment. (25 Marks)	

Semester No : 6

Module 7 : Amrāz-i-Nafsāniyya aur Iski Darjābandi (Psychiatric disorders and its Classification) امراض نفسانیہ اور اسکی درجہ بندی

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describe Classify and Describe different Psyciatric disorders, Mood disorders and Personality disorders.

2. Conduct History taking and Physical examination for Psyciatric disorders, Mood disorders and Personality disorders.

3. Develop and Formulate the line of treatment and write prescriptions for Psyciatric disorders, Mood disorders and Personality disorders.

Unit 1 Amrāz-i-Nafsāniyya ki Darjābandi (Comprehensive Classification of Psychiatric Disorders) امراض نفسانیہ کی درجہ بندی

7.1.1. Ta'aruf wa Darjābandī (Introduction and Classification) تعارف و درجہ بندی

7.1.2. Delirium, Dementia, and Amnestic and Other Cognitive Disorders سہو، نسیان، نسیانی عارضہ

7.1.3. Bipolar Disorder: Mania مانیا

7.1.4. Mālankhūliyā aur uske aqsām (Melancholia and its types) مالنخولیا اور اس کی اقسام

7.1.4.1. Quṭrub قطرب

7.1.4.2. Ṣubārā صبارا

7.1.4.3. Ikhtilāt-i- ‘Aql اختلاط عقل

7.1.5. Schizophrenia & Other Psychotic Disorders مرض شیزوفرینیا و دیگر وسواسی عوارض

7.1.6. Mood Disorders: Iḍmiḥlāl (Depression) اضمحلال

7.1.7. Anxiety Disorders: Iḍtarāb-i-Nafsāni اضطراب نفسانی

References: 1,4,5,7,8,10,29,30						
3A	**3B**	**3C**	**3D**	**3E**	**3F**	**3G**
CO1,CO2, CO5,CO6	Describe Classification of Psychiatric Disorders with specific reference to ICD-11 and describe etiopathophysiology, clinical features, and unani management of Melancholia, Qutrub and Subara.	2	Lecture	CC	Knows-how	L,L&PPT ,L&GD
CO1,CO2, CO5,CO6	Distinguish the etiology, pathophysiology, clinical manifestations, and differential diagnosisof Mania and Schizophrenia and its pharmacologic and non pharmacologic management	1	Lecture	CC	Knows-how	L&PPT ,L,L&GD
CO1,CO2, CO5,CO6	Describe etiopathophysiology, clinical manifestations, and diagnostic test for Depression and Anxiety disorders and their management modes.	1	Lecture	CC	Knows-how	L,L&PPT ,L&GD
CO1,CO2, CO5,CO6	Summarise and describe Delirium, Dementia, and other Cognitive Disorders with appropriate diagnostic methods and types of management.	1	Lecture	CC	Knows-how	L&GD,L&PPT ,L
CO1,CO2, CO5,CO6	Illustrate a detailed history and perform a comprehensive Psychiatric Interview based on clinical presentation, to establish clinical diagnosis of Malencholia and plan treatment accordingly.	5	Practical7.1	PSY-GUD	Shows-how	CBL,D-M,SIM,D-BED
CO1,CO2, CO5,CO6	Demonstrate treatment options and management strategies for Mania and Schizophrenia including medical, and rehabilitative approaches.	5	Practical7.2	PSY-GUD	Shows-how	PBL,CBL
CO1,CO2, CO5,CO6	Adapt with the Psychiatric Interviews, counselling and treatment protocols used to treat Melancholia and Schizophrenia.	6	Experiential-Learning7.1	AFT-RES	Does	W,SIM,CBL,RP,PBL

CO1,CO2, CO4,CO5	Evaluate and interpret the results of Psychiatric interviews to contribute to the identification of Depression and Anxiety disorders and their management modes.	5	Experiential-Learning7.2	CAN	Does	RP,W,PAL
CO1,CO2, CO5,CO6	Appraise the role of community health workers and Counselling options for the patients of different psychiatric disorders.	5	Experiential-Learning7.3	CE	Does	SDL,RP,FV,TPW

Unit 2 Shakhṣiyāti Amrāz (Personality Disorders) شخصیاتی امراض

7.2.1. Normal Human Sexuality, Sexual and Gender Identity disorders

7.2.1.1 Ishq (Erotomania) عشق

7.2.1.2. Ikhtināq al-Raḥim (Hysteria) اختناق الرحم

7.2.2. Shakhṣiyāti Amrāz (Personality Disorders) شخصیاتی امراض

7.2.2.1. Junūn (Mania) جنون

7.2.2.2. Ru'ūnat wa Ḥumq رعونت وحمق

7.2.3. Mental retardation and learning disorders ضعف ذہانت

7.2.4. Drug or alcohol addiction and Withdrawal دواء اور شراب کی لت اور انکا چھوڑنا

7.2.5. Adjustment Disorders/Obsessive-Compulsive Disorders امراض ترمیم وتصحیح، عارضہ اضطراری

References: 4,7,10,27,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO5,CO6	Describe the importance of mental health with specific reference to personality disorders describing the causes and clinical features of Junoon, Raunat o Humaq and their treatments.	2	Lecture	CC	Knows-how	L&GD,CD,L,L&PPT

CO1,CO2, CO5,CO6	Interpret social, economic, environmental, biological, and emotional determinants of Ikhtenaq-ur-rahem and Ishq, and their management.	2	Lecture	CC	Knows-how	L,L&GD,L&PPT
CO1,CO2, CO5,CO6	Describe the causes, clinical features and treatment of Mental retardation and learning disorders.	1	Lecture	CC	Knows-how	L,L&PPT ,L&GD
CO1,CO2, CO5,CO6	Demonstrate how to educate patients and families about their diagnosis, treatment options and recovery strategies in case of Junoon, Raunat o Humaq	5	Practical7.3	AFT-RES	Shows-how	D-BED,DIS,RP,SIM
CO1,CO2, CO5,CO6	Demonstrate various treatment plans for personality disorders, such as Ikhtenaq-ur-rahem and Ishq integrating psychotherapy techniques.	5	Practical7.4	CAP	Shows-how	PAL,D-BED,DIS,PT,RP
CO1,CO2, CO5,CO6	Conduct psychiatric interviews, MSEs and other relevant tests to diagnose and treat Mental retardation and learning disorders.	5	Experiential-Learning7.4	CE	Does	RP,SIM,PAL,TPW,IBL
CO1,CO2, CO5,CO6	Facilitate the techniques to respond to psychiatric crisis such as severe agitation or panic attacks.	5	Experiential-Learning7.5	PSY-ADT	Does	TBL,PAL,RP,SIM,RLE
Practical Training Activity						
Practical Training 7.1 Diagnosis and Treatment of Malencholia						
Total Learning Hours (5) Activity 1: Teacher Demonstration: Conducting a Psychiatric Interview (1 hr) The teacher demonstrates a comprehensive psychiatric interview on a simulated patient with Melancholia, covering detailed history-taking, mental status examination (MSE), and clinical presentation analysis. Activity 2: Student Group Activity: Performing Psychiatric Interviews (1 hr)						

In small groups, students interview a simulated patient or role-play different presentations of Melancholia, documenting key symptoms, social history, and possible triggers. Activity 3: Case Study Discussion & Symptom Analysis (1 hr) Students analyze real or simulated patient cases, comparing symptoms with clinical diagnostic criteria and Unani concepts, differentiating Melancholia from other psychiatric disorders. Activity 4: Formulating a Treatment Plan & Management Strategies (1 hr) Each group develops a holistic treatment plan, including Unani Ilaj bil-Dawa (herbal medicine), Ilaj bil-Tadbeer (regimen therapy), Ilaj bil-Ghiza (dietary modifications), and modern psychiatric approaches. Activity 5: Patient Counseling & Psychoeducation Practice (1 hr) Students simulate counseling sessions with patients and families, explaining the diagnosis, treatment adherence, and lifestyle modifications using effective communication techniques.
Practical Training 7.2 Treatment of Mania and Schizophrenia.
Total Learning Hours (5) Activity 1: Teacher Demonstration (1 hr) The teacher demonstrates Unani and modern treatment strategies for Mania and Schizophrenia, including herbal formulations, dietary recommendations, psychotherapy, and pharmacological options. Activity 2: Unani Medicine Preparation & Prescription Writing (1 hr) Students prepare and prescribe Unani formulations for symptom relief based on patient presentation. Activity 3: Role-Play: Psychotherapy & Counseling Techniques (1 hr) Under the supervision of teacher the students shall communicate and counsel manic and schizophrenic patients using Unani Ilaj bil-Nafsiyat (psychotherapy) techniques. Activity 4: Case-Based Rehabilitation Planning (1 hr)

Students develop a comprehensive rehabilitation plan for long-term management, including lifestyle modifications, diet, social reintegration, and family support. Activity 5: Simulated Patient Rounds & Case Discussions (1 hr) Superviserd assessment of simulated patients, discuss differential diagnoses, and propose treatment and management plans incorporating medical, psychological, and rehabilitative approaches.
Practical Training 7.3 Junoon and Raunat o Humaq
Total Learning Hours (5) Activity 1: Teacher Demonstration (1 hr) The teacher demonstrates how to explain diagnosis, treatment, and recovery to patients and families using clear and empathetic communication. Activity 2: Role-Play: Educating a Patient & Family for Junoon (1 hr) Students practice explaining psychosis, treatment options, and coping strategies in a simulated setting. Activity 3: Creating Educational Materials for Raunat (1 hr) Groups design pamphlets or presentations on symptoms, treatment, and lifestyle changes for Mania. Activity 4: Family Counseling Simulation for Humaq (1 hr) Students conduct a mock counseling session to guide families on long-term care and behavioral management. Activity 5: Case Study Discussion (1 hr) Groups analyze real cases, discuss best approaches, and receive feedback on their communication skills.
Practical Training 7.4 Treatment plans for Ikhtenaq-ur-rahem and Ishq
Total Learning Hours (5) Activity 1: Demonstration of Psychotherapy Techniques for Personality Disorders (1 hr) The teacher demonstrates cognitive-behavioral therapy (CBT), supportive counseling, and Unani approaches for managing Ikhtenaqurrahem (pathological grief) and Ishq (love obsession disorder).

Activity 2: Role-Play – Conducting a Psychotherapy Session (1 hr) Students practice therapeutic communication, active listening, and structured psychotherapy techniques in a simulated patient consultation. Activity 3: Developing Personalized Treatment Plans (1 hr) Groups analyze case scenarios and formulate comprehensive treatment plans integrating Unani regimens, behavioral therapy, and counseling strategies. Activity 4: Managing Crisis Situations in Personality Disorders (1 hr) Students simulate emergency interventions for self-harm risk, emotional outbursts, and obsessive behaviors, applying psychotherapy techniques in real-time scenarios. Activity 5: Case-Based Discussion & Peer Review (1 hr) Groups present their treatment strategies for different personality disorders, discuss effectiveness, challenges, and ethical considerations
Experiential Learning Activity
Experiential-Learning Learning 7.1: Treatment of Melancholia and Schizophrenia
Total Learning Hours (6) Activity 1: Role-Play: Conducting a Psychiatric Interview (1 hr) Students perform structured psychiatric interviews on simulated patients presenting with Melancholia (Depression) and Schizophrenia, using standard assessment tools. Activity 2: Case Analysis: Identifying Symptoms & Diagnosis (2 hrs) Groups analyze real or simulated patient cases, differentiate between Melancholia and Schizophrenia, and discuss diagnostic challenges. Activity 3: Counseling Simulation: Therapeutic Communication Practice (1 hr) Students practice counseling techniques tailored for patients with Melancholia (CBT-based approach) and Schizophrenia (Reality-Oriented Therapy). Activity 4: Treatment Planning Workshop (1 hrs) Groups develop comprehensive treatment strategies, integrating Unani, psychotherapy, medication, and lifestyle modifications. Activity 5: Ethical & Cultural Considerations in Treatment (1 hr)

Groups discuss case-based ethical dilemmas, focusing on stigma, informed consent, and culturally sensitive approaches in psychiatric care.
Experiential-Learning Learning 7.2: Diagnosis and management of Anxiety disorders
Total Learning Hours (5) Activity 1: Role-Play: Conducting a Psychiatric Interview (1 hr) Students practice structured psychiatric interviews using standardized questionnaires (Patient Health Questionnaire) for Depression, (Generalized Anxiety Disorder) on simulated patients. Activity 2: Interpreting Psychiatric Interview Results (1 hr) Groups analyze recorded or written psychiatric interviews, identify key symptoms, and differentiate Depression from Anxiety disorders. Activity 3: Case Study Discussion: Diagnosis & Management (2 hrs) Students discuss real or simulated cases, interpret symptoms, and propose management plans using Unani and modern treatment approaches.. Activity 4: Peer Feedback & Reflection (1 hr) Students present their diagnostic reasoning and management plans, receive peer feedback, and reflect on improving psychiatric assessment skills.
Experiential-Learning Learning 7.3: Counselling options for Psychiatry disorders
Total Learning Hours (5) Activity 1: Role-Play: Community Health Worker (CHW) Interaction (1 hr) Students act as CHWs, educating a simulated patient or family on healthcare access, disease prevention, and available services. Activity 2: Field Visit & Observation (1 hr) Students visit a community health center or NGO, observe CHWs in action, and reflect on their role in patient care. Activity 3: Conducting a Mock Counseling Session (1 hr) Students practice one-on-one counseling for mental health, chronic illnesses, or lifestyle changes in a simulated setting. Activity 4: Designing a Health Awareness Campaign (1 hr) Students create posters, videos, or skits to promote community health and counseling services for public awareness.

Activity 5: Case Study Discussion & Problem-Solving (1 hr) Students analyze real-life cases of CHW interventions, propose counseling strategies, and discuss challenges in community healthcare.
Experiential-Learning Learning 7.4: Mental retardation and learning disorders
Total Learning Hours (5) Activity 1: Conducting a Comprehensive Psychiatric Interview (1 hr) Students take turns acting as clinicians and patients/caregivers, practicing structured psychiatric interviews to assess cognitive, social, and emotional functioning. Activity 2: Mental Status Examination (MSE) Practice (1 hr) Groups perform MSE on simulated patients, assessing appearance, speech, cognition, mood, affect, and insight to identify signs of intellectual disabilities or learning disorders. Activity 3: Administering and Interpreting Cognitive Tests (1 hr) Students practice using IQ tests (e.g., Wechsler scales), neuropsychological assessments, and screening tools to differentiate intellectual disabilities from learning disorders. Activity 4: Case-Based Differential Diagnosis & Treatment Planning (1 hr) Groups analyze real or simulated case studies, identifying key diagnostic findings and proposing personalized treatment plans, including Unani and modern interventions. Activity 5: Parent & Caregiver Counseling Role-Play (1 hr) Students simulate counseling sessions with caregivers, educating them about the disorder, behavioral management strategies, and available support resources
Experiential-Learning Learning 7.5: psychiatric crisis
Total Learning Hours (5) Activity 1: Role-Play: De-escalating an Agitated Patient (1 hr)

Students take turns acting as healthcare providers and agitated patients, practicing verbal de-escalation, active listening, and calming techniques in a simulated scenario.

Activity 2: Guided Simulation: Managing a Panic Attack (1 hr)

Groups practice guiding a simulated patient through breathing exercises, grounding techniques (5-4-3-2-1 method), and relaxation strategies to ease a panic attack.

Activity 3: Non-Verbal Communication & Crisis Response (1 hr)

Students practice body language, maintaining safe distance, and using a calm tone to defuse a psychiatric crisis, ensuring patient and staff safety.

Activity 4: Emergency Response Drill for Psychiatric Crisis (1 hr)

Groups simulate a real-time psychiatric emergency, applying triage, restraint techniques (if necessary), and multidisciplinary team coordination for effective crisis intervention.

Activity 5: Case Study & Peer Feedback Discussion (1 hr)

Students analyze case scenarios of psychiatric crises, discuss their intervention approach, receive peer feedback, and refine their crisis management skills.

Modular Assessment

Assessment	**Hour**
Instructions— Conduct a structured Modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C. Case-based assessment: (50 marks) Each student will be given a case of Psyciatric disorders, Mood disorders and Personality disorders for clinical evaluation based on History taking and Physical Examination and to propose investigations and treatment guidelines. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks)	4

- Formulation of Differential Diagnosis (10 Marks)
- Development of Management Plan and Justification (10 Marks)

Or

Any practical in converted form can be taken for assessment. (25 Marks)

and

Any experiential, such as portfolios/ reflections/ presentations can be taken as an assessment. (25 Marks)

Module 8 : 'Awāriz Ghudad-i-Laqanāti (Endocrine Disorders) عوارض غدد لاقناتی

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describe Concept Endocrine disorders in Unani medicine, and diseases of Hypothalamus, Pituitary, Thyroid, and Prathyroid gland, Adrenal gland and Pancreas.

2. Conduct History taking and Physical examination for diseases of Hypothalamus, Pituitary, Thyroid, and Prathyroid gland, Adrenal gland and Pancreas.

3. Develop and Formulate the line of treatment and write prescriptions for diseases of Hypothalamus, Pituitary, Thyroid, and Prathyroid gland, Adrenal gland and Pancreas.

Unit 1 Amrāz Ghudda Tahat-Al Mahād wa Ghudda Nukhamiya (Disorders of Hypothalamus and Pituitary) امراض غدہ تحت المہاد و غدہ نخامیہ

8.1.1. Ghudud-i-Laqanāti aur unke ifrāzāt ka tasawwur atibba ki nazar mein (Umoomi jayaeza) (Description of Endocrine glands and its secretion acording to Unani Physician) غدہ لاقناتی اور ان کے افرازات کا تصور اطباء کی نظر میں (عمومی جائزہ)

8.1.2. Ghudud-i- Nukhamia ke ifrazāt ki qillat wa ifrāt se hone wale Amrāz (Hypothalamus and Pituitary disorders) ہائپو تھیلمس اور پچوٹری: غدۂ نخامیہ کے افرازات کی قلت و افراط سے ہونے والے امراض

8.1.3. Kibr al-Iẓam (Acromegaly) کبر العظم

8.1.4. Qazāmah (Dwarfism) قزامہ

8.1.5. Diabiṭus Sāda (Diabetes Insipidus) ذیابطسِ سادہ

8.1.6. Sal'āt Nukhāmiya سلاعۃ نخامیہ **References:** 4,5,7,10,11,15,16,17,27,29,30						
3A	**3B**	**3C**	**3D**	**3E**	**3F**	**3G**
CO1,CO2, CO4,CO7	Discuss the Unani concepts, classification and disorders of Endocrine Glands and their principles of treatment.	2	Lecture	CC	Knows-how	L&PPT ,L&GD,DIS
CO1,CO2, CO4,CO7	Describe the etiological concepts, pathophysiology, clinical manifestations, and diagnostic tests for Hypothalamus and Pituitary Disorders and their lab assessment, describing Acromegaly, Dwarfism, and their management.	1	Lecture	CC	Knows-how	L&PPT ,DIS,L,L&GD
CO1,CO2, CO4,CO7	Describe the pathophysiology, clinical manifestations, and diagnostic tests for Sal'at-e-Nukhamia and their Unani treatment.	1	Lecture	CC	Know	L&PPT ,L,DIS,L&GD
CO1,CO2, CO4,CO7	Illustrate case of Acromegaly, Dwarfism on a real patient or a simulated patient and advise appropriate tests for the diagnosis and their management.	5	Practical8.1	PSY-GUD	Knows-how	LRI,CD,L_VC
CO1,CO2, CO4,CO6	Demonstrate diagnostic reasoning to differentiate among endocrine disorders with similar symptoms, emphasizing Diabetes Mellitus Vs Diabetes Insipidus.	5	Practical8.2	CAN	Shows-how	D,L_VC,CBL,LRI
CO1,CO2, CO4,CO6, CO7	Design a strategy on how to educate patients and families about Endocrine Disorders, treatment options and recovery.	3	Experiential-Learning8.1	AFT-SET	Does	D-BED,PBL,PSM

CO1,CO2, CO4,CO6	Develop skills in taking a detailed patient history and conducting physical exams and appropriate tests to identify signs of Sal'ate'Nukhamia	3	Experiential-Learning8.2	AFT-RES	Does	LRI,SDL,PAL
CO1,CO2, CO4,CO6	Formulate and compare different treatment options and management strategies for endocrine disorders, including medical and rehabilitative approaches, outlining Unani concepts.	5	Experiential-Learning8.3	CAN	Does	DIS,RP,SIM,SDL,W

Unit 2 Amrāz-i-Darqiya (Thyroid Disorders) امراض درقیہ

8.2.1. Faṛt-i-Darqiyā (Hyperthyroidism) فرط درقیہ

8.2.2. Tasammum-i-Darqiyā (Thyrotoxicosis) تسمم درقیہ

8.2.3. Hashimoto Thyroiditis التہاب درقیہ ہاشیموٹو

8.2.4. Graves Disease مرض گریوس

8.2.5. Qillaṭ-i-Afrāz Darqiyā (Hypothyroidism) قلت افراز درقیہ

8.2.6. Ghoṭar (Goiter) غوطر

8.2.7. Cretinism کریٹینزم

8.2.8. Sal'ā-i-Darqiyā سلعات درقیہ

8.2.9. Faṛt-i-Duraiqiyā (Hyper Parathyriodism) فرط دریقیہ

8.2.10. Quṣūre-i-Duraiqiyā (Hypo Parathyroidism) قصور دریقیہ

References: 4,5,8,10,14,21,26,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO7	Discuss the aetiology, pathophysiology, clinical manifestations, diagnostic tests, and management strategies of Hypothyroidism and Hyperthyroidism.	1	Lecture	CC	Know	L&GD,L&PPT ,L_VC

CO1,CO2, CO4,CO7	Describe the aetiology, pathophysiology, clinical manifestations, diagnostic tests, and Management strategies for Thyrotoxicosis, Graves' disease, Cretinism, and Hashimoto's disease.	2	Lecture	CC	Know	BS,L,L&PPT ,L&GD
CO1,CO2, CO4,CO7	Summarise and describe the causes, clinical features and lab tests of Parathyroid disorder and its impact on Calcium metabolism.	3	Lecture	CC	Know	L,L&GD,L&PPT
CO1,CO2, CO4,CO7	Demonstrate comprehensive general physical and endocrinological examination based on clinical presentation, to establish clinical diagnosis of Thyroid disorders and personalised treatment plans.	5	Practical8.3	PSY-GUD	Shows-how	D-BED,PBL,CBL,LRI
CO1,CO2, CO4,CO7	Demonstrate diagnostic reasoning to differentiate among para thyroid disorders and others with similar symptoms taking into consideration calcium metabolism.	5	Practical8.4	PSY-GUD	Shows-how	IBL,PBL,D-M,D-BED
CO1,CO2, CO4,CO7	Communicate self-care strategies empathetically and motivate patients to adhere to treatment plans through patient-centered education in the management of Endocrine disorders.	5	Experiential-Learning8.4	PSY-MEC	Does	CBL,RP,PER,SDL,RLE
CO1,CO2, CO4,CO7	Develop the ability to support patients through the chronic and emotional challenges of endocrine disorders by applying empathetic communication and long-term care strategies.	5	Experiential-Learning8.5	AFT-RES	Does	CBL
CO1,CO2, CO4,CO7	Analyze case studies of patients with endocrine disorders to apply theoretical knowledge to real-world scenarios.	5	Experiential-Learning8.6	CAN	Does	PER,RP,CBL,SIM,DIS
Unit 3 Amrāz-i-Ghudda Fawqul Kulya wa Tanāsuli (Adrenal glands Pancreatic and Gonadic Disorders) امراض غدہ فوق الکلیہ و تناسلی						

8.3.1. Diabetes mellitus ذیابطیس سکری

8.3.2. Diabetic Ketoacidosis ذیابیطی کیٹواسڈوسس

8.3.3. Sal'ā-i-Bānqarās (Pancreatic Tumors) سلعۃبانقراس

8.3.4. Mutalāzma Cushing (Cushing's Syndrome) متلازمہ کوشنگ

8.3.5. Aldosteroma ایلڈوسٹیروما

8.3.6. Phoechromocytoma فیبو کروموسائٹوما

8.3.7. Addison's disease مرض ایڈیسنز

8.3.8. Hypo aldosteronism ہائیپوایلڈوسٹیرونزم

References: 5,10,11,12,14,15,16,17,19,26,29,30

3A	3B	3C	3D	3E	3F	3G

Practical Training Activity

Practical Training 8.1 Diagnosis and Managemnt of Acromegaly and Dwarfism

Total Learning Hours (5)

Activity 1: Teacher Demonstration (1 hr)

The teacher will demonstrate patient examination (real or simulated), focusing on physical signs, history-taking, and key diagnostic differences between Acromegaly & Dwarfism.

Group Activity 2: Clinical Examination Practice (1 hr)

Students, in groups, will perform physical examinations on simulated patients, identifying key signs such as enlarged hands (Acromegaly) or short stature (Dwarfism).

Group Activity 3: Diagnostic Workup & Lab Analysis (1 hr)

Groups will select and interpret lab tests (IGF-1, GH stimulation/suppression test, MRI for Acromegaly, bone X-ray for Dwarfism) and discuss differential diagnoses.

Group Activity 4: Treatment Planning (1 hr) Each group will propose Unani and modern treatment strategies, including Ilaj-bil-Ghiza, Ilaj-bil-Dawa, GH therapy, surgery, and hormonal therapy. Group Activity 5: Patient Counseling Role-Play (1 hr) Groups will simulate doctor-patient interactions, explaining the condition, treatment options, and long-term management strategies.
Practical Training 8.2 Diagnosis of Endocrine disorders
Total Learning Hours (5) Activity1: Teacher Demonstration (1 hr) The teacher will demonstrate history-taking, clinical examination, and key diagnostic tests (blood glucose, urine specific gravity, serum osmolality) to differentiate Diabetes Mellitus (DM) and Diabetes Insipidus (DI). Activity2: Case-Based History Taking & Examination (1 hr) Students, in groups, will take a detailed history and perform a focused physical examination on simulated patients presenting with polyuria and polydipsia to identify distinguishing clinical features. Activity3: Lab Test Interpretation & Differential Diagnosis (1 hr) roups will analyze given lab reports (fasting blood glucose, HbA1c, urine osmolality, water deprivation test results) to differentiate DM from DI and discuss diagnostic reasoning. Activity4: Clinical Scenario Discussion (1 hr) Each group will be assigned a case with overlapping symptoms; they must justify their diagnosis and present the rationale for distinguishing DM vs. DI. Activity5: Treatment Plan Development & Counseling Role-Play (1 hr) Groups will design personalized treatment plans for both conditions, integrating Unani and modern approaches, and practice counseling patients on management and lifestyle modifications.
Practical Training 8.3 Diagnosis and management of Thyroid disorders
Total Learning Hours (5)

Activity 1: Teacher Demonstration (1 hr) The teacher will demonstrate a step-by-step thyroid examination, including inspection, palpation (thyroid size, nodules, consistency), and systemic evaluation of associated signs (pulse, reflexes, skin changes). Activity 2: Case-Based Clinical Examination (1 hr) Groups will examine simulated patients presenting with different thyroid disorders (hypothyroidism, hyperthyroidism, goiter) and document key clinical findings. Activity 3: Thyroid Function Test Interpretation (1 hr) Students will analyze lab reports (TSH, T3, T4, anti-TPO antibodies) and correlate results with clinical presentations to refine diagnosis. Activity 4: Personalized Treatment Planning (1 hr) Groups will develop individualized Unani treatment plans, incorporating dietary recommendations, Ilaj-bil-Ghiza, and pharmacological options alongside modern management approaches. Activity 5: Case Presentation & Peer Discussion (1 hr) Each group will present a case, including history, examination findings, diagnosis, and treatment plan, followed by feedback and discussion on best practices.
Practical Training 8.4 Diagnosis of Para thyroid disorders
Total Learning Hours (5) Activity 1: Teacher Demonstration (1 hr) The teacher will demonstrate history-taking, clinical examination (Chvostek's & Trousseau's signs), and interpretation of lab tests (calcium, PTH, vitamin D) to differentiate parathyroid disorders from other causes. Activity 2: Case-Based Diagnostic Exercise (1 hr) Groups will analyze patient cases with altered calcium metabolism and identify whether the cause is parathyroid-related or another condition. Activity 3: Lab Report Interpretation (1 hr) Students will interpret simulated lab reports and classify cases as hyperparathyroidism, hypoparathyroidism, or non-parathyroid calcium disorders. Activity 4: Role-Playing Diagnosis (1 hr)

One student acts as a patient while another performs history-taking and clinical examination, followed by group discussion on differential diagnosis. Activity 5: Unani vs. Modern Perspective Discussion (1 hr) Groups will compare Unani concepts of calcium metabolism with modern pathophysiology and present an integrated diagnostic approach.
Experiential Learning Activity
Experiential-Learning Learning 8.1: Management of Endocrine Disorders
Total Learning Hours (3) Activity 1: Role-Play: Doctor-Patient-Family Interaction (1 hr) Students will practice explaining endocrine disorders, treatment options, and recovery plans through role-play, focusing on empathetic communication and patient adherence. Activity 2: Educational Material Development (1 hr) Groups will create pamphlets, posters, or presentations to simplify endocrine concepts for patients, ensuring clear, culturally appropriate communication. Activity:3 Community Awareness Simulation (1 hr) Students will conduct mock OPD or community health talks, educating patients and families, handling queries, and addressing misconceptions effectively.
Experiential-Learning Learning 8.2: Diagnosis of Sul'ate Nukhamia
Total Learning Hours (3) Activity 1: Peer-Led History-Taking Practice (1 hr) Students will work in pairs, one acting as a patient and the other as a physician, practicing detailed history-taking focusing on bone pain, weakness, dietary habits, and risk factors for Sal'ate' Nukhamia. Activity 2: Physical Examination in Small Groups (1 hr) Students will examine each other or simulated patients, assessing skeletal tenderness, muscle strength, gait abnormalities, and neurological signs like hyporeflexia or bone deformities.

Activity 3: Lab Test Interpretation & Diagnosis (1 hr) Groups will analyze simulated serum calcium, phosphorus, alkaline phosphatase, vitamin D, and PTH levels, correlate findings with clinical symptoms, and discuss differential diagnoses.
Experiential-Learning Learning 8.3: Management of Endocrine Disorders
Total Learning Hours (5) Activity 1: Case-Based Group Discussion (1 hr) Students will be divided into groups, each analyzing a case of an endocrine disorder (e.g., diabetes, hypothyroidism, adrenal insufficiency), comparing Unani and modern medical management. Activity 2: Treatment Plan Development Workshop (1 hr) Each group will design a personalized treatment plan, integrating Unani pharmacotherapy (Ilaj-bil-Dawa), dietary modifications (Ilaj-bil-Ghiza), and modern medical interventions. Activity 3: Role-Play: Patient Counseling & Rehabilitation (1 hr) Students will take turns acting as physicians and patients, practicing counseling techniques on lifestyle modifications, rehabilitation, and medication adherence. Activity 4: Debate on Unani vs. Modern Approaches (1 hr) Groups will engage in a structured debate, critically analyzing the efficacy, safety, and applicability of Unani and modern medical treatments in managing endocrine disorders. Activity 5: Multidisciplinary Case Presentation (1 hr) Each group will present a case, outlining diagnosis, treatment comparison, and an integrated approach, followed by peer discussion and faculty feedback.
Experiential-Learning Learning 8.4: Self care techniques of Endocrine disorders
Total Learning Hours (5) Activity 1: Motivational Interviewing Role-Play (1 hr)

Students will practice one-on-one role-playing exercises where they use motivational interviewing techniques to encourage patient adherence to self-care routines. Activity 2: Empathy-Based Patient Counseling Simulation (1 hr) Students will engage in simulated patient counseling sessions focusing on explaining self-care techniques while addressing emotional concerns and barriers to adherence. Activity 3: Teach-Back Method Workshop (1 hr) Students will teach a peer acting as a patient about a specific self-care routine (e.g., insulin administration, dietary modifications), ensuring understanding through the teach-back method. Activity 4: Case-Based Adherence Problem-Solving Exercise (1 hr) Students will analyze real-world cases of non-adherence, identify root causes, and develop personalized communication strategies to improve patient engagement. Activity 5: Patient Education Material Development & Presentation (1 hr) Students will create simple, patient-friendly educational materials (videos, pamphlets, or demonstrations) and present them using empathic communication skills.
Experiential-Learning Learning 8.5: Managing emotional demands in endocrine disorders
Total Learning Hours (5) Activitiy 1: Patient Interaction and Counseling Role-Play (1 hr) Students will engage in simulated consultations with standardized patients to practice delivering long-term management plans and providing emotional support for chronic endocrine disorders. Activity 2: Empathy Immersion Exercise (1 hr) Students will participate in a guided activity where they take on the perspective of a patient with a lifelong endocrine disorder, documenting daily challenges and discussing coping strategies.

Activity 3: Multidisciplinary Case Management Workshop (1 hr) Students will collaborate with peers acting as endocrinologists, dietitians, and psychologists to design holistic care plans for patients with chronic endocrine conditions. Activity 4: Narrative Medicine Session (1 hr) Students will analyze and discuss real or documented patient narratives to understand the psychological impact of long-term endocrine disorders and develop compassionate communication skills. Activity 5: Self-Care Strategies Discussion (1 hr) Students will reflect on the emotional roll of managing chronic endocrine cases and engage in mindfulness.
Experiential-Learning Learning 8.6: Assessment of Endocrine disorders
Total Learning Hours (5) Avtivity 1: Clinical Case Analysis (1 hr) Students will analyze real patient case reports of endocrine disorders, identify key symptoms, and suggest differential diagnoses and management strategies. Avtivity 2: Interactive Case Simulation (1 hr) Students will engage in a role-playing activity where they take on the roles of physician, patient, and lab technician to simulate diagnosing and managing an endocrine disorder. Avtivity 3: Endocrine Disorder Panel Discussion (1 hr) Students will present and discuss different endocrine disorder cases in small groups, focusing on pathophysiology, clinical presentation, and treatment plans. Avtivity 4: Diagnostic Lab Interpretation (1 hr) Students will review and interpret real or simulated laboratory results (e.g., thyroid function tests, glucose tolerance tests) to diagnose specific endocrine conditions. Avtivity 5: Treatment Plan Workshop (1 hr)

Students will develop comprehensive treatment plans for assigned endocrine disorder cases, including pharmacological and lifestyle interventions, and justify their approach in peer discussions.	
Modular Assessment	
Assessment	**Hour**
Instructions— Conduct a structured Modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C. Case-based assessment: (50 marks) Each student will be given a case of Endocrine disorders covered in this module for Clinical evaluation, Diagnostic approach and further Management strategies. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any experiential, such as portfolios/ reflections/ presentations can be taken as an assessment. (25 Marks)	4

Paper No : 2(Moalajat (Medicine) Paper II)

Semester No : 3

Module 9 : Amrāz-i Nizām-i-Tanaffus 01 (Diseases of Respiratory system-01) امراض تنفس

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Evaluate various respiratory diseases mentioned in Unani classical literature and the conventional system of medicine classified as Obstructive & Occupational Lung diseases, Restrictive Lung diseases and Neoplastic lung diseases

2. Demonstrate and interpret the clinical examination and investigation of different Obstructive & Occupational Lung diseases, Restrictive Lung diseases and Neoplastic lung diseases

3. Appraise the treatment guidelines for different Obstructive & Occupational Lung diseases, Restrictive Lung diseases and Neoplastic lung diseases

Unit 1 Amrāz-i-Riya Suddiya wa Mahniyya (Obstructive & Occupational Lung diseases) امراض ریہ سدیہ ومہنیہ

9.1.1. Itlaqi Tashreeh wa Munafeul Aza (Applied anatomy and physiology) اطلاقی تشریح ومنافع الاعضاء

9.1.2. Ḍīq al-Nafas (Asthma) ضیق النفس

9.1.3. Waram Shu'ba al-Ri'a (Bronchitis-acute and chronic) ورم شعبۃ الریۃ

9.1.4. Dā al-Insidād Rewi Muzmin (Chronic obstructive pulmonary disease-COPD) داء الانسداد روی مزمن

9.1.5. Ittisā'-i Shu'ba al-Ri'a (Bronchiectasis) اتساع شعبۃ الریۃ

9.1.6. Nafkha al-Ri'a (Emphysema) نفخۃ الریۃ

References: 4,5,8,10,17

3A	3B	3C	3D	3E	3F	3G

CO1,CO2, CO4,CO6, CO8	Discuss Emphysema for its definition, aetiology, pathogenesis as per Unani as well as modern concepts and describe clinical features, investigations, and principles of treatment with treatment.	1	Lecture	CC	Knows-how	L&PPT ,L,DIS
CO1,CO2, CO4,CO6, CO8	Discuss Asthma, Acute and Chronic bronchitis for pathogenesis as per Unani as well as modern concepts, describe clinical features, investigations, principles of treatment, and treatment.	1	Lecture	CC	Knows-how	DIS,L,L&PPT ,CD
CO1,CO2, CO4,CO6, CO8	Discuss Bronchiectasis for definition, etiology, pathogenesis as per Unani as well as modern concepts, describe clinical features, investigations, principles of treatment, and treatment.	1	Lecture	CC	Knows-how	L,L&PPT ,DIS
CO1,CO2, CO4,CO6, CO8	Discuss obstructive and restrictive lung diseases for epidemiology and concepts of the disease in Unani classical literature.	1	Lecture	CC	Knows-how	L&PPT ,DIS,L
CO1,CO2, CO4,CO6, CO8	Demonstrate the key physical findings of Bronchial Asthma, differentiate it from other respiratory conditions through clinical evaluation, and formulate an appropriate line of treatment.	2	Practical9.1	PSY-GUD	Shows-how	CBL,CD,LRI,D-BED,PBL
CO1,CO2, CO4,CO6, CO8	Demonstrate the key physical findings and interpret relevant investigations for the diagnosis of acute and chronic bronchitis, and formulate an evidence-based line of treatment.	2	Practical9.2	PSY-GUD	Shows-how	CD,D-BED
CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical signs and diagnostic investigations for Waram-e-Shobat-ur-Riyah (acute and chronic bronchitis), and formulate an appropriate line of treatment using Unani and modern approaches	2	Practical9.3	PSY-GUD	Shows-how	DL,L&GD,D-M,PT

CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical signs and diagnostic investigations for Bronchiectasis, differentiate it from other pulmonary conditions, and formulate an appropriate treatment plan.	2	Practical9.4	CC	Shows-how	D-M,D-BED,PBL
CO1,CO2, CO4,CO6, CO8	Evaluate the physical findings of Emphysema, differentiate it from other respiratory conditions through clinical assessment, and formulate an appropriate line of treatment.	2	Practical9.5	PSY-GUD	Shows-how	D-BED,PBL
CO1,CO2, CO4,CO6, CO8	Conduct case presentations of Bronchial Asthma for clinical findings, critically appraise treatment strategies, and effectively communicate diagnostic features, disease progression, and management plans.	3	Experiential-Learning9.1	PSY-ADT	Does	SDL,PBL,CBL,LRI, L_VC
CO1,CO2, CO4,CO6, CO8	Formulate comprehensive treatment plans for Bronchitis, integrating both Unani and contemporary medical approaches.	4	Experiential-Learning9.2	CAP	Does	PBL,CBL
CO1,CO2, CO4,CO6, CO8	Evaluate the cases of Bronchiectasis, and formulate and appraise treatment plans integrating Unani and modern medicine.	2	Experiential-Learning9.3	PSY-ADT	Does	LRI,X-Ray,CD,PBL
CO1,CO2, CO4,CO6, CO8	Perform comprehensive physical examinations for the diagnosis of Emphysema, develop integrated treatment plans incorporating both Unani and modern medical practices.	4	Experiential-Learning9.4	PSY-ADT	Does	X-Ray,CD,CBL,PBL

Unit 2 Amrāz-i-Riya Muqayyad wa Khalāli (Restrictive and Interstitial Lung Diseases) امراض ریہ مقید و خلالی

9.2.1. Pulmonary fibrosis پلمونری فائبروسس

9.2.2. Cystic fibrosis سسٹک فائبروسس

9.2.3. Asbestosis ایسبیسٹوسس

9.2.4. Silicosis سلی کوسس

9.2.5. Coal worker's Pneumoconiosis کول ورکرس نیوموکونیوسس

References: 4,5,8,10,14,16,17,20,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO8	Discuss the etiology, pathogenesis of Pulmonary fibrosis and Cystic fibrosis as per Unani as well as contemporary system of medicine, describe clinical features, differential diagnosis, investigations, and principles of treatment with treatment.	2	Lecture	CC	Knows-how	L&PPT ,L
CO1,CO2, CO4,CO6, CO8	Discuss Silicosis, Coal worker's Pneumoconiosis, Asbestosis for their aetiology, pathogenesis, clinical features, differential diagnosis, investigations, and principles of treatment with treatment.	1	Lecture	CK	Knows-how	L&PPT ,DIS,L
CO1,CO2, CO4,CO6, CO8	Conduct thorough physical examinations of patients with Pulmonary Fibrosis and Cystic Fibrosis, precisely distinguish these conditions from other respiratory disorders, establish definitive diagnoses, and formulate integrated treatment plans that combine both Unani and modern medical practices.	3	Practical9.6	PSY-GUD	Shows-how	D,D-BED
CO1,CO2, CO4,CO6, CO8	Demonstrate appropriate diagnostic investigations and interpret key findings for Silicosis, Coal Workers' Pneumoconiosis, and Asbestosis	3	Practical9.7	CAN	Knows-how	D-BED,PBL,CD,LRI
CO1,CO2, CO4,CO6, CO8	Conduct clinical case presentations on Pulmonary Fibrosis and Cystic Fibrosis; demonstrate the key clinical findings in each case; and effectively communicate	2	Experiential-Learning9.5	PSY-ADT	Does	PBL,X-Ray,CD,PER

	the diagnostic features, disease progression, and management plans to undergraduate students.					
CO1,CO2, CO4,CO6, CO8	Evaluate the patients with Silicosis, Coal Workers' Pneumoconiosis, and Asbestosis, appraise and compare the lines of treatment in Unani and modern systems of medicine.	2	Experiential-Learning9.6	PSY-GUD	Does	X-Ray,D-M,CD,PBL,PER
CO1,CO2, CO4,CO6, CO8	Perform the clinical examination of a patient with silicosis and outline an evidence-based treatment plan focusing on the Unani system of medicine and recent advancements in its therapeutic approaches.	3	Experiential-Learning9.7	PSY-ADT	Does	LRI,PSM,CD,CBL, X-Ray
Unit 3 Amrāz-i-Riya Sarṭaniyya (Neoplastic lung diseases) امراض ریہ سرطانیہ 9.3.1. Saraṭān al-Ri'a (Lungs Cancer) سرطان الرئۃ 9.3.2. Saraṭān Shu'ba al-Ri'a (Bronchial Cancer) سرطان شعبۃ الرئۃ 9.3.3. Sarcoidosis سارکوئڈوسس 9.3.4. Mesothelioma میزوتھیلیوما 9.3.5. Pulmonary Hamartoma پلمونری ہامارٹوما 9.3.6. Secondary Tumours of lung الأورام الثانویۃ فی الرئۃ 9.3.7.Tumours of Mediastinum أورام المنصف **References:** 1,2,5,8,10,19,20,21,27,29,30						
3A	**3B**	**3C**	**3D**	**3E**	**3F**	**3G**
CO1,CO2, CO4,CO6, CO8	Describe Sartan-e-Riya (lung cancer) and its subtype, etiologies, pathogenesis, staging, clinical features, differential diagnoses, investigative approaches, treatment principles, and potential complications.	2	Lecture	CC	Knows-how	L&PPT ,L

CO1,CO2, CO4,CO6, CO8	Discuss Sarcoidosis, Mesothelioma, Pulmonary Hamartoma for definition, etiology, pathogenesis, modern concept, and possible correlation with Unani classical literature, and describe differential diagnosis, investigations, and principles of treatment and treatment.	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical examination and identify key physical findings of Lung cancer, discuss its clinical features with emphasis on small cell carcinoma, interpret relevant investigations, recognise complications, and evaluate recent advancements in treatment and their correlation with conventional medical practices.	1	Practical9.8	PSY-GUD	Shows-how	D-BED,PT,LRI,D
CO1,CO2, CO4,CO6, CO8	Demonstrate the physical findings and clinical features of Bronchial carcinoma, Mediastinal tumours, and secondary lung tumours, and interpret relevant investigations.	1	Practical9.9	PSY-GUD	Shows-how	D-BED,LRI,CBL,X-Ray,PBL
CO1,CO2, CO4,CO6, CO8	Conduct a comprehensive clinical examination of patients with Lung cancer and formulate an integrative treatment plan that incorporates both Unani medicine principles and the latest advancements in modern oncology.	2	Experiential-Learning9.8	PSY-ADT	Does	LRI,CD,SDL,PBL, PSM
CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical examination of patients with sarcoidosis, mesothelioma, and pulmonary hamartoma, and formulate an evidence-based line of treatment for each condition.	2	Practical9.10	PSY-GUD	Does	D-BED,PBL,LRI
CO1,CO2, CO4,CO6, CO8	Conduct a comprehensive clinical examination and evaluate patients with Bronchial carcinoma, with a special focus on the diagnosis and treatment planning of small cell carcinoma.	2	Experiential-Learning9.9	PSY-ADT	Does	X-Ray,CBL,PBL,CD, LRI

CO1,CO2, CO4,CO6, CO8	Conduct a thorough clinical examination of patients with sarcoidosis, mesothelioma, and pulmonary hamartoma, and critically appraise their respective treatment approaches, with particular attention to evidence-based methods.	2	Experiential-Learning9.10	PSY-ADT	Does	PER,CD,X-Ray,PBL,LRI

Practical Training Activity

Practical Training 9.1 Clinical Diagnosis and Management of Ḍīq al-Nafas (Bronchial Asthma)

Total Learning Hours (2)

Activity 1: Bedsice Demonstration (1 hr)

Under the supervision of a teacher, students will perform clinical examination focusing on key physical findings (e.g., wheezing, prolonged expiration, accessory muscle use), differentiate it from similar conditions like COPD or pneumonia, and present their provisional diagnosis with justification. This will be followed by peer review and group discussion to refine diagnostic reasoning.

Activity 2: Bedside Case Study and Treatment Planning Workshop (1 hr)

Under supervision in a clinical setting, students will evaluate actual patients with bronchial asthma and other respiratory diseases. They will document symptoms, conduct chest examinations (inspection, palpation, percussion, auscultation), and compare findings. Based on their evaluation, they will formulate a stepwise treatment plan including both acute and long-term management, and present it for feedback.

Practical Training 9.2 Diagnosis and Management of Acute anc Chronic Bronchitis

Total Learning Hours (2)

Activity 1: Teacher Demonstration (1 hr)

The teacher will conduct demonstration of a clinical examination focused on a patient with Acute and Chronic Bronchitis. This session will emphasise key aspects of history taking and physical examination, with particular attention to inspection, palpation, percussion, and auscultation. The demonstration will highlight characteristic clinical findings and guide students in recognising features relevant to diagnosis and severity assessment.

Activity 2: Group-Based Clinical Practice and Diagnostic Interpretation (1 hr) Students will be divided into small groups to engage in hands-on clinical practice using real patients, standardised patients (simulated cases), or anatomical models. Each group will perform a complete physical examination, followed by the interpretation of diagnostic investigations, including CBC, chest X-ray, CT scan, MRI, bronchoscopy findings, sputum for AFB, pulmonary function tests, and arterial blood gases. Students will correlate these findings with the clinical presentation, discuss differential diagnoses, and collaboratively develop a treatment plan.
Practical Training 9.3 Diagnosis and Management of Waram-e-Shobat-ur-Riyah.
Total Learning Hours (2) Activity 1: Teacher Demonstration (1 hr) The teacher will conduct a demonstration of patient examination using either a real or simulated case. The session will focus on comprehensive history taking, which includes occupational, dietary, socioeconomic, and symptomatic aspects relevant to bronchitis. This will be followed by a detailed physical examination emphasising inspection, palpation, percussion, and auscultation. Key clinical signs such as wheezing, rhonchi, prolonged expiration, cyanosis, and use of accessory respiratory muscles will be highlighted. Students will observe the process and record important findings. Activity 2 Group activity (1 hr) tudents will be divided into small groups and perform clinical examinations on either their peers, standardised patients, or diagnostic models that simulate cases of acute or chronic bronchitis. They will review and interpret various diagnostic investigations, including complete blood count (CBC), chest X-ray, computed tomography (CT), magnetic resonance imaging (MRI), bronchoscopy, sputum analysis (including AFB), pulmonary function tests, and arterial blood gas results. Students will correlate these findings with clinical features, discuss possible differential diagnoses, and formulate a complete treatment plan. The treatment planning must incorporate both Unani and modern medical systems. From the Unani perspective, students will apply the principles of treatment (Usool-e-Ilaj), which include Ilaj bil Ghiza (dietotherapy), Ilaj bil Dawa (Unani pharmacotherapy), and Ilaj bil Tadbeer (regimenal therapy).
Practical Training 9.4 Diagnosis and Management of Bronchiectasis
Total Learning Hours (2)

Activity 1: Bedside Demonstration (1 hr) The instructor will conduct a demonstration of patient examination using either a real or simulated case of Ittisa-e-Shobat-ur-Riyah (Bronchiectasis). The session will focus on comprehensive history taking, including occupational, dietary, socioeconomic, and symptomatic aspects relevant to bronchiectasis. This will be followed by a detailed physical examination emphasizing inspection, palpation, percussion, and auscultation. Key clinical signs such as crackles, wheezing, digital clubbing, and cyanosis will be highlighted. Students will observe the process and record important findings. Activity 2: Group Activity (1 hr) Students will be divided into small groups and perform clinical examinations on either their peers, standardized patients, or diagnostic models that simulate cases of bronchiectasis. They will review and interpret various diagnostic investigations, including complete blood count (CBC), chest X-ray, high-resolution computed tomography (HRCT), magnetic resonance imaging (MRI), bronchoscopy, sputum analysis (including acid-fast bacilli [AFB]), pulmonary function tests, and arterial blood gas results. Students will correlate these findings with clinical features, discuss possible differential diagnoses, and formulate a complete treatment plan. The treatment plan must incorporate both Unani and modern medical systems. From the Unani perspective, students will apply the principles of treatment (Usool-e-Ilaj), which include Ilaj bil Ghiza (dietotherapy), Ilaj bil Dawa (Unani pharmacotherapy), and Ilaj bil Tadbeer (regimenal therapy). They will also be expected to outline Mamoolat-e-Matab (routine clinical practices) applicable to bronchiectasis management in the Unani system. From the modern medicine perspective, students will include evidence-based pharmacological and non-pharmacological interventions such as bronchodilators, corticosteroids, inhalation therapy, chest physiotherapy, and patient education.
Practical Training 9.5 Clinical Evaluation and Management of Emphysema
Total Learning Hours (2) Activity 1: Bedside Demonstration (1 hr) The instructor will conduct a demonstration of patient examination using either a real or simulated case of Emphysema. The session will focus on comprehensive history taking, including occupational, dietary, socioeconomic, and symptomatic aspects relevant to emphysema. This will be followed by a detailed physical examination emphasising inspection, palpation, percussion, and auscultation.

Activity 2: Group Activity (1 hr)

Students will be divided into small groups and perform clinical examinations on either their peers, standardised patients, or diagnostic models that simulate cases of emphysema. They will review and interpret various diagnostic investigations, including complete blood count (CBC), chest X-ray, computed tomography (CT), magnetic resonance imaging (MRI), bronchoscopy, sputum analysis (including acid-fast bacilli [AFB]), pulmonary function tests, and arterial blood gas results. Students will correlate these findings with clinical features, discuss possible differential diagnoses, and formulate a complete treatment plan. The treatment plan must incorporate both Unani and modern medical systems. From the Unani perspective, students will apply the principles of treatment (Usool-e-Ilaj), which include Ilaj bil Ghiza (dietotherapy), Ilaj bil Dawa (Unani pharmacotherapy), and Ilaj bil Tadbeer (regimenal therapy). They will also be expected to outline Mamoolat-e-Matab (routine clinical practices) applicable to emphysema management in the Unani system. From the modern medicine perspective, students will include evidence-based pharmacological and non-pharmacological interventions such as bronchodilators, corticosteroids, inhalation therapy, chest physiotherapy, and patient education.

Practical Training 9.6 Clinical diagnosis and Management of Pulmonary and Cystic Fibrosis

Total Learning Hours (3)

Activity 1. Instructor-Led Clinical Demonstration (1 hr)

The teacher will conduct a comprehensive demonstration of patient evaluations—either with real patients or high-fidelity simulations—focusing on Pulmonary Fibrosis and Cystic Fibrosis. The session will emphasise detailed history-taking and physical examination techniques, including inspection, palpation, percussion, and auscultation. Key clinical signs such as digital clubbing, inspiratory crackles, and respiratory distress will be highlighted. The demonstration will also cover distinguishing features between the two conditions, aiding students in developing differential diagnoses.

Activity 2: Group-Based Clinical Examination and Diagnostic Interpretation (1 hr)

Students will be divided into small groups to perform supervised physical examinations on simulated patients or anatomical models. Each group will analyse and interpret diagnostic investigations, including Complete Blood Count (CBC), chest X-rays, High-Resolution Computed Tomography (HRCT) scans, Magnetic Resonance Imaging (MRI), bronchoscopy findings, sputum analysis for Acid-Fast Bacilli (AFB), pulmonary function tests, and arterial blood gas analyses. The objective is to correlate clinical findings with diagnostic data to differentiate between Pulmonary Fibrosis and Cystic Fibrosis effectively.

Activity 3: Collaborative Treatment Planning and Patient Counselling Simulation (1 hr)

In this interactive session, student groups will develop comprehensive treatment plans that integrate Unani and modern medical approaches for both Pulmonary Fibrosis and Cystic Fibrosis. From the Unani perspective, plans will incorporate Ilaj bil Ghiza (dietotherapy), Ilaj bil Dawa (herbal pharmacotherapy), and Ilaj bil Tadbeer (regimenal therapy). Modern medical strategies will include the use of antifibrotic agents like pirfenidone and nintedanib for Pulmonary Fibrosis, and CFTR modulators, antibiotics, and airway clearance techniques for Cystic Fibrosis. Students will engage in simulated patient counselling, explaining disease conditions, treatment options, and long-term management strategies to enhance communication skills. Students will practice drafting detailed prescriptions for patients with Pulmonary Fibrosis and Cystic Fibrosis, ensuring the integration of Unani formulations and contemporary medications. Each prescription will be accompanied by a rationale that considers drug interactions, patient-specific factors, and evidence-based guidelines. Peer review sessions will follow, allowing students to critique and refine their prescriptions collaboratively, fostering a deeper understanding of integrated therapeutic approaches.

Practical Training 9.7 Diagnostic Evaluation of Occupational Lung Diseases

Total Learning Hours (3)

Activity 1: Teacher Demonstration (1 hr)

The teacher will demonstrate patient examination (real or simulated) focussing on history taking physical examination and differences between Silicosis, Coal worker's Pneumoconiosis, Asbestosis with epecial refrence to inspection, auscultation, palpation and purcussion and other clinical finding.

Activity 2: Clinical examination practice, investigations (1 hr)

Students in a limited group will perform physical examination on real or simulated or on model, group will interprate the investigatory finfing like like CBC, Xray chest findiung Computed tomography findining ,magnetic resonance imaging finding , Broncoscopic finding, sputum for AFB, finding , pulmonary function test finding, arterial blood gases finding and corelate theses finding with clinical features, discuss diffrential diagnosis.

Activity 3: Treatment planning, patient counseling session (1 hr)

Students shall draw possible line of treatment with treatment students group simulate patients interactios, explaning the actual conditiuons explain posibble treatment options and long managment strategies.

Practical Training 9.8 Integrated Clinical Assessment and Advances in Lung Cancer
Total Learning Hours (1) Activity 1: Teacher Demonstration (30 minutes) The teacher will perform a clinical demonstration on either a real patient, a simulated case, or model, focusing on Sartan-e-Riya (lung carcinoma). The demonstration will cover complete history taking—including occupational exposure, smoking history, and dietary patterns—as well as a structured physical examination. Emphasis will be placed on clinical techniques such as inspection, palpation, percussion, and auscultation. The session will help students recognise signs like cyanosis, clubbing, and the use of accessory respiratory muscles, which are critical in the clinical assessment of bronchogenic carcinoma. Activity 2: Group Activity – Clinical Practice and Diagnostic Interpretation (Duration: 30 minutes) Students will be divided into small groups to apply their clinical skills in examining simulated, standardised, or model patients presenting with features of Sartan-e-Riya. Each group will carry out a physical examination and engage in diagnostic interpretation. Investigations will include CBC, chest X-ray, computed tomography (CT), magnetic resonance imaging (MRI), bronchoscopy findings, sputum for acid-fast bacilli (AFB), pulmonary function tests, and arterial blood gas (ABG) analysis. Groups will correlate the diagnostic findings with clinical features to reach a provisional diagnosis. They will then discuss differential diagnoses and collaboratively develop a treatment plan. This plan will integrate modern medicine (e.g., chemotherapy, radiotherapy, surgery) with Unani principles, including Ilaj bil Ghiza (therapeutic diet), Ilaj bil Dawa (Unani pharmacotherapy), and Ilaj bil Tadbeer/Ilaj bil Yad (regimenal/manual therapy).
Practical Training 9.9 Clinical Approach to Bronchial Carcinoma
Total Learning Hours (1) Activity 1: Simulated demonstration of clinical examination techniques (30 minutes) The demonstration will include key clinical skills such as inspection, palpation, percussion, and auscultation, along with observation of relevant clinical signs like cyanosis, use of accessory respiratory muscles, and digital clubbing. Activity 2: Practice clinical examination and diagnostic reasoning (30 minutes) Using either real patients, simulated cases, or anatomical models, each group will perform a physical examination and then analyze relevant diagnostic

investigations. These investigations may include complete blood count (CBC), chest X-ray, computed tomography (CT) scan, magnetic resonance imaging (MRI), bronchoscopy, sputum for acid-fast bacilli (AFB), pulmonary function tests (PFT), and arterial blood gas (ABG) analysis. Students will be guided to correlate these findings with clinical features of bronchial carcinoma and arrive at a provisional diagnosis.
Practical Training 9.10 Diagnosis and management of Sarcoidosis, Mesothelioma, Pulmonary Hamartoma
Total Learning Hours (2) Activity 1: Teacher Demonstration (1 hr) In this session, the teacher will demonstrate the clinical examination of a patient, which may be real, simulated, or represented using a model. The demonstration will include detailed history taking and a systematic physical examination, with special emphasis on identifying and differentiating clinical features of sarcoidosis, mesothelioma, and pulmonary hamartoma. Key aspects such as inspection, palpation, percussion, and auscultation will be highlighted, along with specific clinical signs that help distinguish between these conditions. Activity 2: Group Activity – Clinical Practice and Treatment Planning (1 hr) In this activity, students will be divided into small groups to engage in hands-on clinical practice. Each group will perform physical examinations on either a real patient, a simulated case, or an anatomical model. They will interpret various diagnostic and laboratory findings, such as complete blood count (CBC), chest X-ray, computed tomography (CT) scan, magnetic resonance imaging (MRI), bronchoscopic findings, sputum for acid-fast bacilli (AFB), pulmonary function tests (PFTs), and arterial blood gas (ABG) analysis. Discuss the differential diagnoses and develop a comprehensive treatment plan. This plan will include both modern medical strategies and Unani approaches, incorporating Ilaj bil Ghiza (diet therapy), Ilaj bil Dawa (medicinal therapy), and Ilaj bil Tadbeer or Ilaj bil Yad.
Experiential Learning Activity
Experiential-Learning Learning 9.1: Diagnosis and Management of Bronchial Asthma
Total Learning Hours (3)

Activity 1: Case-based diagnosis (2 hrs)

The students will take up cases of Bronchial Asthma and analyze them clinically, focusing on patient history, physical examination, diagnostic test results, and disease progression. They will then prepare and deliver structured case presentations to their peers, simulating teaching sessions for undergraduate students.

Activity 2: Integrated Treatment Planning and Educational Discussion (1 hr)

Students will engage in a collaborative discussion to appraise the treatment strategies employed by both Unani and conventional medicine. Students will also discuss the integration of Unani and modern medical practices in managing Ḍīq al-Nafas. The students may present the same in the departmental seminar. The student should also note the line of treatment in his logbook.

Experiential-Learning Learning 9.2: Integrated Therapeutic Strategies for Bronchitis

Total Learning Hours (4)

Activity 1: Clinical Case Analysis and Diagnosis (1 hr)

Students will be presented with diverse patient scenarios exhibiting symptoms of acute and chronic bronchitis. They will engage in detailed history-taking and physical examinations, focusing on identifying key clinical signs and differentiating between the two forms of bronchitis. This exercise aims to enhance diagnostic accuracy and clinical reasoning skills.

Activity 2. Prescription Development Workshop (1 hr)

In this session, students will formulate treatment plans for the previously analysed cases. They will write detailed prescriptions incorporating both Unani remedies, such as Khamira-e-Banafsha and Sharbat-e-Unnab, and modern medications like bronchodilators and antibiotics. Emphasis will be placed on understanding drug interactions, contraindications, and patient-specific considerations.

Activity 3: Therapeutic Rationale Discussion (1 hr)Students will present and justify their treatment plans to peers and faculty, explaining the choice of therapies from both Unani and modern perspectives. Discussions will cover the principles of Usool-e-Ilaj in Unani medicine and evidence-based practices in contemporary medicine, fostering a comprehensive understanding of integrated treatment approaches.

Activity 4, Outcome Evaluation and Reflective Practice (1 hr)

Participants will assess the potential outcomes of their treatment plans, considering factors such as patient adherence, possible side effects, and long-term

management strategies. Reflective discussions will encourage students to evaluate the effectiveness of integrated treatments and identify areas for improvement in clinical practice.
Experiential-Learning Learning 9.3: Diagnosis and Management of Bronchiectasis
Total Learning Hours (2) Activity 1: History Taking and Physical Examination (1 hr) Students will work in pairs, taking turns to role-play as physician and patient. They will practice detailed history taking, emphasising addiction, socioeconomic background, occupational exposure, and dietary habits relevant to patients with Bronchiectasis. Following this, students will perform focused physical examinations on each other, simulated cases, or real patients (if available). The examination will include inspection, auscultation, palpation, and percussion, with attention to clinical signs such as cyanosis, use of accessory respiratory muscles, and digital clubbing. Activity 2: Interpretation of Laboratory Reports and Treatment Planning (1 hr) In small groups, students will analyse and interpret diagnostic findings, including CBC, chest X-ray, computed tomography (CT), magnetic resonance imaging (MRI), bronchoscopy, sputum for AFB, pulmonary function tests, and arterial blood gases. They will correlate these findings with clinical features, discuss differential diagnoses, and develop an appropriate line of treatment addressing potential complications. Treatment planning will integrate both Unani and modern medical approaches.
Experiential-Learning Learning 9.4: Clinical Diagnosis and Management of Emphysema
Total Learning Hours (4) Activity 1: Clinical Examination and Diagnosis Workshop (1 hr) Students will engage in hands-on sessions to practice thorough physical examinations focusing on signs indicative of Naphkhatur Riya (Emphysema). This includes inspection, palpation, percussion, and auscultation techniques to identify clinical features such as barrel chest, decreased breath sounds, and use of accessory muscles. Activity 2: Integrated Treatment Planning Session (1 hr) In this activity, students will formulate comprehensive treatment plans that combine Unani therapeutic principles—such as Ilaj bil Ghiza (dietotherapy), Ilaj bil

Dawa (Unani pharmacotherapy), and Ilaj bil Tadbeer (regimenal therapy)—with contemporary medical interventions, including bronchodilators, corticosteroids, and pulmonary rehabilitation strategies.

Activity 3: Prescription Writing and Rationalisation Exercise (1 hr)

Students will practice writing detailed prescriptions for patients with Naphkhatur Riya, ensuring the integration of Unani formulations and modern medications. They will also provide justifications for their choices, considering factors like drug interactions, patient-specific variables, and evidence-based guidelines.

Activity 4: Case-Based Discussions and Reflective Practice (1 hr)

Through group discussions of real or simulated patient cases, students will reflect on the effectiveness of their examination techniques and treatment plans. This activity aims to enhance critical thinking, encourage peer learning, and foster the ability to adapt treatment strategies based on patient responses and emerging clinical evidence.

Experiential-Learning Learning 9.5: Diagnosis and Management of Pulmonary and Cystic Fibrosis.

Total Learning Hours (2)

Activity 1: Clinical Case Presentation and Demonstration (1 hr)

Students will present detailed clinical cases of Pulmonary Fibrosis and Cystic Fibrosis to undergraduate students. Each presentation will include a comprehensive patient history, emphasising occupational exposures, family history, symptom onset, and progression. This will be followed by a detailed physical examination highlighting key signs such as digital clubbing, crackles, and respiratory distress. Diagnostic investigations, including imaging (e.g., high-resolution CT scans), pulmonary function tests, and relevant laboratory tests, will be discussed. The natural course of each disease and potential complications will be explained, along with outlining treatment strategies, including pharmacological interventions, lifestyle modifications, and supportive therapies. The presentations will be interactive, encouraging questions and discussions to facilitate deeper understanding among undergraduate students.

Activity 2: Interactive Workshop on Diagnosis and Management Strategies (1 hr)

Following the case presentations, MD students will lead small group workshops focusing on differential diagnosis, engaging participants in distinguishing Pulmonary Fibrosis and Cystic Fibrosis from other respiratory conditions based on clinical and diagnostic findings. Treatment modalities will be compared and contrasted, encompassing modern medical treatments (e.g., antifibrotic agents, CFTR modulators) and Unani approaches, including Ilaj bil Ghiza (dietotherapy),

Ilaj bil Dawa (pharmacotherapy), and Ilaj bil Tadbeer (regimenal therapy). Strategies for patient education, emphasising disease management, adherence to treatment, and lifestyle adjustments, will also be discussed. Each group will analyse case scenarios, develop management plans, and present their conclusions, fostering collaborative learning and critical thinking.
Experiential-Learning Learning 9.6: Integrated Case Management of Pneumoconiosis Disorders
Total Learning Hours (2) Activity 1: Clinical History Taking and Physical Examination (1 hr) Students will practice comprehensive history taking and physical examination. One student will assume the role of the patient while the other acts as the physician. Emphasis will be placed on eliciting relevant occupational, socioeconomic, addiction, and dietary history, with specific reference to patients suffering from Silicosis, Coal Workers' Pneumoconiosis, and Asbestosis. Students will also perform focused physical examinations on each other, simulated patients, or models, with attention to clinical signs such as cyanosis, use of accessory respiratory muscles, digital clubbing, and findings from inspection, palpation, percussion, and auscultation. Activity 2: Interpretation of Laboratory and Diagnostic Findings and Treatment Planning (1 hr) Students will interpret and correlate clinical features with diagnostic investigation findings. These may include CBC, chest X-ray, CT scan, MRI, bronchoscopy, sputum for AFB, pulmonary function tests (PFTs), and arterial blood gas (ABG) analysis. Based on the interpreted data, students will discuss differential diagnoses and formulate a suitable line of treatment, addressing both Unani and modern systems of medicine. Unani approaches should incorporate Ilaj bil Ghiza (dietotherapy), Ilaj bil Dawa (Unani pharmacotherapy), and Ilaj bil Tadbeer, alongside contemporary medical interventions.
Experiential-Learning Learning 9.7: Approach to the diagnosis and treatment of Silicosis.
Total Learning Hours (3) Activity 1: History Taking Practice (1 ht) Students will work in pairs, alternating roles as physician and patient. They will practise comprehensive history taking with particular emphasis on addiction, socioeconomic background, occupational exposure, and dietary habits—key aspects in the evaluation of silicosis.

Activity 2: Physical Examination in Small Groups (1 hr) In small groups, students will conduct physical examinations on peers, standardised patients, or simulated cases. The examination will focus on key respiratory findings, including inspection, palpation, percussion, and auscultation, as well as signs such as cyanosis, the use of accessory respiratory muscles, and digital clubbing. Activity 3: Lab Report Interpretation and Treatment Planning (1 hr) Students will interpret various investigation reports, including Complete Blood Count (CBC), Chest X-ray, Pulmonary Function Tests (PFTs), and Arterial Blood Gas (ABG) analyses. They will correlate these findings with clinical features, discuss differential diagnoses, and outline a comprehensive treatment plan that includes Unani interventions and management of complications.
Experiential-Learning Learning 9.8: Clinical Evaluation and Integrative Clinical Management of Lung Carcinoma
Total Learning Hours (2) Activity 1: Case-based Learning (1 hr) Students will practice detailed clinical history taking and physical examination of patients with Lung carcinoma. They will practice inspection, palpation, percussion, and auscultation techniques and learn to identify clinical signs such as cyanosis, the use of accessory respiratory muscles, and digital clubbing. Activity 2: Management plan workshop (1 hr) The students will interpret laboratory and diagnostic investigation reports. These include CBC, chest X-ray, CT scan, MRI, bronchoscopy, sputum for AFB, pulmonary function tests, and arterial blood gas analysis. They will discuss possible differential diagnoses and formulate a comprehensive line of treatment, integrating both Unani and modern approaches, along with modern interventions like chemotherapy, radiotherapy, or surgery when applicable. Students will also consider potential complications as part of their treatment plan.
Experiential-Learning Learning 9.9: Clinical Evaluation and Management of Bronchial Carcinoma
Total Learning Hours (2) Activity 1: Clinical Simulation and Diagnostic Reasoning Workshop (1 hr) Students will go through an integrated simulation that begins with a case-based clinical role-play. One student acts as a patient presenting with symptoms

suggestive of bronchial carcinoma, while another performs a detailed clinical examination. The remaining students observe and offer feedback. Following this, the group transitions into reviewing diagnostic data, including chest X-rays, CT scans, and histopathology slides relevant to Small Cell Lung Carcinoma. Students identify key features and collaborate to determine the differential diagnosis, staging, and initial management strategies. A short video demonstration of an SCLC case is also included to reinforce visual recognition and clinical correlation. This activity concludes with a brief presentation from each group summarising their case findings and clinical reasoning. The goal is to integrate clinical examination, diagnostic interpretation, and group-based discussion into a unified learning experience.

Activity 2: Multidisciplinary Care and Communication Lab (1 hr)

Students participate in a simulated Multidisciplinary Team (MDT) meeting, take on roles such as pulmonologist, oncologist, radiologist, and pathologist, and work together to create a complete management plan for a patient with confirmed small cell lung carcinoma. Students engage in role-play to practice breaking the news of a cancer diagnosis to a patient using the SPIKES protocol. Emphasis is placed on empathy, clarity, and ethical considerations. The session ends with individual reflective writing, where students note what they learned about patient-centered care and their emotional responses to difficult conversations.

Experiential-Learning Learning 9.10: Clinical approach to Sarcoidosis, Mesothelioma, Pulmonary Hamartoma

Total Learning Hours (2)

Activity 1: History Taking and Physical Examination Practice (1 hr)

Students will work in pairs or small groups, alternating roles as physician and patient. They will practise comprehensive history taking with a focus on addiction, socioeconomic status, occupational exposure, and dietary habits—particularly relevant to patients with sarcoidosis, mesothelioma, and pulmonary hamartoma. Following the history taking, students will perform physical examinations on one another, standardised patients, or simulated cases. The examination will emphasise inspection, palpation, percussion, auscultation and observation of clinical signs such as cyanosis, use of accessory respiratory muscles, and digital clubbing.

Activity 2: Interpretation of Lab Reports and Clinical Correlation (1 hr)

In small groups, students will analyse and interpret investigation reports such as complete blood count (CBC), chest X-ray findings, pulmonary function test (PFT)

results, and arterial blood gas (ABG) analysis. They will correlate these findings with clinical features, discuss differential diagnoses, and formulate a possible line of treatment.	
Modular Assessment	
Assessment	**Hour**
Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point. Case-based evaluation: (50 Marks) Each student will be given a case or problem situation related to Obstructive & Occupational Lung diseases/ Restrictive Lung diseases/ Neoplastic lung diseases to evaluate the patient clinically and develop a management plan with justification. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any experiential portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)	4
Module 10 : Amrāz-i Nizāme Tanaffus 02 (Diseases of Respiratory system-02) امراض نظام تنفس ۲	
Module Learning Objectives (At the end of the module, the students should be able to)	

1. Describe various Infectious Respiratory diseases mentioned in Unani classical literature and conventional system of medicine

2. Demonstrate the clinical examination of various Infectious Respiratory diseases.

3. Appraise the treatment guidelines for various Infectious Respiratory diseases.

Unit 1 Amrāz-Muta'ddi Nizām-i-Tanaffus-01 (Infectious Diseases of the Respiratory System 01) امراض متعدی نظام تنفس ا

10.1.1. Dhāt al-Ri'a (Pneumonia) ذات الریہ

10.1.2. Tadarrun al Ri'wī (Pulmonary Tuberculosis) تدرن روی

References: 1,2,4,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO8	Conduct a comprehensive physical examination, elicit relevant medical history, perform clinical assessments and investigations to establish the diagnosis of Pulmonary Tuberculosis, and appraise its management by interpreting findings in the context of both classical Unani treatment principles and contemporary medical approaches.	5	Experiential-Learning10.1	PSY-ADT	Does	LRI,CBL,PBL,CD
CO1,CO2, CO4,CO6, CO8	Discuss Pumonary Tuberculosis, its Classification, Etiology, Risk factors, Pathophysiology, Complications, and Management, as well as the Unani concept mentioned in classical literature.	2	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical examination of patients with Pneumonia, establish a clinical diagnosis, and formulate an appropriate treatment plan integrating Unani and modern medical approaches.	3	Practical10.1	PSY-GUD	Shows-how	CD,LRI,D-BED,PSM,D

CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical examination of a patient with Pulmonary Tuberculosis and formulate an appropriate treatment plan integrating Unani and modern medical approaches	3	Practical10.2	PSY-GUD	Shows-how	LRI,D-BED,D
CO1,CO2, CO4,CO6, CO8	Describe Pneumonia, its classifications, Etiology, Risk factors, Pathophysiology, Clinical features, Diagnosis, and Treatment.	1	Lecture	CC	Knows-how	L,L&PPT ,BS,DIS
CO1,CO2, CO4,CO6, CO8	Perform comprehensive clinical examination of patients presenting with Pneumonia, accurately interpret clinical and investigative findings, and develop integrated treatment plans based on principles of the Unani system of medicine and contemporary medical practices.	4	Experiential-Learning10.2	PSY-ADT	Does	LRI,X-Ray,PBL,CBL

Unit 2 Amrāz-Muta'ddi Nizām-i-Tanaffus-02 (Infectious Diseases of the Respiratory System 02) امراض متعدی نظام تنفس ۲

10.2.1. Khurāj-i-Ri'a (Lung Abscess) خراج رئہ

10.2.2. Dhāt al-Janb (Pleurisy) ذات الجنب

References: 1,2,4

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6	Describe Lung abscess, its Pathophysiology, Clinical features, investigations, Differential Diagnosis, and Management.	1	Lecture	CC	Knows-how	L,L&PPT ,L&GD
CO1,CO2, CO4,CO6	Discuss the Pleurisy, its Pathophysiology, Clinical features, investigations, Differential Diagnosis, and Management with a detailed description of the disease.	1	Lecture	CC	Knows-how	BS,L,L&GD,L&PPT

CO1,CO2, CO4,CO6	Demonstrate comprehensive physical examination, obtain detailed medical history, and investigations to establish the diagnosis of Lung abscess and plan its management..	2	Practical10.3	PSY-GUD	Shows-how	D-BED,LRI,PBL
CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical examination of a patient with Pleurisy, formulate an appropriate treatment plan, and outline the diagnostic approach for effective patient management.	2	Practical10.4	PSY-GUD	Shows-how	PT,CBL,PER,D-BED
CO1,CO2, CO4,CO6, CO8	Conduct a comprehensive physical examination, obtain detailed medical history, and perform relevant clinical assessments and investigations to establish the diagnosis of Lung Abscess, identify its potential complications, and formulate an integrated treatment plan incorporating both Unani and modern medical approaches.	3	Experiential-Learning10.3	PSY-ADT	Does	CD,CBL,PAL
CO1,CO2, CO4,CO6, CO8	Conduct a comprehensive physical examination, record detailed medical history, perform clinical assessments and relevant investigations to establish the diagnosis of Pleurisy, identify its complications, and formulate an integrated management plan using both Unani and modern medical approaches.	3	Experiential-Learning10.4	CAP	Does	LRI,CD,SDL

Unit 3 Amrāz-Muta'ddi Nizām-i-Tanaffus-03 (Infectious Diseases of the Respiratory System 03) امراض متعدی نظام تنفس ۳

10.3.1. Istisqā' al-Ṣadr (Pleural Effusion) استسقاءالصدر

10.3.2. Taqayyuḥ al-Ṣadr(Empyema Thoracis) تقیح الصدر

10.3.3. Coccidioidomycosis کوکسی ڈیوئڈومائکوسس

10.3.4. Bronchopulmonary aspergillosis برونکوپلمونری اسپرجلوسس

References: 4,5,8,10,15,17,19,21,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO8	Discuss Pleural Effusion and classification as exudative, transudative, and haemorrhagic, along with pathophysiology, and describe clinical features, diagnosis, and treatment.	3	Lecture	CC	Knows-how	L,BS,DIS,L&PPT
CO1,CO2, CO4,CO6, CO8	Describe Empyema thoracis, its aetiology, *c*linical features, investigations, diagnosis, and treatment, along with complications.	1	Lecture	CC	Knows-how	L,L&PPT ,DIS
CO1,CO2, CO4,CO6, CO8	Discuss Bronchopulmonary aspergillosis and Coccidioidomycosis Etiology, Clinical Features Diagnosis and Treatment.	1	Lecture	CC	Knows-how	L&PPT ,L
CO1,CO2, CO4,CO6, CO8	Demonstrate clinical examination of patients with Pleural Effusion, illustrate the key physical findings, and perform various diagnostic and therapeutic procedures involved in its management using both Unani and modern medical approaches.	5	Practical10.5	PSY-GUD	Shows-how	W,PER,PT,D-BED,D
CO1,CO2, CO3,CO4, CO6,CO8	Demonstrate the clinical features of Empyema Thoracis through comprehensive physical examination, describe the pathological findings, various procedural approaches, including thoracocentesis and tube thoracostomy with an emphasis on their clinical indications, techniques, and interpretation of outcomes.	2	Practical10.6	PSY-GUD	Shows-how	PSM,CBL,D-BED
CO1,CO2, CO4,CO6, CO8	Demonstrate the key physical and clinical findings of Bronchopulmonary Aspergillosis, interpret relevant diagnostic investigations, and formulate a comprehensive treatment plan incorporating both Unani and modern medical approaches.	3	Practical10.7	PSY-GUD	Shows-how	D-BED,W,CBL,PBL,PT

CO1,CO2, CO4,CO6, CO8	Conduct a comprehensive clinical examination of patients presenting with Pleural Effusion, perform pleural fluid aspiration, identify and describe the physical characteristics of the aspirated fluid, and formulate an integrated line of treatment using both Unani and modern medical approaches.	4	Experiential-Learning10.5	PSY-ADT	Does	X-Ray,CBL,PAL,CD, D-M
CO1,CO2, CO4,CO6, CO8	Evaluate a patient of Bronchopulmonary Aspergillosis, encompassing detailed history taking, physical examination, and interpretation of diagnostic investigations. Develop and present integrated treatment plans that incorporate both Unani and contemporary medical approaches.	4	Experiential-Learning10.6	PSY-ADT	Does	X-Ray,JC,SDL,PBL, CD
CO1,CO2, CO4,CO6, CO8	Perform comprehensive clinical examinations of patients with Empyema Thoracis, and demonstrate the procedural steps of thoracentesis through the preparation of educational video presentations, integrating both Unani and contemporary medical perspectives.	3	Experiential-Learning10.7	PSY-ADT	Does	CD,LRI,X-Ray,PSM
Practical Training Activity						
Practical Training 10.1 Clinical Examination and Management of Dhat al-Ria (Pneumonia).						
Total Learning Hours (3) Activity 1: Bedside demonstration (1 hr) The mentor will demonstrate a thorough clinical examination of a patient with Dhat al-Riya (Pneumonia), including detailed history taking (symptoms, duration, occupational and dietary history) and physical examination focusing on inspection, palpation, percussion, and auscultation to identify key signs like crepitations, bronchial breath sounds, and fever.						

Activity 2: Hands-on Training session (1 hr) Under supervision, students will perform clinical examinations on real or simulated patients, practicing history taking and physical examination skills. They will also learn to identify and record relevant clinical signs specific to pneumonia. Activity 3: Interpretation of Investigations and Management Plan (1 hr) Students will interpret common diagnostic investigations such as chest X-rays, complete blood counts, sputum analysis, and pulse oximetry. Based on clinical and investigative findings, they will formulate and discuss integrated treatment plans incorporating Unani principles (Ilaj bil Ghiza, Ilaj bil Dawa, Ilaj bil Tadbeer) alongside modern medical therapies (antibiotics, supportive care). Students will document the case summary and treatment plan in their logbooks.
Practical Training 10.2 Clinical Examination and Management of Pulmonary Tuberculosis
Total Learning Hours (3) Activity 1: Bedside demonstration (1 hr) The Teacher will demonstrate a detailed clinical examination of a patient with Pulmonary Tuberculosis, including comprehensive history taking (symptoms, risk factors, and social history) and physical examination focusing on respiratory signs such as prolonged cough, hemoptysis, lymphadenopathy, and auscultatory findings. Activity 2: Hands-on training session (1 hr) Students will perform supervised clinical examinations on patients or simulated cases to practice history taking and physical examination skills specific to Pulmonary Tuberculosis. Activity 3: Investigation interpretation and Management plan workshop (1 hr) Students will review and interpret relevant investigations such as sputum AFB staining, chest X-rays, and Mantoux tests etc. They will formulate and discuss integrated treatment plans, including Unani therapeutic principles and modern anti-tubercular therapy. Documentation of case findings and treatment plans will be maintained in their logbooks.
Practical Training 10.3 Clinical Diagnosis and Management of Lung Abscess
Total Learning Hours (2)

Activity 1: Bedside demonstration (1 hr)

The Teacher will demonstrate the comprehensive physical examination of a patient with Lung abscess, including detailed history taking, emphasizing symptoms like cough, fever, sputum characteristics, and chest pain, followed by physical examination focusing on inspection, palpation, percussion, and auscultation to identify clinical signs. The mentor will also explain relevant investigations such as complete blood count (CBC), chest X-ray, sputum culture and sensitivity, computed tomography (CT) scan of the chest, and other laboratory tests. Formulate an integrated treatment plan covering both Unani principles (Ilaj bil Ghiza, Ilaj bil Dawa, Ilaj bil Tadbeer) and modern medical management (antibiotics, drainage procedures, supportive care).

Activity 2: Hands-on training session (1 hr)

Under mentor supervision, students will conduct history taking and perform physical examinations on real or simulated patients, practising clinical skills in diagnosing Khuraj-e-Ria. They will review and interpret diagnostic investigations relevant to lung abscess cases and discuss differential diagnoses. Students will collaboratively formulate and present integrated management plans that incorporate Unani therapeutic approaches alongside contemporary medical treatments.

Practical Training 10.4 Clinical Diagnosis and Management of Pleurisy

Total Learning Hours (2)

Activity 1: Teacher Demonstration (1 hr)

The teacher will demonstrate the clinical examination of a patient (real or simulated) with Dhat-al-Janb (pleurisy). This will include history taking, detailed physical examination focusing on inspection, palpation, percussion, and auscultation, highlighting key signs like pleural friction rub, reduced breath sounds, and chest movement abnormalities. The teacher will also demonstrate how to outline the diagnostic approach, including the use of relevant investigations such as chest X-ray and pleural fluid analysis.

Activity 2: Supervised Student Practice (1 hr)

Students will work in small groups under supervision to practice clinical examination techniques on peers, models, or simulated patients presenting with pleurisy-like symptoms. They will also review sample investigation results and practice correlating clinical findings with diagnostic data. The group will discuss and formulate integrated treatment plans using Unani principles (Usool Ilaj, Ilaj and Mamoolate Matab) and modern medical management. Supervisors will provide feedback on clinical skills and decision-making.

Practical Training 10.5 Clinical Evaluation and Management of Pleural Effusion
Total Learning Hours (5) Activity 1: Bedside Demonstration (1 hr) The teacher will demonstrate a comprehensive clinical examination of a patient (real or simulated) with pleural effusion. This will include history taking (dyspnea, chest pain, cough, occupational and environmental exposure), followed by inspection, palpation, percussion (noting stony dullness), and auscultation (reduced breath sounds, pleural rub). The demonstration will also cover interpretation of basic investigations such as chest X-ray, ultrasound, and pleural fluid analysis. Activity 2. Hands-on History Taking and Clinical Examination (1 hr) Under supervision, students will work in small groups to perform history taking and physical examinations on either peers, standardised patients, or mannequins. They will record their findings, identify clinical signs specific to pleural effusion, and discuss how to differentiate it from other conditions like pneumonia or lung consolidation. Activity 3: Diagnostic Interpretation Workshop (1 hr) Students will be given anonymised case files with investigation reports (CBC, Chest X-ray, Ultrasound, CT scan, Pleural fluid analysis—protein, glucose, ADA, cytology). Working in groups, they will interpret these results to establish a diagnosis (transudate vs exudate), explore aetiology (e.g., tuberculosis, malignancy, CHF), and document findings in their logbooks. Activity 4: Therapeutic Procedure Demonstration: Pleural Fluid Tapping (1 hr) The teacher will demonstrate thoracentesis (pleural fluid tapping) using a simulation model or under direct observation if a patient procedure is being conducted. Students will observe patient positioning, sterile precautions, anatomical landmarks, and fluid collection. The teacher will highlight possible complications and post-procedure monitoring. Activity 5: Treatment Planning and Peer Discussion (1 hr) Students will formulate treatment plans based on their case findings. The plan must integrate Unani and modern management. From the Unani perspective, students will apply Usool-e-Ilaj, Ilaj and mamoolat matab. Modern treatment components may include antibiotics, diuretics, anti-TB therapy, or cancer management, depending on aetiology. Students will then present their treatment plan to peers for discussion and receive feedback.

Practical Training 10.6 Diagnosis and Management of Empyema Thoracis
Total Learning Hours (2) Activity 1. Teacher Demonstration (1 hr) The teacher will conduct a detailed demonstration of the clinical examination of a patient diagnosed with *Taqayyuh-i-Sadr* (Empyema Thoracis). The session will include history taking with emphasis on symptoms such as fever, chest pain, productive cough, and dyspnea. The physical examination will focus on key signs like decreased chest movement, stony dullness on percussion, diminished breath sounds, and pleural rub. The teacher will also demonstrate thoracocentesis, including patient positioning, aseptic precautions, procedural steps, and collection of pleural fluid for analysis. The fluid's physical characteristics (e.g., turbidity, odour, colour) will be explained in the context of differential diagnosis. Students will observe and take notes for reference. Activity 2: Student Supervised Performance and Clinical Integration (1 hr) Following the teacher's demonstration, students will be divided into small groups and will perform supervised clinical examinations on real or simulated patients. They will focus on eliciting the signs demonstrated previously. Under faculty supervision, students will also practice the interpretation of diagnostic investigations, including pleural fluid analysis (appearance, pH, protein, glucose, LDH), chest X-ray, ultrasound, and CT scans. Based on their findings, students will formulate a comprehensive treatment plan incorporating both Unani (Usool-e-Ilaj, Ilaj and Mamoolat and modern medical approaches (antibiotics, drainage, and supportive care). Each group will present their findings and treatment plan, and students will record a detailed case summary along with the proposed treatment strategy in their logbooks for formative assessment.
Practical Training 10.7 Clinical Evaluation and Management of Bronchopulmonary Aspergillosis
Total Learning Hours (3) Activity 1: Teacher Demonstration (1 hr) The teacher will demonstrate a comprehensive clinical examination of a patient (real or simulated) with suspected or confirmed Bronchopulmonary Aspergillosis. The session will include detailed history taking—focusing on asthma, recurrent respiratory infections, hypersensitivity reactions—and a step-by-step physical examination highlighting key signs such as wheezing, rales, and chest discomfort. The demonstration will also include interpretation of key diagnostic

investigations like chest X-ray, CT scan, serum IgE levels, eosinophil count, sputum culture, and skin test for aspergillus sensitivity. Students will observe and record the key findings..

Activity 2: Clinical Skills Practice in Small Groups (1 hr)

Students will be divided into small groups to practice history taking and physical examination on peers, simulated patients, or clinical mannequins presenting symptoms consistent with Bronchopulmonary Aspergillosis . They will document findings and compare them with standard diagnostic criteria. Each group will be tasked with correlating symptoms such as productive cough, wheezing, and allergic history with probable diagnosis, differentiating ABPA from other chronic respiratory illnesses such as asthma, TB, and COPD.

Activity 3: Diagnostic Interpretation and Treatment Planning (1 hr)

Groups will be given anonymised patient case records, including investigation reports such as CBC, IgE levels, imaging (X-ray/HRCT), and sputum results. They will interpret the data, establish a diagnosis, and prepare an integrated treatment plan including both Unani and modern medicine. Unani management will be based on Usool-e-Ilaj, Ilaj and Mamoolat matab. Students will present their findings to peers in a mini peer-teaching session. Each student will document the case and treatment in their logbook for formative assessment.

Experiential Learning Activity

Experiential-Learning Learning 10.1: Clinical Diagnosis and Management of Pulmonary Tuberculosis

Total Learning Hours (5)

Activity 1: Patient History Taking (1 hr)

Students will work in pairs or small groups to practice detailed history taking of patients (real or simulated) presenting with symptoms suggestive of Tadarrunerevi (Pulmonary Tuberculosis). Emphasis will be placed on eliciting respiratory symptoms, constitutional signs, socioeconomic factors, dietary habits, and previous treatment history. Students will reflect on the importance of these findings in diagnosis.

Activity 2: Clinical Physical Examination (1 hr)

Students will perform a thorough respiratory system examination on peers, standardised patients, or models, focusing on inspection, palpation, percussion, and

auscultation. Key clinical signs related to pulmonary tuberculosis, such as clubbing, lymphadenopathy, and respiratory distress, will be identified and documented.

Activity 3: Interpretation of Diagnostic Investigations (1 hr)

In small groups, students will analyse laboratory and imaging data commonly used in TB diagnosis, including sputum microscopy, chest X-rays, Mantoux test, and blood tests. They will correlate clinical features with investigation results and discuss differential diagnoses.

Activity 4: Case-based Discussion on Management (1 hr)

Students will review case scenarios to formulate management plans integrating classical Unani treatment principles such as Usool-e-Ilaj (treatment principles), Ilaj bil Ghiza (dietotherapy), Ilaj bil Dawa, and Ilaj bil Tadbeer, alongside contemporary anti-tubercular therapy and supportive care. Complications and patient counselling will also be addressed.

Activity 5: Peer Teaching and Logbook Documentation (1 hr)

Each student will prepare and present a brief clinical case summary, highlighting examination findings, investigations, and treatment plans to their peers. Following presentations, students will document the case details, diagnostic reasoning, and management plan in their logbooks for formative assessment and reflection.

Experiential-Learning Learning 10.2: Clinical Diagnosis and Management of Pneumonia

Total Learning Hours (4)

Activity 1: Comprehensive Clinical Examination and History Taking (1 hr)

Students will perform detailed clinical examinations on patients presenting with symptoms suggestive of Pneumonia. The examination will include thorough history taking, focusing on occupational exposure, dietary habits, socioeconomic status, and symptom progression. Physical examination will emphasize inspection, palpation, percussion, and auscultation to identify signs such as fever, cough, chest pain, and abnormal breath sounds. Students will document their findings systematically, correlating them with potential Unani diagnoses.

Activity 2: Diagnostic Investigations and Interpretation (1 hr)

Students will review and interpret relevant diagnostic investigations for pneumonia, including complete blood count (CBC), chest X-rays, sputum analysis, and

arterial blood gas measurements. They will correlate these findings with clinical presentations to confirm the diagnosis. Emphasis will be placed on understanding the pathophysiology of pneumonia from both modern and Unani perspectives, facilitating a comprehensive diagnostic approach.

Activity 3: Development of Integrated Treatment Plans (1 hr)

Based on the clinical and investigative findings, students will formulate integrated treatment plans that incorporate both Unani and modern medical practices. From the Unani perspective, treatment strategies will include Usool Ilaj, Ilaj bil Ghiza (dietotherapy), Ilaj bil Dawa (pharmacotherapy), Mamoolat-e-matab, and Ilaj bil Tadbeer (regimenal therapy). Modern medical interventions will encompass appropriate antibiotic therapy, supportive care, and patient education. Students will discuss the rationale behind each treatment modality, ensuring a holistic approach to patient care.

Activity 4: Case Presentation and Peer Discussion (1 hr)

Students will present their cases, including history, examination findings, diagnostic interpretations, and treatment plans, to their peers and faculty members. These presentations will be followed by interactive discussions, allowing for feedback and knowledge exchange. The session aims to enhance communication skills, critical thinking, and the ability to integrate diverse medical systems in clinical practice.

Experiential-Learning Learning 10.3: Clinical Diagnosis and Management of Lung Abscess

Total Learning Hours (3)

Activity 1: Peer-Based Clinical Simulation and History Taking (1 hr)

Students will work in pairs or small groups to simulate clinical encounters based on case vignettes of Lung Abscess. One student will act as the patient, presenting symptoms such as cough, fever, chest pain, and expectoration. The other student will take a comprehensive medical history, including occupational, dietary, and socio-environmental factors. Each group will then reflect on and record their findings, focusing on the relevance of history to the clinical condition.

Activity 2: Structured Clinical Examination and Diagnostic Reasoning (1 hr)

Students will conduct supervised physical examinations on peers or standardised patients using a structured checklist that focuses on identifying signs specific to lung abscess, such as diminished breath sounds, crackles, and features of underlying consolidation or cavity formation. They will then interpret provided investigation results (e.g., CBC, chest X-ray, CT scan, sputum culture) and correlate these with clinical findings to develop a working diagnosis.

Activity 3: Integrated Treatment Planning and Peer Teaching (1 hr) Each student group will develop a treatment plan for their case, integrating Usool-e-Ilaj (principles of Unani treatment), along with evidence-based modern management strategies like antibiotics, drainage, and supportive care. They will present their management plan and rationale to their peers, facilitating peer discussion. All findings and treatment plans must be documented in the student logbook as part of formative assessment.
Experiential-Learning Learning 10.4: Clinical Evaluation and Management of Pleurisy
Total Learning Hours (3) Activity 1: History Taking and Physical Examination (1 hr) Students will work in pairs or small groups to perform complete history-taking and physical examination on simulated patients or peers role-playing clinical scenarios of Dhat al-Janb. The focus will be on eliciting symptoms like pleuritic chest pain, dry cough, and breathlessness, along with key history components such as onset, occupational exposure, and constitutional symptoms. The physical examination will emphasise findings like reduced chest expansion, pleural rub, and stony dullness to percussion. Students will document their findings in standard clinical formats and reflect on diagnostic possibilities. Activity 2: Small Group Diagnostic Investigation Workshop (1 hr) Students will collaboratively analyze a set of investigation reports such as Chest X-rays, pleural fluid analysis, blood counts, ESR, and ultrasound reports. They will compare these findings with their clinical assessments and discuss how these support or challenge the diagnosis of Dhat al-Janb. They will also identify common complications like empyema or fibrosis. The students will practice writing brief diagnostic summaries and discuss differential diagnoses. Activity 3: Treatment Planning and Case Presentation (1 hr) Students will form small groups and design a comprehensive management plan that includes both Unani and modern approaches. From the Unani perspective, they will apply Usool-e-Ilaj and Ilaj. From the modern medicine side, they will integrate antibiotics, antipyretics, thoracocentesis, and oxygen therapy if needed. Each group will present their case and management plan to peers, followed by reflective feedback. All students must record their case summary and treatment strategy in their logbook.
Experiential-Learning Learning 10.5: Clinical Approach and Management of Pleural Effusion
Total Learning Hours (4)

Activity 1: Clinical History Taking and Physical Examination (1 hr)

Students will perform detailed history taking from patients with suspected pleural effusion, focusing on etiological aspects such as infection, trauma, and systemic illnesses. They will examine the patient using standard clinical methods—inspection, palpation, percussion, and auscultation—to identify key signs such as decreased breath sounds and stony dullness. Findings will be recorded and discussed with faculty for clinical correlation.

Activity 2: Video-Based Procedure Demonstration and Documentation (1 hr)

Under supervision, students will observe or assist in the thoracentesis procedure (pleural tapping). They will prepare a short instructional video covering patient preparation, sterile technique, fluid aspiration, and post-procedure care. The aspirated fluid's physical features—colour, consistency, and quantity—will be documented. Students will compare the observed characteristics with typical pathological findings.

Activity 3: Integrated Diagnosis and Treatment Planning (1 hr)

Based on clinical and investigative findings (CBC, chest X-ray, ultrasound, pleural fluid analysis), students will draft treatment plans. From the Unani perspective, they will apply Usool-e-Ilaj, including Ilaj bil Dawa (Unani pharmacotherapy), Ilaj bil Ghiza (diet therapy), and Ilaj bil Tadbeer (regimenal therapy). From a modern perspective, students will discuss antibiotics, thoracentesis indications, and supportive care. Emphasis will be placed on differential diagnosis and individualised treatment strategies.

Activity 4: Peer Teaching and Logbook Maintenance (1 hr)

In small groups, students will present their case summaries, diagnostic reasoning, and treatment protocols to peers. Faculty will facilitate feedback. Each student will document their participation, procedural observations, and treatment plans in their logbook, which will be reviewed as part of their formative assessment. This session reinforces clinical communication, reflective learning, and integrative thinking across systems of medicine.

Experiential-Learning Learning 10.6: Clinical Diagnosis and Management of Bronchopulmonary Aspergillosis

Total Learning Hours (4)

Activity 1: Clinical History Taking and Physical Examination (1 hr)

Students will engage in comprehensive history taking from patients suspected of having Bronchopulmonary Aspergillosis. The history will focus on identifying risk factors such as asthma, cystic fibrosis, and exposure to environmental fungi. Students will inquire about symptoms like chronic cough, wheezing, hemoptysis, and

expectoration of brownish mucus. Following history taking, students will perform thorough physical examinations, emphasising respiratory assessment to detect signs like wheezing, crackles, and signs of bronchiectasis. The session will also include discussions on correlating clinical findings with Unani concepts of humoral imbalance and the identification of relevant Mizaj (temperament) disturbances.

Activity 2: Diagnostic Investigations and Interpretation (1 hr)

Students will review and interpret diagnostic investigations pertinent to Bronchopulmonary Aspergillosis. This includes analysing complete blood counts for eosinophilia, serum IgE levels, specific IgE and IgG antibodies against Aspergillus fumigatus, and radiological imaging such as chest X-rays and high-resolution CT scans to identify central bronchiectasis and mucus plugging. Additionally, students will discuss the role of skin prick tests and sputum cultures. The interpretation of these investigations will be integrated with Unani diagnostic principles.

Activity 3: Development of Integrated Treatment Plans (1 hr)

Based on clinical and investigative findings, students will formulate comprehensive treatment plans that integrate Unani and modern medical approaches. From the Unani perspective, treatment strategies will include usool Ilaj, Ilaj bil Dawa (Unani pharmacotherapy) and Ilaj bil Tadbeer (regimenal therapy) along with Modern medical management.

Activity 4: Case Presentations and Peer Discussions (1 hr)

In the final session, students will present their cases, including history, examination findings, diagnostic interpretations, and integrated treatment plans, to their peers. These presentations will be followed by interactive discussions, allowing for feedback and knowledge exchange. The session aims to enhance communication skills, critical thinking, and the ability to integrate diverse medical systems in clinical practice. Students will be encouraged to present their case discussions and treatment plans in departmental seminars. Each student will also be required to document the clinical summary and treatment protocol in their logbook as part of their competency-based assessment.

Experiential-Learning Learning 10.7: Clinical Examination and Thoracentesis Procedure in Empyema Thoracis

Total Learning Hours (3)

Activity 1: Clinical Examination Demonstration (1 hr)

MD student will demonstrate the systematic approach to examining a patient with suspected Empyema Thoracis, emphasising history-taking and physical

examination techniques such as inspection, palpation, percussion, and auscultation. The demonstration will highlight key clinical signs like fever, chest pain, dyspnea, and diminished breath sounds, facilitating the differentiation of empyema from other pleural conditions.

Activity 2: Group-Based Diagnostic Investigation and Interpretation (1 hr)

Students will be divided into small groups to analyze and interpret various diagnostic investigations relevant to empyema thoracis. These will include Complete Blood Count (CBC), chest X-rays, ultrasound imaging, and pleural fluid analysis obtained via thoracentesis. Each group will correlate these findings with clinical presentations to reinforce diagnostic reasoning and the formulation of differential diagnoses.

Activity 3. Thoracentesis Procedure Video Preparation Activity and Reflective Discussion (1 hr)

In this session, students will collaborate to create educational video presentations demonstrating the thoracentesis procedure. The videos will cover indications, contraindications, patient preparation, procedural steps, and post-procedure care. Emphasis will be placed on integrating Unani principles with modern medical practices to provide a holistic understanding of the procedure. Students will present their video projects to peers and faculty for review. Constructive feedback will be provided, focusing on clinical accuracy, clarity of demonstration, and integration of Unani and modern medical concepts. A reflective discussion will follow, encouraging students to share insights gained during the project and discuss the importance of interdisciplinary approaches in patient care.

These activities are designed to provide MD Moalajat students with practical experience in the clinical examination and management of Taqayyuh-i-Sadr (Empyema Thoracis), emphasising the integration of traditional Unani principles with modern medical practices

Modular Assessment

Assessment	**Hour**
Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point. SAQ: 3 questions (one from each Unit) – 30 Marks and	4

Case Record evaluation: (20 marks) Clinical assessment with detailed history and physical examination along with proposed investigations and line of treatment of any Respiratory Infectious Disease of this module. Or Direct observation of Procedure or Observed Structured Clinical Examination (OSCE). (50 Marks) • History Taking / Communication Skills (15 Marks) • Clinical Examination / Procedural Skills (15 Marks) • Clinical Reasoning / Interpretation (10 Marks) • Decision-Making / Management Plan (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any of the experiential as portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)	
Semester No : 4	
Module 11 : Amrāz-i Nizām-i-Tanaffus 03 (Diseases of Respiratory system-03) امراض نظام تنفس ۳	
Module Learning Objectives (At the end of the module, the students should be able to) 1. Describe various infectious and infectious respiratory miscellaneous Respiratory diseases mentioned in Unani classical literature and conventional system of medicine 2. Demonstrate the clinical examination of various infectious and some miscellaneous respiratory diseases. 3. Appraise the treatment guidelines for various infectious and some miscellaneous respiratory diseases.	
Unit 1 Amrāz-Muta'ddi Nizām-i-Tanaffus-04 (Infectious Diseases of the Respiratory System 04) امراض متعدی نظام تنفس ۴	

11.1.1. Waram-i-Qaṣaba'-i-Ri'a (Tracheitis) ورم قصبۃ الریۃ

11.1.2. Other Tracheal Disorders (Obstruction, Tumours) اضطرابات الحجاب الحاجز

References: 2,4,5,8,10,14,17,21,26,27,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO8	Discuss Trachitis and other Tracheal disorders, including definition, aetiology, pathogenesis, Unani as well as modern concepts, clinical features, investigations, and principles of treatment.	2	Lecture	CC	Knows-how	L,DIS,L&PPT
CO1,CO2, CO4,CO6, CO8	Demonstrate comprehensive clinical examinations to identify physical findings associated with Tracheitis and differentiate it from other causes of tracheal obstruction.	4	Practical11.1	PSY-GUD	Shows-how	D-BED,CBL,LRI,W
CO1,CO2, CO4,CO6, CO8	Conduct case presentations of Tracheitis and other tracheal disorders and demonstrate key clinical findings and integrated management approaches.	6	Experiential-Learning11.1	PSY-ADT	Does	CD,CBL,X-Ray
CO1,CO2, CO4,CO6, CO8	Demonstrate a complete clinical assessment, including history-taking, physical examination, and laryngoscopic evaluation of patients with Bohtus Saut (Hoarseness of Voice), and formulate a justified Unani treatment plan based on Unani principles and evidence-based practice.	4	Practical11.2	PSY-GUD	Shows-how	PT,CD,CBL,D-BED

Unit 2 Amrāz-Muta'ddi Nizām-i-Tanaffus-05 (Infectious Diseases of the Respiratory System 05) امراض متعدی نظام تنفس ۵

11.2.1. Covid-19 کووڈ ۱۹

11.2.2. Nafth al-Dam (Haemoptysis) نفث الدم

11.2.3. RSV (Respiratory Syncytial Virus) Infection تعدیہ رِسپائریٹری سِنسیٹیَل وائرس

References: 1,5,21,27,29,30						
3A	**3B**	**3C**	**3D**	**3E**	**3F**	**3G**
CO1,CO2, CO4,CO6, CO8	Discuss Covid-19 for its definition, aetiology, pathogenesis, clinical features, investigations, and principles of treatment, and possible treatment in the Unani system of Medicine.	2	Lecture	CC	Knows-how	DIS,L,L&PPT
CO1,CO2, CO4,CO6, CO8	Describe Haemoptysis for its definition, aetiology, pathogenesis, clinical features, differential diagnosis, investigations, and principles of treatment in the Unani system of medicine	2	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO4,CO6, CO8	Demonstrate the physical findings of COVID-19 and post-COVID complications, differentiate them from other respiratory and systemic conditions, and apply appropriate diagnostic and management approaches.	4	Practical11.3	PSY-GUD	Shows-how	D-BED,PER,LRI,CD,PT
CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical physical examination and diagnostic approach to identify the causes of Haemoptysis and formulate appropriate management plans based on Unani and modern medical systems.	4	Practical11.4	PSY-GUD	Shows-how	PER,D-BED,CD,PT
CO1,CO2, CO4,CO6, CO8	Conduct case presentations of COVID-19 patients, integrating clinical history, physical examination, and investigatory findings, and formulate comprehensive management plans based on both Unani principles and contemporary medical approaches.	6	Experiential-Learning11.2	PSY-ADT	Does	CD,SDL,PSM,X-Ray,PL

CO1,CO2, CO4,CO6, CO8	Conduct comprehensive clinical examinations of patients presenting with Haemoptysis, assess the underlying causes, and formulate integrated treatment plans based on Unani and modern medical approaches.	6	Experiential-Learning11.3	PSY-ADT	Does	LRI,CD,X-Ray,PL

Unit 3 Amrāz Mutafarriqa Nizām-i-Tanaffus-01 (Miscellaneous diseases of the respiratory system 01) امراض متفرقہ نظام تنفس ا

11.3.1. Su'āl (Cough) سعال

11.3.2. Buḥḥat al-Ṣawt (Hoarseness of voice) بحۃ الصوت

11.3.3. Diyaphragma ke 'Awāriz (Disorders of the diaphragm) دیافراغمہ کے عوارض

11.3.4. Deformities of the chest wall

References: 4,5,7,8,10,11,14,17,27,29

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO8	Describe Sual (Cough) for its definition, types, etiology, pathogenesis in different diseases, differential diagnosis, investigations, and principles of treatment and treatment plan.	2	Lecture	CC	Knows-how	L&PPT ,L
CO1,CO2, CO4,CO6, CO8	Discuss the Bohtus saut (Hoarseness of voice) for its definition, aetiology, pathogenesis, clinical features, differential diagnosis, investigations, and treatment plan.	2	Lecture	CC	Knows-how	L,L&PPT ,L&GD,DIS
CO1,CO4, CO6,CO8	Demontrate detailed physical examinations of patients presenting with Sual (Cough), classify its types, discuss associated clinical features, perform relevant investigations, identify potential complications, and explore recent advancements in treatment.	4	Practical11.5	PSY-GUD	Shows-how	PT,D-BED,CBL

CO1,CO2, CO4,CO6, CO8	Conduct comprehensive clinical examinations, establish differential diagnoses, and formulate management plans for patients presenting with Sual (Cough), integrating Unani and modern medical principles.	4	Experiential-Learning11.4	PSY-ORG	Does	X-Ray,LRI,CD,CBL,SDL
CO1,CO2, CO4,CO6, CO8	Demonstrate and illustrate comprehensive clinical assessments, including history-taking, physical examination, and laryngoscopic evaluation of patients presenting with Bohtus Saut (Hoarseness of Voice) and formulate Unani treatment plans based on classical principles and evidence-based practices.	4	Experiential-Learning11.5	PSY-ADT	Does	CD,LRI,SDL,X-Ray,PER

Practical Training Activity

Practical Training 11.1 Clinical Examination and Management of Tracheitis and other Tracheal Disorders

Total Learning Hours (4)

Activity 1: Instructor-Led Clinical Examination Demonstration (1 hr)

An instructor will conduct a comprehensive demonstration on the clinical assessment of patients suspected of having Warm-e-Qasab-e-Riya (Tracheitis) or tracheal obstruction. This session will cover detailed history-taking and physical examination techniques, including inspection, palpation, percussion, and auscultation. Emphasis will be placed on identifying key clinical signs such as stridor, intercostal retractions, nasal flaring, and the use of accessory respiratory muscles. The demonstration will also integrate traditional Unani principles with contemporary medical practices, highlighting a holistic approach to patient evaluation and management.

Activity 2: Group-Based Clinical Examination under supervision (1 hr)

Students will be organized into small groups to perform supervised physical examinations on simulated patients or anatomical models. Each group will practice identifying clinical signs associated with tracheitis and tracheal obstruction, enhancing their diagnostic skills through hands-on experience. Faculty members will provide real-time feedback, ensuring that students refine their examination techniques and accurately interpret clinical findings.

Activity 3: Diagnostic Investigation and Interpretation (1 hr)

In this session, students will analyze and interpret various diagnostic investigations pertinent to tracheitis and tracheal obstruction. These will include Complete

Blood Count (CBC) to detect leukocytosis, chest X-rays and neck radiographs to identify tracheal narrowing or irregularities, and bronchoscopy findings revealing mucopurulent secretions or membrane formations within the trachea. Students will correlate these findings with clinical presentations to reinforce diagnostic reasoning and the formulation of differential diagnoses. Activity 4: Case-Based Discussion and Integrated Management Planning (1 hr) Students will engage in case-based discussions to develop comprehensive management plans for patients with Warm-e-Qasab-e-Riya (Tracheitis) and tracheal obstruction. The discussions will integrate Unani therapeutic principles, Ilaj and mamoolate Matab with contemporary medical interventions, including antibiotic therapy and airway management strategies. Students will present their management plans, providing justifications for their chosen approaches and considering factors like drug interactions, patient-specific variables, and evidence-based guidelines.
Practical Training 11.2 Clinical Approach and Unani Management of Bohtus Saut (Hoarseness of Voice).
Total Learning Hours (4) Activity 1: Mentor-Led Demonstration of Physical Examination (1 Hr) The mentor will demonstrate a physical examination of patients with hoarseness of voice, focusing on the larynx, vocal cords, and associated structures. This includes inspection, palpation, and auscultation techniques pertinent to identifying causes of hoarseness. Activity 2: Supervised Laryngoscopic Evaluation (1 Hr) Students will observe and assist in performing laryngoscopic evaluations to visualise vocal cord function and identify pathologies such as nodules, polyps, or inflammation. This hands-on experience enhances understanding of anatomical and pathological correlations. Activity 3: Clinical Case Discussions and Diagnosis (1 Hr) In small groups, students will discuss patient cases, integrating clinical findings with Unani diagnostic principles. They will identify the type of Bohtus Saut, determine underlying causes, and consider differential diagnoses.

Activity 4: Formulation of Unani Treatment Plans (1 Hr) Students will develop individualised Unani treatment plans based on their assessments. This includes selecting appropriate therapies and mamoolate matab, ensuring alignment with classical texts and contemporary evidence.
Practical Training 11.3 Clinical Assessment and Management of COVID-19 and Post-COVID Complications
Total Learning Hours (4) Activity 1: Bedsice demonstration (1 hr) The teacher will video demonstrate clinical examination of a patient COVID-19 of or post-COVID-19 symptoms, focusing on general condition, respiratory distress signs, auscultatory findings, oxygen saturation, and systemic involvement (e.g., cardiovascular or neurological signs). Activity 2: Hands-on Training session (1 hr) Students will appraise supervised physical examinations on video or simulated patients or similar conditions with suspected post-COVID complications (e.g., lung fibrosis, fatigue syndrome, thromboembolic events) in pairs, under clinical observation. Activity 3: Investigations interpretation workshop (1 hr) Students will review and interpret relevant investigations including viral tests (e.g., PCR, rapid antigen), CBC, D-dimer, CRP, Chest X-ray, HRCT chest, ECG, and 2D Echo.. They will compare these with clinical signs to distinguish post-COVID complications from other differential diagnoses (e.g., tuberculosis, heart failure, bronchitis). Activity 4: Management plan session (1 hr) Under supervision, students will review management plans integrating both Unani treatment principles (Ilaj bil Ghiza, Ilaj bil Dawa, Ilaj bil Tadbeer) and modern medical protocols, including rehabilitation and long-term follow-up for post-COVID conditions. Each student will document findings and treatment plans in the clinical logbook.
Practical Training 11.4 Clinical Evaluation and Management of Haemoptysis
Total Learning Hours (4)

Activity 1: Teacher Demonstration (1 hr)

The teacher will conduct a live or simulated demonstration of the clinical examination of a patient presenting with haemoptysis in OPD or IPD. The demonstration will include comprehensive history taking (e.g., onset, duration, frequency, volume of blood, associated symptoms), general and systemic physical examination (especially respiratory), and clinical approach to differentiate pulmonary and extrapulmonary causes.

Activity 2: Student-performed Clinical Examination and Case Analysis (1 hr)

Under faculty supervision, students will perform physical examinations on simulated patients or models. They will assess signs such as respiratory rate, chest expansion, use of accessory muscles, crepitations, and hemoptysis characteristics. They will record findings, suggest probable causes (e.g., tuberculosis, bronchiectasis, carcinoma), and present preliminary clinical impressions.

Activity 3: Investigation Review and Interpretation (1 hr)

Students will be given case-based investigation reports (e.g., CBC, Chest X-ray, CT scan, sputum AFB, bronchoscopy findings). They will work in groups to analyse and interpret results, correlate them with clinical findings, and prepare diagnostic summaries. will formulate a treatment plan integrating both Unani principles and modern medical strategies (e.g., antibiotics, antitubercular therapy, anticoagulants, or surgical consultation if needed). Differential diagnosis will be discussed under teacher guidance.

Activity 4: Treatment Planning and Peer Teaching (1 hr)

Students will present the case, diagnosis, and management plan to junior (UG) students as a peer teaching activity, supervised and assessed by faculty. All the activities will be recorded in their log books.

Practical Training 11.5 Comprehensive Clinical Approach to Sual (Cough)

Total Learning Hours (4)

Activity 1: Clinical Examination Demonstration (1 Hr)

The teacher will demonstrate to the physical examination of patients with various types of cough (e.g., dry, productive, acute, chronic). Emphasis will be placed on inspection, palpation, percussion, and auscultation techniques to identify characteristic signs associated with different cough types.

Activity 2: Clinical Feature Discussion and Diagnostic Investigations (1 Hr)

Through case-based discussions, under the supervision of the teacher, students will classify coughs according to duration (acute, subacute, chronic) and nature (dry, productive). They will correlate these classifications with clinical features and underlying etiologies, referencing both Unani concepts (e.g., Sual Yabis, Sual Ratab) and modern medical classifications. Students will review and interpret diagnostic investigations such as chest X-rays, sputum analysis, pulmonary function tests, and blood work. They will learn to correlate investigative findings with clinical presentations to arrive at accurate diagnoses

Activity 3: Complication Identification and Management Strategies and Recent Advances in Treatment (1 Hr)

Students will also explore potential complications arising from an untreated or chronic cough, such as bronchiectasis or pneumothorax. They will discuss management strategies to prevent and address these complications, integrating Unani treatments and modern medical interventions.

Activity 4: Peer Teaching and Logbook Documentation (1 Hr)

A seminar will be conducted to discuss recent advancements in the treatment of cough, including novel pharmacological agents, immunomodulatory therapies, and emerging Unani formulations. Students will prepare and deliver presentations summarising their findings and experiences in the seminar. Additionally, they will document clinical encounters, diagnostic reasoning, and treatment plans in their logbooks for reflective learning and assessment.

Experiential Learning Activity

Experiential-Learning Learning 11.1: Presentations and Management of Tracheal Disorders.

Total Learning Hours (6)

Activity 1: Clinical Case presentation (1 hr)

Students will individually conduct clinical case presentations of patients diagnosed with Warm-e-Qasab-e-Riyah (Tracheitis) or related tracheal conditions. Each student will describe history taking, presenting symptoms, relevant Unani concepts, and clinical signs.

Activity 2: Diagnostic interpretation workshop (1 hr)

Students will collaboratively review and interpret diagnostic investigations (such as laryngoscopy, chest X-ray, CT scan, sputum analysis, and complete blood count). They will correlate findings with clinical features of tracheitis, tracheal obstruction, or tumours.

Activity 3: Analysis for Differential diagnosis (1 hr) Students will analyse and discuss differential diagnoses for tracheal disorders by comparing clinical features of similar respiratory diseases (e.g., asthma, bronchitis, laryngeal pathology). Activity 4: Management planning workshop (1 hr) Each group will formulate a comprehensive management plan using both Unani (Ilaj bil Ghiza, Ilaj bil Dawa, Ilaj bil Tadbeer) and modern medical strategies (antibiotics, corticosteroids, airway clearance, surgical options for tumours). Activity: Peer learning session (1 hr) Students will engage in a peer-teaching session, where each group presents a case (clinical findings + management plan) to undergraduate students, explaining diagnostic reasoning and treatment strategies clearly. Activity 6: Logbook and presentation (1 hr) All students will document their case studies, diagnostic interpretations, and management plans in individual logbooks. This will be followed by a reflective discussion guided by the mentor on challenges faced and lessons learned, in the departmental seminar presentation.
Experiential-Learning Learning 11.2: Integrated Case-Based Management of COVID-19 in Unani and Modern Medicine
Total Learning Hours (6) Activity 1: Case-Based Clinical Presentation (1 hr) Students will present recorded or simulated COVID-19 cases, detailing patient history, symptomatology, and clinical findings. Emphasis will be placed on correlating Unani concepts like "humma" (fever) with modern clinical presentations. Activity 2: Diagnostic Investigation Analysis (1 hr) In groups, students will analyse diagnostic reports such as RT-PCR results, chest imaging, and blood tests. They will interpret these findings from both Unani and modern medical perspectives, discussing the implications for diagnosis and management.

Activity 3: Integrated Treatment Planning (1 hr) Students will collaboratively develop treatment plans that incorporate Unani therapies (e.g., Ilaj bil Ghiza, Ilaj bil Dawa, Ilaj bil Tadbeer) alongside modern medical interventions. Discussions will focus on patient-centred care and evidence-based practices. Activity 4: Bedside Demonstration and Peer Teaching (1 hr) Students will conduct bedside demonstrations, showcasing clinical examination techniques and management strategies to peers and undergraduate students, fostering a collaborative learning environment. Activity 5: Educational Video(1 hr) Students will review or visit videos demonstrating the clinical approach to COVID-19 patients, including history taking, examination, and management. These videos will serve as learning tools for peers and junior students. Activity 6: Reflective Discussion and Feedback Session (1 hr) A facilitated session where students reflect on their learning experiences, discuss challenges faced during case presentations and management planning, and receive feedback from mentors and peers to enhance clinical competence. The student should also note in his logbook.
Experiential-Learning Learning 11.3: Integrated Clinical and Literary Exploration of Haemoptysis
Total Learning Hours (6) Activity 1: Literature Review and Analysis (1 hr) Students will review classical Unani texts (e.g., Al-Qanoon fi al-Tibb, Kitab al-Hawi) and modern medical literature to extract information on the aetiology, diagnosis, and treatment of Nafsuddam. They will compare and contrast the perspectives of both systems. Activity 2: Seminar Presentation (1 hr) Students will present their literature findings in a departmental seminar, highlighting the diagnostic criteria and treatment modalities of Nafsuddam in both Unani and modern medicine. This will encourage peer learning and critical discussion.

Activity 3: Clinical Examination Demonstration (1 hr)

Under faculty supervision, students will demonstrate the physical examination of patients with haemoptysis, focusing on techniques relevant to both Unani and modern diagnostic approaches.

Activity 4: Case Study Analysis (1 hr)

Students will analyse real or simulated case studies of patients presenting with haemoptysis. They will identify the underlying causes, interpret diagnostic findings, and discuss appropriate management strategies from both Unani and modern perspectives.

Activity 5: Treatment Plan Documentation (1 hr)

Based on the case studies, students will formulate comprehensive treatment plans incorporating Unani therapies (e.g., Ilaj bil Ghiza, Ilaj bil Dawa, Ilaj bil Tadbeer) and modern medical interventions. These plans will be documented in their clinical logbooks.

Activity 6: Peer Teaching Session (1 hr)

Students will conduct a teaching session for undergraduate students, demonstrating clinical examination techniques and discussing the diagnosis and management of Nafsuddam. This reinforces their understanding and develops teaching skills.

Experiential-Learning Learning 11.4: Integrated Clinical and Pedagogical Approach to Sual (Cough)

Total Learning Hours (4)

Activity 1: Clinical Examination and Case Documentation (1 Hr)

Students will perform detailed history-taking and physical examinations of patients with various types of cough (e.g., dry, productive, acute, chronic) in OPD/IPD settings. They will document findings, focusing on identifying the type of Sual and correlating it with Unani concepts such as Sual Yabis (dry cough) and Sual Ratab (productive cough).

Activity 2: Differential Diagnosis and Management Planning Workshop (1 Hr)

In small groups, students will analyse clinical cases to establish differential diagnoses, considering both Unani and modern medical perspectives. They will develop integrated management plans, incorporating Unani treatments like Sharbat Zoofa Murakkab and contemporary medical interventions, ensuring evidence-based practice.

Activity 3: Unani Literature Review and Teaching Preparation (1 Hr) Students will review classical Unani texts (e.g., Al-Qanoon fi al-Tibb, Kamil-us-Sana) to extract information on the aetiology, classification, and treatment of Sual. They will prepare teaching materials to convey these concepts effectively to undergraduate students, emphasising the relevance of Unani Medicine in modern clinical practice. Activity 4: Peer Teaching and Demonstration Session (1 Hr) Students will conduct interactive sessions with undergraduate students, demonstrating clinical examination techniques, discussing case studies, and explaining Unani concepts related to Sual. This activity aims to enhance teaching skills and reinforce their understanding through peer education.
Experiential-Learning Learning 11.5: Clinical Assessment and Peer-Led Teaching of Bohtus Saut (Hoarseness of Voice)
Total Learning Hours (4) Activity 1. Clinical Assessment and Documentation (1 Hr) Students will independently perform detailed history-taking and physical examinations of patients with hoarseness of voice in OPD/IPD settings. They will document findings, focusing on identifying the type of Bohtus Saut and correlating it with Unani concepts. This activity emphasises self-directed learning and the application of clinical reasoning skills. Activity 2. Laryngoscopic Evaluation and Interpretation (1 Hr) Under mentor supervision, students will perform laryngoscopic evaluations to visualise vocal cord function and identify pathologies such as nodules, polyps, or inflammation. They will interpret these findings in the context of Unani diagnostic principles, enhancing their diagnostic acumen. Activity 3. Unani Literature Review and Treatment Planning (1 Hr) Students will review classical Unani texts to extract information on the aetiology, classification, and treatment of Bohtus Saut. They will develop individualised Unani treatment plans, ensuring alignment with classical texts and contemporary evidence. Activity 4. Peer Teaching and Demonstration Session (1 Hr) Students will prepare and deliver presentations summarising their findings and experiences to undergraduate peers, demonstrating clinical examination

techniques, discussing case studies, and explaining Unani concepts related to Bohtus Saut. This activity aims to enhance teaching skills and reinforce their understanding through peer education.	
Modular Assessment	
Assessment	**Hour**
Instructions— Conduct a structured Modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C. Case-based evaluation: (50 Marks) Each student will be given a case or problem situation related to any infectious or miscellaneous respiratory disease to evaluate the patient and create a treatment/management plan with justification. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any experiential portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)	4
Module 12 : Amrāz-i-Nizām-i-Tanaffus 04 (Diseases of Respiratory system-04) امراض نظام تنفس ۴	
Module Learning Objectives (At the end of the module, the students should be able to)	

1. Describe various respiratory diseases like haemothorax, pneumothorax, pulmonary oedema etc. mentioned in Unani classical literature and conventional system of medicine

2. Demonstrate the clinical examination of various respiratory diseases like haemothorax, pneumothorax, pulmonary oedema etc.

3. Appraise the treatment guidelines for various respiratory diseases like haemothorax, pneumothorax, pulmonary oedema etc.

Unit 1 Amrāz Mutafarriqa Nizām-i-Tanaffus-02 (Miscellaneous diseases of the respiratory system 02) امراض متفرقہ نظام تنفس ۲

12.1.1. Nazf al-Ṣadr (Haemothorax) نزف الصدر

12.1.2. Nafkha al-Ṣadr (Pneumothorax) نفخۃ الصدر

References: 2,4,5,8,10,15,16,20,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO8	Describe Haemothorax definition, aetiology, pathogenesis Unani as well as modern concept regarding this, clinical features, investigations and principal of treatment with treatment and complications in detail. Concept of the disease in Unani classical literature	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO4,CO6, CO8	Discuss Pneumothorax its definition, aetiology classifications pathogenesis clinical features, investigations and principal of treatment and possible treatment in Unani system of Medicine with complications in detail.	2	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO4,CO6, CO8	Demonstrate the physical findings indicative of haemothorax, differentiate it from other thoracic conditions, and discuss recent scientific advancements in its management.	3	Practical12.1	PSY-GUD	Shows-how	D-BED,D-M,PER,DIS,PT

CO1,CO3, CO4,CO6, CO8	Demonstrate the physical findings indicative of pneumothorax, differentiate among its various types, recognise potential complications, and formulate appropriate treatment plans.	3	Practical12.2	PSY-GUD	Shows-how	PT,CD,D-BED,D
CO1,CO3, CO4,CO6, CO8	Demonstrate and thoroughly evaluate hemothorax cases, demonstrate key clinical findings to undergraduate students, critically analyse both contemporary and Unani treatment approaches, and competently perform thoracocentesis while incorporating modern techniques.	4	Experiential-Learning12.1	PSY-ADT	Does	X-Ray,CD,PER,CBL
CO1,CO3, CO4,CO6, CO8	Conduct a physical examination of a patient with suspected pneumothorax, interpret investigatory findings, and formulate an appropriate line of treatment based on principles of both Unani medicine and modern medicine, including demonstration and documentation of treatment protocols.	5	Experiential-Learning12.2	PSY-GUD	Does	LRI,X-Ray,D-M,PER
CO1,CO2, CO4,CO6, CO8	Perform a physical examination to identify characteristic signs of pulmonary hypertension, differentiate it from other cardiovascular and respiratory conditions, and develop an integrated treatment plan combining Unani therapeutic principles with modern medical approaches when indicated, while following referral protocols for severe cases.	2	Practical12.3	PSY-GUD	Shows-how	PT,D-BED,D-M

Unit 2 Amrāz Mutafarriqa Nizām-i-Tanaffus-03 (Miscellaneous diseases of the respiratory system 03) امراض متفرقہ نظام تنفس ۳

12.2.1. Suqūṭ al-Ri'a (Atelectasis) سقوط الرئۃ

12.2.2. Tahabbuj al-Ri'a (Pulmonary oedema) تہبج الریہ

12.2.3. Suqūṭ-i-Tanaffus (Respiratory failure) سقوط تنفس

References: 1,2,4,24,26,27,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO8	Describe Saqoote ria (Atelectasis) definition, types, etiology, pathogenesis, clinical features, differential diagnosis investigations and principal of treatment with treatment and complications	2	Lecture	CC	Knows-how	L&PPT ,L
CO1,CO2, CO4,CO6, CO8	Discuss Pulmonary edema, Explain definition, aetiology, pathogenesis, clinical features, differential diagnosis investigations and principal of treatment with treatment.	2	Lecture	CC	Knows-how	L,L&PPT
CO1,CO3, CO4,CO6, CO8	Discuss Respiratory failure definition, aetiology, pathogenesis, clinical features, differential diagnosis investigations and complications.	1	Lecture	CC	Knows-how	L&PPT ,L
CO1,CO2, CO4,CO6, CO8	Demonstrate and evaluate the physical examinations, including history-taking, physical examination, and interpretation of diagnostic investigations of Saqoote ria (Atelectasis) and classify the types of atelectasis, recognise associated complications, recent advancements, and formulate Unani treatment plans based on Unani principles and contemporary evidence.	4	Practical12.4	PSY-GUD	Shows-how	D-M,CD,LRI,PT
CO1,CO2, CO4,CO6, CO8	Assess patients presenting with pulmonary oedema by conducting thorough history-taking, physical examinations, and interpreting relevant diagnostic investigations. They will classify the types of pulmonary oedema, identify associated complications, and develop Unani treatment plans based on classical principles and contemporary evidence, ensuring timely referrals when necessary.	4	Practical12.5	PSY-GUD	Knows-how	D-BED,DIS,PT,D-M

CO1,CO2, CO4,CO6, CO8	Demonstrate and properly examine patients with pulmonary hypertension, recognise key symptoms, recent advancements in its diagnosis, and create treatment plans using both Unani medicine and modern approaches when needed.	2	Practical12.6	PSY-GUD	Shows-how	D-BED,PT,D-M
CO1,CO3, CO4,CO6, CO8	Examine patients diagnosed with Saqoote Ria (Atelectasis), accurately demonstrate clinical findings in each case, explain the condition and its management, including recent advances in treatment, to undergraduate students, and integrate classical Unani references with modern diagnostic and therapeutic approaches.	4	Experiential-Learning12.3	PSY-ADT	Does	PER,D-M,X-Ray
CO1,CO2, CO4,CO6, CO8	Conduct multiple case presentations of Pulmonary oedema **and** evaluate through clinical examination and interpretation of relevant investigations, differentiate between cardiogenic and non-cardiogenic types, and formulate an evidence-based treatment plan incorporating recent advances in management.	4	Experiential-Learning12.4	PSY-ADT	Does	X-Ray,CD
CO1,CO2, CO4,CO6, CO8	Demonstrate and evaluate a patient presenting with respiratory failure through clinical assessment and relevant investigations, while formulating an appropriate line of treatment that incorporates recent advances in diagnosis and management.	3	Experiential-Learning12.5	PSY-ADT	Does	X-Ray,LRI,D-M

Unit 3 Amrāz Mutafarriqa Nizām-i-Tanaffus-04 (Miscellaneous diseases of the respiratory system 04) امراض متفرقہ نظام تنفس ۴

12.3.1. Acute Respiratory Distress Syndrome ایکیوٹ رِسپائریٹری ڈسٹریس سنڈروم

12.3.2. Pulmonary hypertension ضغط الدم قوی روَی

References: 1,2,4,16,18,27,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO8	Discuss Acute respiratory Distress Syndrome definition, aetiology, pathogenesis Unani as well as modern concept regarding this, clinical features, investigations and principal of treatment with treatment and complications in detail. Concept of the disease in Unani classical literature	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO4,CO6, CO8	Discuss Pulmonary hypertentions etiology, pathogenesis clinical features, investigations and principal of treatment with treatment and possible treatment in Unani system of Medicine complications in detail.	1	Lecture	CC	Knows-how	L&PPT ,L
CO1,CO2, CO4,CO6, CO8	Perform a physical examination to identify characteristic signs of Acute Respiratory Distress Syndrome (ARDS), distinguish it from other acute respiratory conditions through differential diagnosis, and develop an integrated treatment plan combining Unani therapeutic principles with modern critical care approaches when necessary, while adhering to referral protocols for severe cases.	2	Practical12.7	PSY-GUD	Shows-how	PER,PT,D-BED
CO1,CO2, CO4,CO6, CO8	Competently examine patients with Acute Respiratory Distress Syndrome (ARDS), accurately identify its characteristic clinical signs, differentiate it from similar respiratory conditions, and develop comprehensive treatment plans integrating Unani medicine principles with modern critical care approaches when necessary.	3	Experiential-Learning12.6	PSY-GUD	Does	CD,PER,D
CO1,CO2, CO4,CO6, CO8	Demonstrate comprehensive physical examination of pulmonary hypertension patients, interpret clinical and investigatory findings through both Unani and modern medical perspectives, and formulate an integrated treatment plan	3	Experiential-Learning12.7	PSY-GUD	Does	CD,PER,X-Ray,CBL

	combining Unani treatment with timely referral when indicated, while effectively demonstrating these skills to undergraduate trainees.					

Practical Training Activity

Practical Training 12.1 Clinical Evaluation and Management of Haemothorax

Instructor-Led Practical Activities (Total Duration: 3 Hours):

Activity 1: Clinical Examination (1 Hour):

Under instructor supervision, students will perform thorough physical examinations on patients presenting with chest trauma or symptoms suggestive of haemothorax. Emphasis will be placed on recognising key clinical signs such as diminished breath sounds, dullness to percussion, and signs of respiratory distress. Students will document their findings and discuss the clinical relevance in differentiating haemothorax from other thoracic conditions.

Activity 2: Diagnostic Imaging and Interpretation (1 Hour)

Students will participate in a guided session reviewing diagnostic imaging modalities pertinent to haemothorax, including chest X-rays, ultrasound, and CT scans. The instructor will highlight characteristic imaging features of haemothorax and contrast them with other pleural pathologies. Students will engage in interpreting sample images and correlating them with clinical scenarios to reinforce diagnostic acumen.

Activity 3: Management Strategies and Recent Advances (1 Hour)

In this interactive session, the instructor will present current management protocols for haemothorax, encompassing both Unani and modern medical approaches. Discussions will cover indications for interventions such as tube thoracostomy, surgical options, and the role of minimally invasive techniques. Recent scientific advancements and evidence-based practices will be highlighted, encouraging students to appraise and integrate new knowledge into clinical decision-making.

Practical Training 12.2 Clinical Evaluation and Management of Pneumothorax.

This will be achieved through instructor-led practical sessions in the outpatient department (OPD) and inpatient department (IPD) settings (Total Duration: 3 Hours)

Activity 1. Clinical Examination and Identification of Physical Findings (1 Hour): Under the instructor's supervision, students will conduct thorough physical examinations on patients/ Simulators presenting with symptoms suggestive of pneumothorax. Emphasis will be placed on recognising key clinical signs such as diminished or absent breath sounds, hyperresonance on percussion, and signs of respiratory distress. Students will document their findings and discuss the clinical relevance of differentiating among types of pneumothorax.

Activity 2. Diagnostic Imaging and Interpretation (1 Hour): Students will engage in a guided session reviewing diagnostic imaging modalities pertinent to pneumothorax, including chest X-rays and ultrasound. The instructor will highlight characteristic imaging features of various types of pneumothorax and contrast them with other thoracic pathologies. Students will interpret sample images and correlate them with clinical scenarios to reinforce their diagnostic acumen.

Activity 3. Management Strategies and Recent Advances Discussion (1 Hour): In this interactive session, the instructor will present current management protocols for pneumothorax, encompassing both Unani and modern medical approaches. Discussions will cover indications for interventions such as needle decompression, chest tube insertion, and surgical options. Recent scientific advancements and evidence-based practices will be highlighted, encouraging students to appraise and integrate new knowledge into clinical decision-making.

Practical Training 12.3 Clinical Evaluation and Management of Pulmonary Hypertension.

Activity 1. Bedside Clinical Examination of Pulmonary Hypertension (1 Hour): The teaching session will begin with the mentor demonstrating a thorough physical examination on a patient with pulmonary hypertension in either the inpatient (IPD) or outpatient (OPD) setting. The mentor will systematically assess and highlight key clinical features, including elevated jugular venous pressure, a loud pulmonic component of the second heart sound (P2), right ventricular heave, peripheral oedema, and signs of right heart failure. Special emphasis will be placed on proper auscultation techniques to detect characteristic heart sounds and murmurs. Following the demonstration, students will practice these examination skills on real or simulated patients under direct supervision. The mentor will provide immediate feedback on technique and guide students in correlating physical findings with Unani diagnostic concepts. The session will conclude with a discussion on recognising clinical red flags that warrant specialist referral.

Activity 2. Differential Diagnosis and Treatment Planning (1 Hour): This one-hour interactive session will focus on developing clinical reasoning skills for pulmonary hypertension management. The mentor will present several case scenarios, including pulmonary hypertension, chronic obstructive pulmonary disease, and left heart failure. Students will work in small groups to analyse these cases, focusing on identifying distinguishing clinical features and creating differential

diagnoses. Each group will then develop a comprehensive treatment plan that incorporates Unani modalities, while also considering indications for modern vasodilator therapies. The mentor will guide students in establishing clear criteria for when to implement Unani treatments versus when to refer for advanced care. The workshop will culminate in group presentations and a debriefing, during which the mentor will provide feedback on diagnostic accuracy and treatment planning, with a particular emphasis on collaborative management of cardiovascular conditions.

Practical Training 12.4 Clinical Evaluation and Management of Saqoote Ria (Atelectasis).

Instructor-Led Practical Activities (4 hours):

Activity 1: Teacher Demonstration (60 Minutes): The instructor will demonstrate the process of history-taking and physical examination on a patient or high-fidelity simulator exhibiting signs of Saqoote Ria. This includes identifying clinical features such as diminished breath sounds, dullness to percussion, and reduced chest expansion. The demonstration will also cover the interpretation of relevant laboratory tests and imaging studies.

Activity 2: Case-Based Diagnostic Exercise (45 Minutes): Students will be divided into small groups to analyse the provided patient cases. Each group will identify the type of atelectasis presented, discuss potential complications, and propose differential diagnoses.

Activity 3: Lab Report Interpretation (45 Minutes): Students will review and interpret simulated laboratory reports and imaging studies related to Saqoote Ria. They will classify the cases based on the findings and correlate them with clinical presentations. This activity enhances diagnostic skills and the ability to integrate laboratory data into clinical decision-making.

Activity 4: Role-Playing Diagnosis (45 Minutes): In pairs, students will engage in role-playing exercises where one acts as a patient presenting with symptoms of Saqoote Ria, and the other performs history-taking and physical examination. Following the role-play, the group will discuss the differential diagnoses and appropriate management strategies, fostering communication skills and clinical reasoning.

Activity 5: Unani vs. Modern Perspective Discussion (45 Minutes): Students will participate in a guided discussion comparing Unani concepts of Saqoote Ria with modern medical perspectives. The conversation will focus on integrating Unani diagnostic and treatment approaches with contemporary evidence-based practices, promoting a holistic understanding of patient care.

Practical Training 12.5 Clinical Assessment and Management of Pulmonary Oedema

Here are four practical activities, where the teacher or mentor will demonstrate and guide students on how to conduct a physical examination for patients with pulmonary oedema in clinical settings (OPD/IPD):

1. Demonstration and Practice of Respiratory Examination (1 Hour): The mentor will first demonstrate how to properly examine a patient with pulmonary oedema, covering inspection, palpation, percussion, and auscultation. They will highlight key findings such as crackles in the lungs, jugular venous distension (JVD), and swelling in the legs. Students will then practice these techniques on real or simulated patients under supervision. The mentor will also explain how these signs relate to Unani concepts like Tashannuj-e-Riya (respiratory distress). By the end, students should confidently identify pulmonary oedema signs using both modern and Unani approaches.

2. Bedside Case Discussion and Clinical Correlation (1 Hour): The mentor will select a real patient with pulmonary edema in the ward or OPD. Students will take the patient's history, focusing on symptoms like sudden breathlessness and cough with frothy sputum. They will then perform a physical examination while the mentor guides them in linking findings to possible causes (e.g., heart failure, kidney issues). The session will include a discussion on when to manage the case with Unani treatments and when to refer the patient for advanced care.

3. Diagnostic Testing and Interpretation (1 Hour): The mentor will show students how to use basic diagnostic tools such as pulse oximetry (to check oxygen levels), a stethoscope (for lung sounds), and chest X-rays (if available). They will also discuss Unani diagnostic methods. Students will practice interpreting test results—for example, connecting low oxygen levels with severe fluid overload. The mentor will emphasise when further tests (like echocardiography) are needed and when to refer.

4. Simulated Emergency Management and Decision-Making(1 Hour): Using a simulated case of acute pulmonary oedema, the mentor will demonstrate emergency steps like sitting the patient upright, giving oxygen, and administering diuretics. They will also discuss Unani supportive measures. Students will then role-play managing the case, deciding whether to continue Unani treatment or refer for intensive care. The mentor will provide feedback on their clinical decisions, ensuring they understand critical warning signs that require urgent referral

Practical Training 12.6 Clinical evaluation of Pulmonary hypertension.

Activity 1. (1 Hour): The teacher will begin by demonstrating how to check for signs of pulmonary hypertension in a patient. This includes looking for swollen neck veins, listening for abnormal heart sounds with a stethoscope, feeling for signs of heart strain, and checking for leg swelling as well as including the advanced

investigations in its diagnosis.. The teacher will show these physical signs connected to Unani medicine concepts. After the demonstration, students will practice these examination techniques on each other or simulated patients while the teacher guides them. The session will end with a discussion about how these findings help determine whether to treat with Unani therapies or refer for modern medical care.

Activity 2. (1 Hour): The teacher will present a real-life case of a patient with pulmonary hypertension. Students will work together to analyse the case and decide on a treatment plan. They will consider Unani treatments, Usool Ilaj, Ilaj and Ilaj bit tadbeer, while also learning about modern medications used for this condition. The class will then discuss when Unani treatments are appropriate and when modern treatments or specialist referral might be needed. The teacher will help students understand how to combine both approaches safely and effectively.

Practical Training 12.7 Clinical Assessment and Management of Acute Respiratory Distress Syndrome (ARDS).

Practical Activities: 2 hrs

Activity 1. Bedside Clinical Examination of ARDS: The teaching session will begin with the mentor demonstrating a comprehensive physical examination on an ARDS patient in a clinical setting (ICU/ward). The mentor will systematically assess and point out key clinical features, including rapid shallow breathing, use of accessory muscles, bilateral crackles on auscultation, and signs of hypoxia. Special attention will be given to demonstrating proper techniques for evaluating respiratory distress and interpreting pulse oximetry readings. Following this demonstration, students will have the opportunity to practice these examination skills on real or simulated patients under close supervision. The mentor will provide real-time feedback on examination techniques and help the students correlate physical findings with diagnosis. The session will conclude with a discussion on identifying critical warning signs that necessitate immediate referral to intensive care.

Activity 2. Differential Diagnosis and Treatment Planning: This one-hour interactive session will focus on developing clinical decision-making skills for ARDS management. The mentor will present several case scenarios featuring patients with acute respiratory failure, including ARDS, cardiogenic pulmonary oedema, and severe pneumonia. Students will work in small groups to analyse these cases, focusing on identifying distinguishing clinical features and formulating differential diagnoses. Each group will then develop a stage-wise management plan that incorporates Unani treatment modalities, while also considering indications for modern interventions. The mentor will guide students in establishing clear criteria for when to initiate Unani treatments versus when to refer for

advanced respiratory support. The workshop will culminate in group presentations and a debriefing session where the mentor will provide feedback on diagnostic reasoning and treatment planning, with particular emphasis on collaborative care in respiratory emergencies.

Experiential Learning Activity

Experiential-Learning Learning 12.1: Clinical Approach and Procedure-Based Learning in Hemothorax.

Experiential Learning Activities (Total: 4 Hours):

1. Case Presentations and Demonstration of Clinical Findings (1.5 hours): The student will present at least two Hemothorax cases at the bedside or in the seminar room, demonstrating patient-specific clinical signs and diagnostic features.
2. Teaching Session for Undergraduate Students (0.5 hour): The student will explain Hemothorax pathophysiology, clinical presentation, and treatment from both Unani and modern perspectives to undergraduates, using real cases.
3. Appraisal of Treatment Guidelines and Discussion on Advances (1 hour): The student will review and compare current treatment guidelines (modern and Unani), and discuss recent advances in management, including updated thoracocentesis techniques, in a group discussion or with a supervisor.
4. Demonstration of Thoracocentesis (1 hour): Under supervision, the student will demonstrate the thoracocentesis procedure on a manikin or in a clinical setting (if available), highlighting precautions, indications, and the latest methods used.

The student should also note the line of treatment in his logbook

Experiential-Learning Learning 12.2: Integrated Clinical Management of Pneumothorax

Experiential Learning Activities (Total: 5 Hours):

Activity 1. Bedside Physical Examination (1.5 hours): The student will examine a patient with pneumothorax in the ward or OPD. This includes taking history and doing physical examination (inspection, palpation, percussion, and auscultation) under supervision. They will note these findings in their logbook.

Activity 2. Understanding Investigation Reports (0.5 hour): The student will study and interpret the patient's investigation reports like chest X-ray, CT scan, ABG, etc., and also compare them with signs and methods used in Unani diagnosis.

Activity 3. Planning and Practising Treatment Procedures (1 hour): The student will make a treatment plan for the patient, one using Unani principles of treatment, Ilaj and one based on modern medicine (like oxygen therapy or chest tube). Under supervision, the scholar will observe or perform procedures like chest tube insertion on a model or a real patient. They will learn the correct steps and safety measures. Activity 4: Interactive Teaching Session on Pneumothorax Management (1 Hour): The PG scholar will lead an engaging teaching session for undergraduate students focused on pneumothorax case management. This activity will combine case discussion, hands-on demonstration, and interactive learning to reinforce both clinical knowledge and teaching skills. The session will begin with a case presentation where the scholar shares details of a pneumothorax patient, including their symptoms, physical examination findings, and diagnostic test results. This real or simulated case will set the foundation for the learning activities. The scholar will facilitate an interactive discussion by dividing students into small groups. Each group will analyse the case to make a diagnosis and then compare different treatment approaches, both modern medical interventions like chest tube insertion and Unani treatment or therapies. The groups will discuss the advantages and limitations of each approach before presenting their recommended treatment plan to the whole class. The scholar will then conduct a practical demonstration, showing students how to perform key physical examination techniques for pneumothorax and demonstrating a simulated chest tube insertion procedure. This hands-on component will be followed by a question-and-answer session where students can clarify doubts about diagnosis and treatment options. Activity 5. Logbook Writing and Reflection (1 hour): The student will write the case details and treatment plan in the logbook and also write a short reflection about what they learned from the case. The student will present the case in a departmental seminar. The scholar will explain pneumothorax diagnosis and treatment, covering both Unani and modern approaches. This will help reinforce their learning while sharing knowledge.
Experiential-Learning Learning 12.3: Integrated Clinical Approach to Saqoote Ria (Atelectasis)
Experiential Learning Activities (4 hours and one hour each activity): Experiential Activity 1: The student will survey and analyze classical Unani texts to identify the descriptions, causes, clinical features, and traditional treatment of Saqoote Ria. The student will compare and correlate this knowledge with current understanding of atelectasis from modern medical literature, and prepare a structured presentation for the departmental seminar.

Experiential Activity 2: The student will examine multiple patients clinically diagnosed with Saqoote Ria (Atelectasis), document symptoms and physical signs such as reduced breath sounds, dull percussion, and decreased chest expansion. The student will record these findings and present them in departmental discussions.

Experiential Activity 3: The student will demonstrate the process of clinical examination of the respiratory system, specifically for detecting atelectasis, to undergraduate students. This will include inspection, palpation, percussion, and auscultation techniques, along with interpretation of findings. The demonstration will be followed by an interactive teaching session to clarify concepts for the juniors.

Experiential Activity 4: The student will formulate and document the line of treatment for each patient with Saqoote Ria, incorporating both Unani interventions and recent advances from modern medicine such as chest physiotherapy, bronchoscopy, and positive pressure ventilation. The treatment plans will be entered into the student's logbook and discussed in a review session with faculty for feedback and refinement.

Experiential-Learning Learning 12.4: Integrated Clinical Approach to Pulmonary Oedema.

Experiential activities of 4 hours (one hour for each activity)

Activity 1: The student will independently conduct multiple case presentations of patients with pulmonary oedema, focusing on detailed history-taking and clinical examination. The student will identify clinical signs such as dyspnea, orthopnea, basal crepitations, and raised jugular venous pressure, and differentiate between cardiogenic and non-cardiogenic causes. These findings will be presented in a clinical seminar or explained through demonstration to junior graduates.

Activity 2: The student will select and interpret relevant investigations such as chest X-ray, echocardiography, ECG, and arterial blood gas analysis to confirm the diagnosis of pulmonary oedema. The student will independently analyse the pathophysiological basis of findings and present the diagnostic pathway in a seminar or teach interpretation techniques to junior graduates through case examples.

Activity 3: The student will formulate a line of treatment for pulmonary oedema, including oxygen therapy, diuretics, vasodilators, and positive pressure ventilation, and incorporate recent advances such as the use of high-flow nasal cannula, non-invasive ventilation strategies, and novel pharmacologic agents. The treatment protocol will be discussed in a seminar or demonstrated to junior graduates using simulated case scenarios.

Activity 4. Interprofessional Care Simulation: This one-hour role-playing activity simulates a real-world multidisciplinary team meeting for pulmonary oedema management. Students will divide into two groups representing Unani and modern medical teams collaborating on a complex case. The Unani team will advocate

for the Unani system of medicine approaches, while the modern team will propose conventional treatments, including diuretics and non-invasive ventilation. Through structured debate and negotiation, students will work to develop an integrated care plan that addresses potential conflicts between treatment approaches. Faculty will facilitate discussion on practical considerations, such as how to combine Unani with modern therapy. The session aims to develop skills in interdisciplinary collaboration while respecting both Unani and contemporary medical paradigms. A logbook should be maintained.
Experiential-Learning Learning 12.5: Clinical Evaluation and Management in Respiratory Failure.
Experiential Learning Activities (3 hours and one hour each activity): Activity 1: The student will independently assess a patient (real or simulated) presenting with respiratory failure by performing a detailed clinical evaluation, interpreting vital signs and arterial blood gases, and identifying the type of respiratory failure. The student will document the findings and later present the case in a seminar or teach the clinical evaluation process to junior graduates through demonstration. Activity 2: The student will select appropriate investigations for a patient with respiratory failure and interpret the results of chest X-ray, CT scan, pulmonary function tests, and arterial blood gases. The student will correlate investigation findings with clinical features and present the diagnostic approach in a seminar or explain interpretation techniques to junior graduates. Activity 3: The student will formulate a comprehensive treatment plan for respiratory failure by integrating standard management with recent advances such as high-flow nasal cannula, non-invasive ventilation protocols, and newer pharmacological options. The student will present the treatment protocol in a seminar or demonstrate it to junior graduates using clinical scenarios or case simulations.
Experiential-Learning Learning 12.6: Clinical Approach to Acute respiratory Distress Syndrome
Activity 1. Bedside ARDS Examination (1 hour): The PG scholar will demonstrate a targeted physical examination on an ARDS patient in the ICU/ward, highlighting four key signs: rapid shallow breathing, intercostal retractions, bilateral crackles on auscultation, and SpO2 on room air. Students will then practice in pairs on real/simulated patients, with the scholar correcting their technique (e.g., proper stethoscope placement for detecting late-stage "silent chest"). In their logbooks, students will record: 1) Examination findings 2) Proposed Unani interventions Modern parameters requiring ICU referral.

Activity 2. Teaching Juniors at the Bedside (1 Hour): The postgraduate scholar will guide junior students through a hands-on examination of an ARDS patient in the hospital ward or clinic. First, the senior student will demonstrate how to carefully check the patient's breathing rate, listen for crackling sounds in the lungs, and monitor oxygen levels. They will explain how these signs relate to Unani medicine concepts. Then, the junior students will practice these examination techniques themselves while the senior student watches and offers tips, like how to position the stethoscope properly. After the practice session, all students will write notes in their logbooks about what they observed and suggest initial Unani treatments to help with breathing difficulties.

Activity 3.(1 Hour): In this classroom session, the postgraduate scholar will present two similar but different cases - one with ARDS and one with severe pneumonia. Students will learn how to spot the differences between these conditions by comparing symptoms like fever patterns and the types of sounds heard in the lungs. The scholar will show how Unani diagnostic methods, like carefully checking the pulse (Nabz) and breathing quality, can help identify ARDS. Students will work in small groups to examine sample cases and discuss when to use traditional Unani treatments versus when modern antibiotics or hospital care might be needed. Everyone will then update their logbooks with clear notes on how to distinguish ARDS from other lung problems and the appropriate treatments for each.

Experiential-Learning Learning 12.7: Unani Approach to Pulmonary Hypertension

Activity 1. (1 hour): The postgraduate scholar will first demonstrate how to properly examine a patient with pulmonary hypertension in the hospital ward or clinic. They will show how to check for important signs like neck vein swelling, abnormal heart sounds, and leg swelling. Then each student will practice these examination skills on real patients under guidance. As they examine patients, they will learn to connect what they find to Unani medicine concepts. After the examination practice, students will write down their findings and treatment ideas in their logbooks, suggesting Unani approaches like special diets or herbal medicines that could help.

Activity 2.Case Discussion Seminar (1 hour): In this classroom session, the postgraduate scholar will present several patient cases showing different heart and lung problems that can look like pulmonary hypertension. Students will work in groups to figure out how to tell these conditions apart by comparing examination findings and test results. They will discuss when to use traditional Unani treatments and when modern medicines might be needed. The session will help students understand how to make good decisions about patient care. At the end, everyone will update their logbooks with key learning points about diagnosing and treating these conditions.

Activity 3: Practice With Simulated Patients (1 hour):

This hands-on session lets students practice their skills in a realistic setting. One of the students will pretend to be a patient with pulmonary hypertension, showing different symptoms that get worse over time. Students will take turns examining this "patient", ordering tests, and planning treatment. They will create complete care plans that combine Unani remedies like special exercises and herbal tonics with awareness of when to send patients for advanced hospital care. Finally, students will write detailed notes in their logbooks about what they learned from this practice session, including when to refer serious cases to specialists.	
Modular Assessment	
Assessment	**Hour**
Instructions— Conduct a structured Modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C. Case-based evaluation: (50 Marks) Each student will be given a case or problem situation related to haemothorax/ pneumothorax/ pulmonary oedema etc. to evaluate the patient and create a treatment/management plan with justification. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or Any practical in converted form can be taken for assessment. (25Marks) and Any experiential portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)	4
Semester No : 5	
Module 13 : Amrāz-i-Qalb wa Daurāne Khūn-01 (Diseases of Cardiovascular system-01) امراض قلب ودوران خون ا	

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Evaluate various cardiac diseases mentioned in Unani classical literature and conventional system of medicine

2. Demonstrate and interpret the clinical examination and investigations of various cardiac diseases.

3. Appraise the treatment guidelines for various cardiac diseases.

Unit 1 Sū-i Mizāj Qalb, Ḍu'f-i-Qalb, Khafqān سوءمزاج قلب، ضعف قلب، خفقان

13.1.1. Sū-i Mizāj Qalb سوءمزاج

13.1.2. Ḍu'f-i-Qalb ضعف قلب

13.1.3. Khafqān (Palpitation) خفقان

References: 4,5,10,15,16,17,21,27,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO8	Describe various types of Sū-i Mizāj Qalb, its clinical presentation, and treatment	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO4,CO6, CO8	Describe Unani perspective of Ḍu'f-i-Qalb , its causes, clinical presentation, and treatment.	1	Lecture	CC	Knows-how	L&PPT ,L
CO1,CO2, CO4,CO6, CO8	Describe Khafqān, its causes, classification, and clinical presentation and treatment	1	Lecture	CC	Knows-how	L,L&PPT

CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical examination appropriate to the patients of Sū-i Mizāj Qalb.	2	Practical13. 1	PSY-GUD	Shows-how	D,CD,D-BED
CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical examination of the patients of Ḍu'f-i-Qalb	2	Practical13. 2	PSY-GUD	Shows-how	D,D-BED
CO1,CO2, CO4,CO6, CO8	Demonstrate physical examination of patients' of Khafqān	2	Practical13. 3	PSY-GUD	Shows-how	D-BED,CD,D
CO1,CO2, CO4,CO6, CO8	Conduct a clinical examination of a patient of Sū-i Mizāj Qalb and demonstrate a line of treatment	2	Experiential-Learning13. 1	PSY-ADT	Does	D-BED,D
CO1,CO2, CO4,CO6, CO8	Conduct a clinical examination of the patient of Ḍu'f-i-Qalb and demonstrate a line of treatment	2	Experiential-Learning13. 2	PSY-ADT	Does	PER,D-BED
CO1,CO2, CO4,CO6, CO8	Conduct physical examination of patients' of Khafqān	3	Experiential-Learning13. 3	PSY-ADT	Does	D,D-BED,CD

Unit 2 Iltihābi wa 'Ufūni Amrāz-i-Qalb (Inflammatory and Infective Cardiac Disorder) التہابی وعفونی امراض قلب

13.2.1. Waram Ghilaafe qalb (Pericarditis) ورم غلاف القلب

13.2.2. Constrictive pericarditis کانسٹرکٹیو پیری کارڈائٹس

13.2.3. Waram 'Azlat-i-qalb (Myocarditis) ورم عضلات قلب

13.2.4. Waram Baṭana-i-qalb (Infective Endocarditis) ورم بطانہ قلب

13.2.5. Waram Baṭana-i-qalb hudaari (Rheumatic heart disease) ورم بطانہ قلب حداری

References: 5,9,10,11,14,15,16,17,23,24,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2	Discuss etiology, etiopathogenesis, Clinical Features, Diagnosis and Treatment of *Waram Ghilaafe qalb* (Pericarditis) and Constrictive pericarditis	1	Lecture	CC	Knows-how	L&PPT ,L&GD,L
CO1,CO2, CO4,CO6, CO8	Diagnose *Waram Azlate qalb* (Myocarditis) and Discuss its epidemiology, etiology, pathophysiology, complications and management	1	Lecture	CC	Knows-how	L&PPT ,L,L&GD
CO1,CO2, CO4,CO6, CO8	Discribe *Waram Batanae qalb* (Infective Endocarditis), Classification, Etiology and Pathophysiology, clinical features, diagnosis, Preventive measures, Complications, treatment and modified Duke criteria of Waram Batanae qalb (Infective Endocarditis), and investigations.	1	Lecture	CC	Knows-how	L&PPT ,L,L&GD
CO1,CO2, CO4,CO6, CO8	Describe *Waram Batanae qalb hudaari* (Rheumatic heart disease), write down its epidemiology, etiology, and Pathophysiology, clinical features, Diagnostic interventions, complications, prognosis, long term management and Revised Jones Criteria	1	Lecture	CC	Knows-how	L&GD,L,L&PPT
CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical examination of *Waram Ghilaafe qalb* (Pericarditis) and Warm Azlate qalb (Myocarditis)	4	Practical13.4	PSY-GUD	Shows-how	D,D-BED

CO1,CO2, CO4,CO6, CO8	Draw a flow chart for clinical diagnosis of Rheumatic heart disease and demonstrate the physical examination of the patient	4	Practical13.5	PSY-GUD	Shows-how	D,PT,PrBL
CO1,CO2, CO4,CO6, CO8	Conduct clinical examination of patients of *Waram Ghilaafe qalb* (Pericarditis) and *Waram Azlate qalb* (Myocarditis) and formulate a line of treatment.	4	Experiential-Learning13.4	PSY-ADT	Does	D-BED,PER,D,CD
CO1,CO2, CO4,CO6, CO8	Appraise the treatment guidelines of Rheumatic heart disease and conduct the clinical examination of patient of RHD patient and formulate a line of treatment	6	Experiential-Learning13.5	CE	Does	PL,LS,RP,PER

Unit 3 Ghashī, Iflās-i-Qalb, Suqūṭ-i-Qalb, Corpulmonale, غشی،افلاس القلب،سقوط قلب وسقوط قلب ریوی

13.3.1. Ghashī (Syncope) غشی

13.3.2. Iflās-i-Qalb (Cardiac Ischaemia) افلاس القلب

13.3.3. Suqūṭ-i-Qalb (Cardiac Failure) سقوط قلب

13.3.4. Corpulmonale متلازمہ ریوی قلبی

References: 1,4,10,11,12,13,27,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO8	Describe Ghashī (Syncope), its Etiology, Classifications ,Clinical Features, Diagnosis, Differential diagnosis and Management of Ghashī (Syncope).	1	Lecture	CC	Knows-how	L&GD,L&PPT ,L

CO1,CO2, CO4,CO6, CO8	Discuss Iflās-i-Qalb (IHD) its classification, Etiology, Risk factors, Pathophysiology, Clinical features, Diagnosis, ECG changes, cardiac markers. Complications, lifestyle modifications and Treatment	1	Lecture	CC	Knows-how	L&PPT ,L,L&GD
CO1,CO2, CO4,CO6, CO8	Describe Suqūṭ-i-Qalb (Heart Failure) and Corpulmonale , Etiology, Risk factors, Pathophysiology, Clinical features, Diagnosis, and Treatment and also discuss types of Heart Failure , NYHA and ACC/AHA classification and Framingham Diagnostic Criteria	1	Lecture	CC	Knows-how	L_VC,L&GD,L,L&PPT
CO1,CO2, CO4,CO6, CO8	Demonstrate How to evaluate the patient of Ghashī, (Syncope)	2	Practical13.6	PSY-GUD	Shows-how	L_VC,D,D-BED
CO1,CO2, CO4,CO6, CO8	Demonstrate how to evaluate the patient suffering from MI	2	Practical13.7	PSY-GUD	Shows-how	D-M,D,PER,D-BED,L_VC
CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical examination of Suqūṭ-i-Qalb (Heart Failure) and discuss its clinical features, complications, lifestyle modifications, and treatment.	2	Practical13.8	PSY-GUD	Shows-how	DIS,D-BED,D
CO1,CO2, CO4,CO6, CO8	Conduct clinical examination of patient of Ghashī, (Syncope) and formulate a line of treatment of Ghashī	3	Experiential-Learning13.6	PSY-ADT	Does	D,D-BED,PER

CO1,CO2, CO4,CO6, CO8	Conduct clinical examination of MI patients and formulate a line of treatment	3	Experiential-Learning13.7	PSY-ADT	Does	D-BED,W,D
CO1,CO2, CO4,CO6, CO8	Conduct a clinical examination of the patient of Suqūṭ-i-Qalb (Heart Failure) and formulate a line of treatment.	3	Experiential-Learning13.8	PSY-ADT	Does	D-M,D-BED,PER

Practical Training Activity

Practical Training 13.1 Sui Mizaj Qalb.

Total Learning Hours (2)

Activity 1: Clinical Examination of a Patient with Sū'-i Mizāj Qalb– General & Cardiovascular Assessment (1hr)

Demonstrate inspection , palpation, percussion , and auscultation to evaluate the nature of cardiac dysfunction.

Activity 2: Unani & Modern Correlation in Diagnosing Sū'-i Mizāj Qalb (1 hr)

Discuss the Unani concept of cardiac temperament imbalance, its manifestations, and integration with modern diagnostic tests (ECG, echocardiography, lipid profile), along with treatment strategies using Ilaj bil Ghiza (dietary modification), Ilaj bil Dawa (Arq Gawzaban, Dawa-ul-Misk, Kushta Marwareed), and conventional cardiac management.

Practical Training 13.2 Ḍu'f-i-Qalb

Total Learning Hours (2)

Activity 1: Clinical Examination of a Patient with Ḍu'f-i-Qalb (Cardiac Weakness) – General & Cardiovascular Assessment (1 hr)

Demonstrate inspection, palpation, percussion, and auscultation to assess cardiac function.

Activity 2: Unani & Modern Approach to Diagnosis and Management of Ḍu'f-i-Qalb (1 hr) Discuss clinical correlation with diagnostic tests (ECG, echocardiography, BNP levels) along with Unani Usool-e-Ilaj (Ilaj bil Ghiza – heart-strengthening foods, Ilaj bil Dawa – Iksir-e-Qalb, Dawa-ul-Misk, Arq Gawzaban) and modern treatment (ACE inhibitors, beta-blockers, diuretics) in a case-based discussion.
Practical Training 13.3 *Khafqān*
Total Learning Hours (2) Activity 1: Clinical Examination of a Patient with Khafqān (Palpitations) – General & Cardiovascular Assessment (1 hr) Demonstrate inspection, palpation, and blood pressure measurement to evaluate underlying causes like arrhythmias, anxiety, or structural heart disease. Activity 2: Systemic Evaluation & Unani Perspective in Khafqān (1 hr) Teach students neurological , and respiratory examination (signs of hypoxia), while integrating Unani concepts like Sue Mizaj Qalb (cardiac temperament imbalance) and its management with Ilaj bil Ghiza, Ilaj bil Dawa (herbs like Arq Gawzaban, Kushta Marwareed, Dawa-ul-Misk).
Practical Training 13.4 *Warm Ghilaafe qalb* (Pericarditis) and *Warm Azlate qalb* (Myocarditis)
Total Learning Hours (4) Activity 1: Clinical Examination of Waram Ghilaafe Qalb (Pericarditis) (1 hr) Demonstrate inspection (distress, pericardial friction rub positioning), palpation (pulsus paradoxus, pericardial knock), percussion (cardiac dullness assessment), and auscultation (pericardial friction rub, muffled heart sounds) to identify pericarditis. Activity 2: Clinical Examination of Warm Azlat-e-Qalb (Myocarditis) (1 hr) Teach students general examination for fever, tachycardia, and signs of heart failure, palpation for displaced apical impulse, and auscultation for S3 gallop, murmurs, and pericardial friction rub in cases of myocarditis. Activity 3: Differentiation & Diagnostic Workup of Pericarditis vs. Myocarditis (1 hr) Guide students in interpreting ECG changes (ST-elevation in pericarditis, arrhythmias in myocarditis), cardiac biomarkers (troponins, CK-MB), echocardiography, and inflammatory markers (CRP, ESR, viral serologies).

Activity 4: Unani & Conventional Management Approaches (1 hr) Discuss Unani Usool-e-Ilaj (Tanqiya-e-Mawad, Ilaj bil Ghiza, Ilaj bil Dawa with Iksir-e-Qalb, Arq Gawzaban, Dawa-ul-Misk), along with modern treatments (NSAIDs, corticosteroids, antivirals, supportive heart failure management) in a case-based session.
Practical Training 13.5 Rheumatic heart disease
Total Learning Hours (4) Activity 1: Drawing a Flowchart for the Clinical Diagnosis of Rheumatic Heart Disease (1 hr) Guide students in creating a structured flowchart covering history (preceding streptococcal infection), clinical criteria (Jones criteria), diagnostic workup (echocardiography, ASO titers, ECG), and classification of disease severity. Activity 2: Inspection & General Examination in Rheumatic Heart Disease (1 hr) Demonstrate inspection for signs of heart failure (cyanosis, clubbing, edema), joint involvement (arthritis), and skin manifestations (erythema marginatum, subcutaneous nodules) in affected patients. Activity 3: Cardiac Examination: Palpation & Auscultation (1 hr) Teach students to assess apical impulse displacement, thrills, and auscultate for murmurs characteristic of valvular involvement (mitral stenosis, aortic regurgitation, mitral regurgitation). Activity 4: Case-Based Discussion on Clinical Findings & Management (1 hr) Conduct a case discussion integrating history, examination, diagnostic tests, and treatment strategies Integrating Unani Usool-e-Ilaj (Principles of Treatment) with Clinical Management of Rheumatic.
Practical Training 13.6 *Ghashī* (Syncope)
Total Learning Hours (2) Activity 1: Clinical Examination of a Patient with Ghashī (Syncope) (1 hr) Demonstrate a systematic assessment including vital signs (BP, HR, orthostatic changes), cardiovascular (murmurs, arrhythmias, carotid bruits), and neurological examination (reflexes, focal deficits) to differentiate vasovagal, cardiac, and neurological causes of syncope.

Activity 2: Diagnostic Evaluation & Case-Based Discussion (1 hr) Teach students to interpret ECG (arrhythmias, conduction blocks), echocardiography (structural heart disease), tilt-table test (autonomic dysfunction), and laboratory tests (blood glucose, electrolytes, CBC), correlating findings with clinical scenarios for diagnosis and management.
Practical Training 13.7 Myocardial Infarction
Total Learning Hours (2) Activity 1: Clinical Examination of a Patient with Myocardial Infarction (MI) (1 hr) Demonstrate and practice inspection (distress, diaphoresis), palpation (pulse abnormalities, hypotension), auscultation (S4, murmurs of ischemic complications), and assessment of chest pain characteristics (location, radiation, intensity) to differentiate MI from other conditions. Activity 2: Diagnostic Evaluation & Case-Based Discussion of MI (1 hr) Teach students to interpret ECG changes (ST-elevation, T-wave inversion, Q waves), cardiac biomarkers (troponins, CK-MB), and imaging (echocardiography, angiography) while discussing emergency management protocols (MONA – Morphine, Oxygen, Nitrates, Aspirin).
Practical Training 13.8 Suqūṭ-i-Qalb (Heart Failure)
Total Learning ours (2) Activity 1: Clinical Examination of Suqūṭ-i-Qalb (Heart Failure) (1 hr) Demonstrate and allow students to practice inspection (cyanosis, edema, dyspnea), palpation (apical impulse displacement, hepatomegaly), percussion (cardiomegaly), and auscultation (S3 gallop, murmurs, lung crepitations) to assess heart failure severity. Activity 2: Discussion on Clinical Features, Complications, Lifestyle Modifications & Treatment (1 hr) Conduct a case-based discussion covering symptoms (fatigue, orthopnea, PND), complications (pulmonary edema, renal dysfunction), lifestyle changes (diet, fluid restriction, exercise), and Unani & modern treatment approaches (Ilaj bil Ghiza, Ilaj bil Dawa, diuretics, ACE inhibitors, beta-blockers).
Experiential Learning Activity
Experiential-Learning Learning 13.1: *Sū-i Mizāj Qalb*

Total Learning Hours (2) Activity 1: Clinical Examination of Sū-i Mizāj Qalb (1 hr) PG students will assess the patient by taking a detailed history, evaluating symptoms, and performing a cardiovascular examination, including pulse, heart sounds, and signs of systemic involvement. Activity 2: Treatment Demonstration & Management Plan (1 hr) Students will formulate and demonstrate a holistic treatment approach, integrating Unani and modern medicine, including dietary modifications, pharmacological therapy, and lifestyle interventions.
Experiential-Learning Learning 13.2: *Ḍu'f-i-Qalb*
Total Learning Hours (2) Activity 1: Clinical Examination of Ḍu'f-i-Qalb (Cardiac Weakness) (1 hr) PG students will assess patients through history-taking, vitals, cardiovascular examination, and auscultation to evaluate signs of heart failure or reduced cardiac output. Activity 2: Treatment Demonstration & Management Plan (1 hr) Students will formulate and demonstrate a treatment plan integrating Unani and modern approaches, including lifestyle modifications, pharmacological therapy (diuretics, ACE inhibitors, beta-blockers), and supportive care strategies.
Experiential-Learning Learning 13.3: *Khafqān*
Total Learning Hours (3) Activity 1: History Taking & Symptom Assessment (1 hr) PG students will evaluate patients with Khafqān (Palpitations) by recording history, identifying triggers (stress, anemia, arrhythmias), and assessing associated symptoms like dizziness or chest discomfort.

Activity 2: Clinical Examination & Auscultation (1 hr) Perform a detailed cardiovascular and systemic examination, including pulse assessment, blood pressure measurement, and heart auscultation to detect murmurs or irregular rhythms. Activity 3: ECG & Diagnostic Interpretation (1 hr) Analyze ECG findings, correlate with clinical symptoms, and discuss potential causes and management strategies under faculty supervision.
Experiential-Learning Learning 13.4: *Warm Ghilaafe qalb* (Pericarditis) and *Warm Azlate qalb* (Myocarditis)
Total Learning Hours (4) Activity 1: Clinical Examination (1 hr) Assess history, auscultate heart sounds, and evaluate for pericardial rub or myocarditis signs. Activity 2: ECG & Diagnostics (1 hr) Interpret ECG, echocardiography, and biomarkers to differentiate pericarditis and myocarditis. Activity 3: Case Discussion (1 hr) Compare conditions, discuss complications, and review Unani and modern treatment approaches. Activity 4: Treatment Plan (1 hr) Formulate management strategies, including Unani and pharmacological therapies, with faculty feedback.
Experiential-Learning Learning 13.5: Rheumatic heart disease
Total Learning Hours (6) Activity 1: Review & Appraisal of Treatment Guidelines (2 hrs) PG students will analyze current Rheumatic Heart Disease (RHD) treatment guidelines from sources like the WHO, AHA, and Unani perspectives, comparing pharmacological and preventive strategies.

Activity 2: Comprehensive Clinical Examination (2 hrs) Students will conduct a detailed examination of an RHD patient, including history-taking (previous rheumatic fever episodes), auscultation for valvular murmurs, and systemic assessment for heart failure or complications. Activity 3: Formulating a Treatment & Management Plan (2 hrs) PG students will devise a holistic treatment approach integrating Unani and modern medicine, including penicillin prophylaxis, anti-inflammatory therapy, heart failure management, and surgical considerations, followed by faculty feedback.
Experiential-Learning Learning 13.6: Ghashī (Syncope)
Total Learning Hours (3) Activity 1: Comprehensive Clinical Examination (1 hr) PG students will assess a patient with Ghashī (Syncope) by taking a detailed history (triggers, duration, prodromal symptoms) and performing a physical examination, including vital signs, orthostatic blood pressure measurement, and cardiovascular and neurological assessment. Activity 2: ECG & Diagnostic Workup Interpretation (1 hr) Students will analyze ECG for arrhythmias, conduct echocardiography if needed, and review laboratory tests (electrolytes, blood glucose, hemoglobin) to determine the underlying cause of syncope (vasovagal, cardiac, orthostatic, or neurological). Activity 3: Formulating a Treatment & Management Plan (1 hr) PG students will develop a treatment strategy integrating Unani and modern approaches, including lifestyle modifications, hydration, pharmacological treatment (if needed), and preventive measures, followed by expert discussion.
Experiential-Learning Learning 13.7: Myocardial Infarction
Total Learning Hours (3) Activity 1: Clinical Examination & Symptom Assessment (1 hr) PG students will evaluate a myocardial infarction (MI) patient by taking a detailed history (chest pain characteristics, risk factors) and performing a systemic examination, including vitals, cardiovascular assessment, and signs of complications.

Activity 2: ECG & Biomarker Interpretation (1 hr) Students will analyze ECG changes (ST-elevation, T-wave inversions) and cardiac biomarkers (troponins, CK-MB) to confirm MI diagnosis and classify it as STEMI or NSTEMI. Activity 3: Treatment Planning & Emergency Management (1 hr) PG students will formulate an immediate and long-term management plan, including MONA protocol (Morphine, Oxygen, Nitrates, Aspirin), antiplatelets, reperfusion therapy (thrombolysis or PCI), and secondary prevention strategies, followed by expert discussion.	
Experiential-Learning Learning 13.8: Suqūṭ-i-Qalb (Heart Failure)	
Total Learning hours (3) Activity 1: Comprehensive Clinical Examination (1 hr) PG students will assess a patient with Suqūṭ-i-Qalb (Heart Failure) by taking a detailed history, evaluating symptoms , and performing a systemic examination including jugular venous pressure (JVP), auscultation, and peripheral perfusion. Activity 2: Diagnostic Interpretation & Case Discussion (1 hr) Students will analyze ECG, echocardiography, and laboratory findings (BNP, troponins, renal function) to classify heart failure (systolic vs. diastolic) and discuss differential diagnoses. Activity 3: Formulating a Treatment Plan (1 hr) PG students will devise a management plan including Unani and modern approaches, incorporating Unani and modern pharmacological treatment (diuretics, beta-blockers, ACE inhibitors), lifestyle modifications, and supportive care, followed by expert feedback.	
Modular Assessment	
Assessment	**Hour**

Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per table 6 C. Case-based assessment: (50 marks) Each student will be given a case or problem situation to evaluate the patient of Ghashī (syncope) and formulate a treatment/ management plan. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or Direct observation of Procedure or Observed Structured Clinical Examination (OSCE) for any of the disease/ condition covered in this module. (50 Marks) • History Taking / Communication Skills (15 Marks) • Clinical Examination / Procedural Skills (15 Marks) • Clinical Reasoning / Interpretation (10 Marks) • Decision-Making / Management Plan (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any of the experiential as portfolios/reflections/presentations can be taken as an assessment. (25 Marks)	4
Module 14 : Amrāz-i-Qalb wa Daurāne Khūn-02 (Diseases of Cardiovascular system-02) امراض قلب ودوران خون ۲	

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Evaluate various cardiac diseases mentioned in Unani classical literature and conventional system of medicine.

2. Demonstrate and interpret the clinical examination and investigations of various cardiac diseases.

3. Appraise the treatment guidelines for various cardiac diseases.

Unit 1 Maraz-i-Qalb 'Azli, Zaghṭuddam Qawī, Suqūṭ-i Daurān-i-Khūn Saṭḥī (Cardiomyopathy, Hypertension, Peripheral Circulatory Failure) مرض قلب عضلی، ضغط الدم قوی، سقوط دوران خون سطحی

14.1.1. Amarāz Aḍalāt Qalbi (Cardiomyopathy) امراض عضلات قلبی

14.1.2. Zaghṭuddam Qawī (Hypertension) ضغط الدم قوی

14.1.3. Suqūṭ-i Daurān-i-Khūn Saṭḥī (Peripheral Circulatory Failure) سقوط دوران خون سطحی

References: 1,2,4,5,10,11,27,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO8	Discuss Cardiomyopathy its classification Classification (Dilated, Hypertrophic, Restrictive), Etiology, Pathophysiology, Clinical Features. Diagnosis, Treatment and Complications.	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO4,CO6, CO8	Discuss *Zaghṭuddam Qawī* (Hypertension), its Classification, grading according to various guidelines (AHA/ ESH/ JNC 8), Etiology, Risk factors, Pathophysiology, Complications, and Management. Compare Unani concept of hypertension with the conventional system of medicine	1	Lecture	CC	Knows-how	DIS,L,L&PPT
CO1,CO2, CO4,CO8	Describe *Suqūṭ-i Daurān-i-Khūn Saṭḥī* (Shock), Classification, Pathophysiology, Clinical Presentation, Diagnosis, and Management.	1	Lecture	CC	Knows-how	L,L&PPT

CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical examination of Cardiomyopathy	2	Practical14.1	PSY-GUD	Shows-how	D,L_VC,D-BED
CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical diagnosis of hypertension by history taking and physical examination of the patient.	2	Practical14.2	PSY-GUD	Shows-how	D,PT,D-BED
CO1,CO2, CO4,CO6, CO8	Demonstrate Physical examination, along with medical history and clinical investigations in establishing the diagnosis and directing the management of shock	2	Practical14.3	PSY-GUD	Shows-how	D-BED,D,L_VC
CO1,CO2, CO4,CO6, CO8	Conduct clinical examination of patients of Cardiomyopathy and formulate a line of treatment.	3	Experiential-Learning14.1	PSY-GUD	Shows-how	D-BED,PER,D
CO1,CO2, CO4,CO6, CO8	Conduct a clinical examination of a Hypertension patient and formulate a line of treatment.	3	Experiential-Learning14.2	PSY-ADT	Does	D-BED,PER,D
CO1,CO2, CO4,CO6, CO8	Conduct a clinical examination of a patient of Shock and formulate a line of treatment.	3	Experiential-Learning14.3	PSY-ADT	Does	D-BED,PER,D
Unit 2 Ikhtilāj-i-Qalb, Khilqī Amrāz-i-Qalb, Tawaqqaf al-Qalb, Istisqa al-Qalb (Arrhythmias, Congenital Heart diseases, Cardiac Arrest, Cardiac tamponade) اختلاج قلب، خلقی امراض قلب، توقف القلب، استسقاء القلب						

14.2.1. Arrhythmias عدم انتظام ضربات قلب

14.2.2. Khilqī Amrāz Qalb (Congenital Heart Diseases) خلقی امراض قلب

14.2.3. Cardiac Arrest توقف قلب

14.2.4. Pericardial Effusion and Cardiac tamponade استسقاء قلب

References: 5,9,10,11,14,15,16,17,23,24,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO8	Discuss cardiac Arrhythmias, Mechanism, Classification, Diagnosis, specific ECG changes, and Treatment (Pharmacological, Non-pharmacological)	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO4,CO6, CO8	Describe *Khilqī Amrāz Qalb* (congenital heart disease), Cyanotic vs Acyanotic, Clinical features, Diagnosis and Treatment.	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO4,CO6, CO8	Discuss Cardiac Arrest, Etiology, Pathophysiology, Recognition of Cardiac arrest, Shockable and non-shockable rhythms and Immediate management (BLS & ALS)	1	Lecture	CC	Knows-how	DIS,L&PPT ,L
CO1,CO2, CO4,CO6, CO8	Describe Pericardial Effusion and classify exudative, transudative, hemorrhagic, and chylous Pericardial Effusion and Explain Pathophysiology and Clinical Features Diagnosis and Treatment and also explain Cardiac Tamponade	1	Lecture	CC	Knows-how	L&GD,DIS,L&PPT ,L
CO1,CO2, CO4,CO6, CO8	Demonstrate specific ECG changes and their interpretation in different types of Cardiac Arrhythmias.	2	Practical14.4	PSY-GUD	Shows-how	D,D-BED,PT,L_VC

CO1,CO2, CO4,CO6, CO8	Demonstrate CPR and Automated External Defibrillation (AED) on manikin	4	Practical14.5	PSY-GUD	Shows-how	D-M,EDU
CO1,CO2, CO4,CO6, CO8	Demonstrate pericardiocentesis and discuss the indications and contraindications, steps of the procedure.	2	Practical14.6	PSY-GUD	Shows-how	D,JC,EDU
CO1,CO2, CO4,CO6, CO8	Interpret ECG changes in different types of Cardiac Arrhythmias.	3	Experiential-Learning14.4	CAP	Does	PER,D-BED
CO1,CO2, CO4,CO6, CO8	Conduct CPR and Automated External Defibrillation (AED) on manikin	4	Experiential-Learning14.5	PSY-ADT	Does	D-M,EDU
CO1,CO2, CO4,CO6, CO8	Prepare a video to show a procedure of pericardiocentesis	3	Experiential-Learning14.6	CS	Does	EDU

Unit 3 Waram Udhun al-Qalb, Ḍagḥt al-Qalb, Taqashshur al-Qalb, Qadhf al-Qalb, Iḥtiwā' al-Rụtūba 'ala'l Qalb, Jadhb al-Qalb ورم اذن القلب، ضغط القلب، تقشر القلب، قذف القلب، احتواء الرطوبة على القلب، جذب القلب

14.3.1. Waram Udhun al-Qalb ورم اذن القلب

14.3.2. Ḍagḥt al-Qalb ضغط القلب

14.3.3. Taqashshur al-Qalb تقشر قلب

14.3.4. Qadhf al-Qalb قذف القلب

14.3.5. Iḥtiwā' al-Ruṭūba 'ala'lQalb احتواءالرطوبۃعلی القلب

14.3.6. Jadhb al-Qalb جذب القلب

References: 1,2,4,7,10,12,19,21,27,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO8	Discuss *Waram Udhun al-Qalb* and *Ḍagḥt al-Qalb* its causes and treatment	1	Lecture	CC	Knows-how	L,L&PPT ,DIS
CO1,CO2, CO4,CO6, CO8	Discuss *Taqashshur al-Qalb* and *Qadhf al-Qalb, Iḥtiwā*, its causes, and treatment.	1	Lecture	CC	Knows-how	L&PPT ,DIS,L
CO1,CO2, CO4,CO6, CO8	Discuss *Iḥtiwā' al-Ruṭūba 'ala'l*, *Jadhb al-Qalb* its causes and treatment.	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO4,CO6, CO8	Demonstrate preparation of an assignment to co-relate *Waram Udhun al-Qalb*, *Ḍagḥt al-Qalb*, *Taqashshur al-Qalb*, *Qadhf al-Qalb, Iḥtiwā, Iḥtiwā' al-Ruṭūba 'ala'l, Jadhb al-Qalb* with the diseases mentioned in the conventional system of medicine.	6	Practical14.7	PSY-GUD	Shows-how	D,SY,PER
CO1,CO2, CO4,CO6, CO8	Prepare an assignment to co-relate Waram Udhun al-Qalb, Ḍagḥt al-Qalb, Taqashshur al-Qalb, Qadhf al-Qalb, Iḥtiwā, Iḥtiwā' al-Ruṭūba 'ala'l, Jadhb al-Qalb with the diseases mentioned in conventional system of medicine.	7	Experiential-Learning14.7	CS	Does	BS,W

Practical Training Activity
Practical Training 14.1 Cardiomyopathy
Total Learning Hours (2) Activity 1: Systematic Clinical Examination of Cardiomyopathy (1 hr) Demonstrate and practice inspection (signs of heart failure, cyanosis, edema), palpation (apical impulse displacement, thrills), percussion (cardiac enlargement), and auscultation (S3, S4, murmurs in dilated, hypertrophic, and restrictive cardiomyopathy). Activity 2: Correlation of Clinical Findings with Diagnostic Workup (1 hr) Teach students to interpret ECG changes, echocardiographic findings, and laboratory tests (BNP, cardiac enzymes, genetic markers) in different types of cardiomyopathy through case-based discussions.
Practical Training 14.2 Diagnosis of Hypertension
Total Learning Hours (2) Activity 1: Drawing a Flowchart for Clinical Diagnosis of Hypertension (1 hr) Guide students in creating a structured flowchart covering risk factors, blood pressure measurement criteria, classification (normal, elevated, stage 1 & 2 hypertension), diagnostic workup (labs, ECG, fundoscopy, 2 D echo), and secondary hypertension screening. Activity 2: Demonstrating the Physical Examination of a Hypertensive Patient (1 hr) Teach and demonstrate students the correct technique for accurate BP measurement (proper cuff size, positioning), cardiovascular examination (pulse, JVP, heart sounds), fundoscopic examination (hypertensive retinopathy), and systemic assessment (renal, neurological signs).
Practical Training 14.3 Diagnosis and Management of Shock
Total Learning Hours (2)

Activity 1: Clinical Examination & History-Taking in Shock (1 hr) Demonstrate systematic assessment of vital signs (BP, HR, RR), perfusion status (capillary refill, skin temperature, mental status), and targeted history (trauma, infection, cardiac events) to differentiate types of shock (hypovolemic, cardiogenic, distributive, obstructive). Activity 2: Diagnostic Workup & Management Approach in Shock (1 hr) Teach students to interpret laboratory investigations (lactate, ABG, CBC, electrolytes), imaging (CXR, echocardiography), and hemodynamic monitoring, correlating findings with clinical management strategies like fluid resuscitation, vasopressors, and definitive interventions.
Practical Training 14.4 ECG changes in cardiac Arrhythmias.
Total Learning Hours (2) Activity 1: Recognition & Interpretation of ECG in Common Arrhythmias (1 hr) Demonstrate ECG changes in bradyarrhythmias (sinus bradycardia, AV blocks) and tachyarrhythmias (AF, SVT, VT, VF) using real or simulated ECG tracings, followed by student-led interpretation. Activity 2: Hands-on ECG Analysis & Case-Based Discussion (1 hr) Provide students with ECG strips of various arrhythmias, guiding them in systematic analysis (rate, rhythm, P-wave, QRS, PR interval) and correlating findings with clinical scenarios for diagnosis and management planning.
Practical Training 14.5 CPR and Automated External Defibrillation (AED)
Total Learning Hours (4) Activity 1: Basic Life Support (BLS) & Chest Compressions Technique (1 hr) Demonstrate and allow students to practice proper hand placement, compression depth, rate, and recoil on a manikin, ensuring high-quality CPR. Activity 2: Rescue Breathing & Airway Management (1hr) Teach students the correct technique for opening the airway, giving effective rescue breaths, and using a bag-valve-mask (BVM) device on a manikin. Activity 3: Automated External Defibrillator (AED) Usage (1 hr) Demonstrate the proper placement of AED pads, analyzing heart rhythms, and delivering shocks, followed by student hands-on practice with simulated scenarios.

Activity 4: Team-Based CPR & AED Response in Emergency Scenarios (1 hr) Conduct simulated cardiac arrest cases where students take turns performing CPR, using an AED, and coordinating as a resuscitation team.
Practical Training 14.6 Pericardiocentesis
Total Learning Hours (2) Activity 1: Designing a Flowchart for Indications & Equipment of Pericardiocentesis (1 hr) Guide students in identifying and organizing key indications (cardiac tamponade, pericardial effusion), contraindications, and required equipment (needle, catheter, ultrasound, ECG monitoring) into a structured flowchart. Activity 2: Creating a Stepwise Flowchart for Pericardiocentesis Procedure (1 hr) Teach students to illustrate the pre-procedure preparation, anatomical approach, needle insertion technique, fluid aspiration, and post-procedure monitoring, ensuring clarity and accuracy in the flowchart.
Practical Training 14.7 Waram Udhun al-Qalb, *Ḍagḥt al-Qalb, Taqashshur al-Qalb, Qadhf al-Qalb, Iḥtiwā, Iḥtiwā' al-Ruṭūba 'ala'l, Jadhb al-Qalb*
Total Learning Hours (6) Activity 1: Literature Review & Concept Mapping (1 hr) Guide students in analyzing Unani descriptions of Waram Udhun al-Qalb, Ḍagḥt al-Qalb, Taqashshur al-Qalb, Qadhf al-Qalb, Iḥtiwā, and Iḥtiwā' al-Ruṭūba 'ala'l Jadhb al-Qalb, creating a concept map to correlate with modern cardiovascular diseases. Activity 2: Identification of Equivalent Conditions in Conventional Medicine (1 hr) Teach students to compare Unani terminologies with conventional diagnoses like endocarditis, hypertension, pericarditis, heart failure, cardiac tamponade, and myocardial contractility disorders through guided research. Activity 3: Structuring an Evidence-Based Assignment (1 hr) Demonstrate how to outline an assignment, including historical perspectives, pathophysiology, clinical features, diagnostic approaches, and treatment correlations between Unani and modern medicine.

Activity 4: Critical Analysis & Application of Unani Treatment Principles (1 hr) Train students to critically evaluate Unani treatment modalities (Ilaj bil Ghiza, Ilaj bil Dawa, Ilaj bil Tadbeer) and discuss their relevance to modern cardiovascular management. Activity 5: Presentation & Peer Review of Assignments (1 hr) Students present their assignments, receive feedback, and engage in discussions to refine their understanding and approach. Activity 6: Finalization & Documentation of the Assignment (1 hr) Guide students in integrating feedback, referencing Unani and conventional sources, and formatting the assignment for academic submission.
Experiential Learning Activity
Experiential-Learning Learning 14.1: Cardiomyopathy
Total Learning Hours (3) Activity 1: Clinical Examination & Diagnostic Assessment (1 hr) PG students will perform a detailed clinical examination of a cardiomyopathy patient, including history-taking, cardiac auscultation, and systemic evaluation to identify signs of heart failure or structural abnormalities. Activity 2: ECG, Echocardiography & Case Discussion (1 hr) Students will interpret diagnostic tests such as ECG and echocardiography to classify the type of cardiomyopathy (dilated, hypertrophic, or restrictive) and discuss differential diagnoses. Activity 3: Formulating a Treatment Plan (1 hr) PG students will develop a management strategy including pharmacological (beta-blockers, ACE inhibitors), non-pharmacological.
Experiential-Learning Learning 14.2: Hypertension
Total Learning Hours (3)

Activity 1: Comprehensive Clinical Examination (1 hr) PG students will assess a patient with hypertension, recording history, measuring blood pressure accurately, and performing a systemic examination to identify target organ damage. Activity 2: Risk Assessment & Case Discussion (1 hr) Students will evaluate cardiovascular risk factors, classify hypertension severity, and discuss differential diagnoses and associated complications with faculty. Activity 3: Treatment Planning & Lifestyle Modification Counseling (1 hr) PG students will formulate a personalized treatment plan, including Unani and modern pharmacological therapy, dietary changes, and lifestyle modifications, followed by expert feedback.
Experiential-Learning Learning 14.3: Shock
Total Learning Hours (3) Activity 1: Systematic Clinical Examination (1 hr) PG students will assess a simulated or real patient in shock, performing a structured examination including vitals, perfusion status, and systemic evaluation to determine the type of shock. Activity 2: Shock Classification & Case Discussion (1 hr) Students will categorize the shock type (hypovolemic, cardiogenic, distributive, or obstructive) based on clinical findings and discuss differential diagnoses with faculty. Activity 3: Treatment Planning & Management Strategy (1 hr) PG students will formulate an appropriate treatment plan, including fluid resuscitation, vasopressors, inotropes, and definitive management, followed by faculty feedback.
Experiential-Learning Learning 14.4: ECG changes in Cardiac Arrhythmias.
Total Learning Hours (3)

Activity 1: ECG Pattern Recognition Workshop (1 hr) PG students will analyze ECG tracings of various cardiac arrhythmias (e.g., atrial fibrillation, ventricular tachycardia, heart blocks) and identify characteristic waveforms. Activity 2: Case-Based ECG Interpretation (1 hr) Students will interpret real or simulated ECGs, correlate findings with clinical symptoms, and discuss appropriate management strategies for different arrhythmias. Activity 3: Interactive Quiz & Peer Discussion (1 hr)) A structured quiz with ECG case scenarios will be conducted, followed by peer discussions to reinforce learning and clarify doubts under faculty guidance.
Experiential-Learning Learning 14.5: CPR and Automated External Defibrillation (AED)
Total Learning Hours (4) Activity 1: Step-by-Step CPR Training (1 hr) PG students will practice high-quality chest compressions and rescue breaths on a manikin, focusing on correct hand placement, compression depth, and ventilation techniques. Activity 2: AED Operation & Hands-On Practice (1hr) Students will learn to operate an Automated External Defibrillator (AED), including pad placement, rhythm analysis, and delivering a shock on a training manikin. Activity 3: Simulated Cardiac Arrest Scenario (1 hr) PG students will participate in a team-based simulation, integrating CPR and AED use in a real-time emergency response scenario. Activity 4: Performance Evaluation & Feedback (1 hr) Faculty will assess students' technique, provide feedback, and discuss key improvements to enhance CPR and AED proficiency.
Experiential-Learning Learning 14.6: Pericardiocentesis
Total Learning Hours (3)

Activity 1: Procedure Demonstration & Filming (1 hr) PG students will perform a simulated pericardiocentesis on a mannequin or anatomical model while recording step-by-step instructions, ensuring clarity and accuracy. Activity 2: Editing & Voiceover Narration (1 hr) Students will edit the recorded video, add voiceover explanations, highlight key anatomical landmarks, and include safety precautions for a comprehensive instructional guide. Activity 3: Peer Review & Finalization (1 hr) The video will be presented to faculty and peers for feedback, necessary modifications will be made, and the final version will be prepared for educational use.
Experiential-Learning Learning 14.7: Waram Udhun al-Qalb, Ḍagḥṭ al-Qalb, Taqashshur al-Qalb, Qadhf al-Qalb, Iḥtiwā, Iḥtiwā’ al-Rụtūba ‘ala’l, Jadhb al-Qalb
Total Learning Hours (7) Activity 1: Literature Review & Data Collection)1 hr) PG students will explore Unani classical texts and modern medical literature to gather information on Unani cardiac conditions and their equivalents in conventional medicine. Activity 2: Comparative Pathophysiology Workshop (1 hr) Students will analyze the pathophysiology of Unani cardiac terms and correlate them with diseases like myocarditis, hypertension, pericarditis, arrhythmias, and heart failure. Activity 3: Clinical Case Analysis (1 hr) G students will review and discuss clinical cases to identify symptoms aligning with Unani cardiac conditions and compare them with conventional diagnoses. Activity 4: Group Discussion & Expert Consultation (1 hr) Students will engage in discussions with Unani and modern medicine experts to validate correlations, clarify concepts, and refine their understanding.

Activity 5: Assignment Structuring & Drafting (1 hr)

PG students will organize their findings into a structured format, clearly defining each Unani cardiac condition, its symptoms, and its corresponding modern medical disease.

Activity 6: Presentation & Peer Review (1 hr)

Students will present their draft assignment to peers and faculty for constructive feedback, discussion, and refinement.

Activity 7: Final Submission & Reflection (1 hr)

PG students will incorporate feedback, finalize the assignment, and reflect on how Unani and modern medicine can complement each other in cardiac disease management.

Modular Assessment

Assessment	**Hour**
Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per table 6 C. Practical Exam: (50 marks) Formative assessment is based on the Experiential Learning in Unit-2—Interpretation of ECG changes in different types of Cardiac Arrhythmias. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or Direct observation of Procedure or Observed Structured Clinical Examination (OSCE) can be taken as an assessment. (50 Marks) • History Taking / Communication Skills (15 Marks)	4

- Clinical Examination / Procedural Skills (15 Marks)
- Clinical Reasoning / Interpretation (10 Marks)
- Decision-Making / Management Plan (10 Marks)

Or

Any practical in converted form can be taken for assessment. (25 Marks)

and

Any of the experiential as portfolios/ reflections/ presentations can be taken as an assessment. (25 Marks)

Semester No : 6

Module 15 : Amrāz-i-Shiryān wa, Awrida wa Lymphāwiya (Diseases of Arteries, Veins and Disorders of Lymphatic system) امراض شریان،اوردہ ولمفاویہ

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Evaluate various Arterial, Venous and Lymphatic diseases mentioned in Unani classical literature and conventional system of medicine
2. Demonstrate and interpret the clinical examination and investigations of various vascular diseases.
3. Appraise the treatment guidelines for various vascular diseases.

Unit 1 Amrāz-i-Sharāyīn (Diseases of Arteries) امراض شرائین

15.1.1. Taṣallub al-Sharāyīn (Arteriosclerosis/ Atherosclerosis) تصلب شرائین

15.1.2. Anūrasmā Awrṭā (Aortic aneurysm) انورسما اورطیٰ

15.1.3. Aortic dissection ڈسیکشن اورطی

15.1.4. Jānibi Sharyāni Amrāz (Peripheral arterial diseases) جانبی شریانی امراض

References: 4,5,8,10,14,16,17,27,28,29,30

3A	3B	3C	3D	3E	3F	3G

CO1,CO2, CO4,CO6, CO8	Discuss *Tasallub al-Shara'in* (Arteriosclerosis//Atherosclerosis) its causes epidemiology, pathophysiology, complications and diagnosis Prevention and Management. of Atherosclerosis	1	Lecture	CC	Knows-how	L,L&PPT ,DIS
CO1,CO2, CO4,CO6, CO8	Discuss Aortic aneurysm and Aortic dissection and differentiate Aortic aneurysm from Aortic dissection	1	Lecture	CC	Knows-how	L&PPT ,DIS,L
CO1,CO2, CO4,CO6, CO8	Discuss Peripheral arterial disease, its pathophysiology, differential diagnosis, prognosis, complications and management	1	Lecture	CC	Knows-how	L&PPT ,DIS,L
CO1,CO2, CO4,CO6, CO8	Discuss Burger's disease (thromboangiitis obliterans (TAO)) and Raynaud's disease and their pathophysiology, differential diagnosis, complications and management	1	Lecture	CC	Knows-how	L,DIS,L&PPT
CO1,CO2, CO4,CO6, CO8	Demonstrate an ability to assess, critique, and synthesize the Unani literature and apply it to patient care in the case of Tasallub al-Shara'in.	4	Practical15.1	PSY-GUD	Shows-how	D-BED,D,SY
CO1,CO2, CO4,CO6, CO8	Demonstrate a detailed history taking, physical examination, and measurement of the Arterial brachial index (ABI) in patients of Peripheral Arterial Disease	2	Practical15.2	PSY-GUD	Shows-how	D-BED,EDU,PER
CO1,CO2, CO4,CO6, CO8	Demonstrate history taking, physical examination for diagnosis and differential diagnosis between Buerger's disease and Raynaud's disease.	2	Practical15.3	PSY-GUD	Shows-how	D-BED,D

CO1,CO2, CO4,CO6, CO8	Analyze the classical literature of Unani Medicine to correlate the Unani concept of *Tasalube sharayeen* in the context of *Sudad*.	4	Experiential-Learning15.1	CS	Does	LS,PER,W
CO1,CO2, CO4,CO6, CO8	Conduct a literature survey on the concept of Peripheral arterial disease in Unani medicine and demonstrate the interpretation of required diagnostic tests to confirm the diagnosis and formulate a treatment plan.	3	Experiential-Learning15.2	CS	Does	W,JC,LS,SDL
CO1,CO2, CO4,CO6, CO8	Evaluation of paeithes with Buerger's disease and Raynaud's disease, and interpretation of required diagnostic tests to confirm the diagnosis and formulate a treatment plan.	3	Experiential-Learning15.3	PSY-ADT	Shows-how	SY,D,PER,CD

Unit 2 Amrāz-i-Awrida (Diseases of Veins) امراض اوردۃ

15.2.1. Iltihāb al-Warīd Khathārī (Thrombophlebitis) التہاب الوریدخثاری

15.2.2.Khathār al-Warīd 'Amīq (Deep vein thrombosis) خثارالوریدالعمیق

15.2.3. Insdād al-Ri'a (Pulmonary Embolism) انسدادالریہ

References: 4,5,8,10,14,16,17,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO8	Discuss Thrombophlebitis, its etiology, pathophysiology, management, differential diagnosis, prognosis, and complications	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO4,CO6, CO8	Discuss the risk factors for developing Deep vein thrombosis, its etiology, pathophysiology, management, differential diagnosis, prognosis, and complications	1	Lecture	CC	Knows-how	L,DIS,L&PPT

CO1,CO2, CO4,CO6, CO8	Discuss the risk factors for developing Pulmonary Embolism, its etiology, pathophysiology, management, differential diagnosis, prognosis, and complications	1	Lecture	CC	Knows-how	DIS,L&GD,L&PPT ,L,LRI
CO1,CO2, CO4,CO6, CO8	Demonstrate Physical examination, along with medical history and clinical investigations in establishing the diagnosis and directing the management of Thrombophlebitis	2	Practical15. 4	PSY-GUD	Shows-how	D-BED,D
CO1,CO2, CO4,CO6, CO8	Demonstrate the examination findings and evaluation process of a patient with suspected case of deep vein thrombosis, including indicated laboratory analysis.	2	Practical15. 5	PSY-GUD	Shows-how	PER,D-BED,L_VC,D
CO1,CO2, CO4,CO6, CO8	Demonstrate Physical examination, along with medical history and clinical investigations in establishing the diagnosis and directing the management of Pulmonary Embolism	2	Practical15. 6	PSY-GUD	Shows-how	EDU,D,D-BED,SY
CO1,CO2, CO4,CO6, CO8	Devise a holistic approach to the treatment of Thrombophlebitis and formulate a personlized treatment plan	3	Experiential-Learning15. 4	CS	Shows-how	JC,PER,W,PBL
CO1,CO2, CO4,CO6, CO8	Formulate personalized treatment strategies for a patient with deep vein thrombosis, including preventative measures.	3	Experiential-Learning15. 5	CS	Does	SIM,PSM,W,CBL
CO1,CO2, CO4,CO6, CO8	Formulate treatment strategies based on the principles of treatment in Unani Medicine for Pulmonary embolism, including preventative measures.	3	Experiential-Learning15. 6	CS	Shows-how	W,JC,PER,PBL

Unit 3 Amrāz-i-Lymphāwiya (Diseases of Lymphatic system) امراض لمفاویہ

15.3.1. Tahabbuj Sayyāla ‘Uqda (Lymphoedema) تہبج سیالہ عقدہ

15.3.2. Amrāz Sayyāla ‘Uqda (Lymphadenopathy) امراض سیالہ عقدہ

References: 4,5,8,10,14,15,16,17,27,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO8	Describe the pathophysiology, classification, staging, management, differential diagnosis, and complications of lymphoedemas.	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO4,CO6, CO8	Describe the pathophysiology, classification, staging, management, differential diagnosis, prognosis, and complications of Lymphadenopathy	2	Lecture	CC	Knows-how	L&PPT ,L
CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical examination of a patient with lymphoedema and differentiate it from similar conditions	2	Practical15.7	PSY-GUD	Shows-how	D,EDU,D-BED
CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical examination of a patient with Lymphadenopathy and differentiate it from similar conditions	4	Practical15.8	PSY-GUD	Shows-how	SIM,D-BED
CO1,CO2, CO4,CO6, CO8	Conduct clinical examination of patients with lymphoedemas	3	Experiential-Learning15.7	PSY-ADT	Does	D-BED,PER

CO1,CO2, CO4,CO6, CO8	Conduct clinical examination of patients with Lymphadenopathy	4	Experiential-Learning15.8	PSY-ADT	Does	D-BED,PER
Practical Training Activity						
Practical Training 15.1 Treatment of *Tasalube sharayeen*						
Total Learning Hours (4) Activity 1: Review and Interpretation of Unani Texts (1 hr) Guide students in analyzing classical Unani descriptions of pathophysiology, causes (Asbab), and Mizaj imbalances for on *Tasallub al-Shara'in* (Atherosclerosis) comparing them with modern medical perspectives. Activity 2: Application of Unani Principles in Clinical Assessment (1 hr) Demonstrate and practice clinical evaluation of Mizaj (temperament), Sual wa Jawab (history-taking), and examination of Siraat wa Nabz (pulse and vessel hardness) in patients with suspected atherosclerosis. Activity 3: Critique and Integration of Unani & Modern Management Approaches (1 hr) Teach students to assess Ilaj bil Tadbeer (regimenal therapy), Ilaj bil Ghiza (dietotherapy), and Ilaj bil Dawa (pharmacotherapy) in Unani literature, integrating it with evidence-based cardiovascular care. Activity 4: Case-Based Discussion & Treatment Planning (1 hr) Present real or simulated cases of *Tasallub al-Shara'in*, guiding students in formulating Unani-based treatment plans while incorporating modern investigations (lipid profile, imaging) and management strategies.						
Practical Training 15.2 Arterial brachial index (ABI) in patients of Peripheral Arterial Disease						
Total Learing Hours (2)						

Activity 1: Bedside demonstration (1 hr) The Mentor/ teacher will demonstrate how to take a detailed history, perform a physical examination, and present measurement of the Arterial brachial index (ABI) in OPD/IPD/Seminar Activity 2: Hands-on training and Summarization (1 hr) The students will be distributed in groups and asked to demonstrate the same. The teacher shall summarize the key concepts covered in the practical.
Practical Training 15.3 Diagnosis of Buerger's disease and Raynaud's disease
Total Learning Hours (2) Activity 1: Bedside demonstration (1 hr) The Mentor/ teacher will demonstrate how to take a detailed history, perform a physical examination, and differentiate between Buerger's disease and Raynaud's disease based on the clinical presentation in OPD/IPD. Activity 2: Hands-on training (1 hr) The students will be distributed in groups and asked to demonstrate the same. The teacher shall summarize the key concepts covered in the practical
Practical Training 15.4 Diagnosis and Management of Thrombophlebitis
Total Learning Hours (2) Activity 1: Bedside demonstration (1 Hr) The Mentor/ teacher will demonstrate how to take a detailed history, perform a physical examination, and clinical investigations in establishing the diagnosis and directing the management of Thrombophlebitis in OPD/IPD. Activity 2: Hands-on training (1 Hr) The students will be distributed in groups and asked to demonstrate the same. The teacher shall summarize the key concepts covered in the practical
Practical Training 15.5 Diagnosis of Deep vein thrombosis
Total Learning Hours (2)

Activity 1: Clinical Examination of Suspected Deep Vein Thrombosis (1 Hr) Demonstrate and practice inspection, palpation (Homan's sign, calf tenderness, unilateral leg swelling, warmth, erythema), and measurement of limb circumference, followed by student-led examinations. Activity 2: Evaluation and Diagnostic Workup of Deep Vein Thrombosis (1 Hr) Teach students to apply Wells' score for risk assessment, interpret D-dimer results, and review imaging modalities like Doppler ultrasound, along with case-based discussions on laboratory findings.
Practical Training 15.6 Diagnosis and Management of Pulmonary Embolism
Total Learning Hours (2) Activity1: Clinical Assessment & Physical Examination (1 hr) Demonstrate inspection, palpation, percussion, and auscultation to identify tachypnea, dyspnea, pleuritic chest pain, and signs of right heart strain in patients with Pulmonary Embolism. Activity 2: Medical History, Risk Stratification & Diagnostic Workup (1 Hr) Teach students to take a targeted history (risk factors, Wells' criteria, Geneva score) and interpret clinical investigations like D-dimer, arterial blood gas (ABG), ECG, chest X-ray, and CT pulmonary angiography through case-based discussions.
Practical Training 15.7 Diganosis of Lymphoedemas
Total Learning Hours (2) Activity 1: Inspection and Palpation in Lymphedema (1 Hr) Demonstrate assessment of limb swelling, pitting vs. non-pitting edema, skin changes, and Stemmer's sign, followed by hands-on practice by students. Activity 2: Grading and Differential Diagnosis of Lymphedema (1 Hr) Teach students to classify lymphedema stages, differentiate it from other causes of edema (e.g., venous insufficiency, lipedema), and correlate with clinical findings through case-based discussions.
Practical Training 15.8 Diagnosis of Lymphadenopathy

Total Learning Hours (4)

Activity 1: Bedside examination of Lymph Nodes (1 Hr)

Demonstrate systematic examination of lymph node regions (cervical, axillary, inguinal, etc.), assessing size, consistency, mobility, tenderness, followed by student hands-on practice.

Activity 2: Differentiating Benign vs. Malignant Lymphadenopathy (1 Hr)

Guide students to evaluate clinical features suggestive of infection, inflammation, or malignancy, using real or simulated patient cases for guided practice.

Activity 3: Systemic Examination for Associated Signs (1 Hr)

Demonstrate examination of skin, liver, spleen, and other systemic findings associated with lymphadenopathy (e.g., hepatosplenomegaly in lymphoma or signs of TB).

Activity 4: Case-Based Approach & Diagnostic Workup (1 Hr)

Present clinical cases, guide students in formulating differential diagnoses, and teach interpretation of investigations such as FNAC, biopsy, and blood tests.

Experiential Learning Activity

Experiential-Learning Learning 15.1: Exploration of *Tasalube sharayeen*

Total Learning Hours (4)

Activity 1: Literature Review & Data Collection (1 hr)

PG students will search classical Unani texts and modern medical literature to gather information on Tasalub-e-Sharayeen and its correlation with Sudad (vascular obstruction).

Activity 2: Comparative Analysis & Conceptual Discussion (1 hr)

Students will compare Unani descriptions of Tasalub-e-Sharayeen with modern pathophysiology of atherosclerosis and vascular blockages, followed by a group discussion.

Activity 3: Manuscript/ Report Writing Workshop (1 hr)

PG students will organize collected literature, draft key findings, and structure a report or manuscript for academic submission or presentation.

Activity 4: Presentation & Expert Review (1 hr) Students will present their findings, highlighting the Unani perspective and its relevance to modern medicine, with feedback from faculty and Unani scholars.
Experiential-Learning Learning 15.2: Peripheral Arterial Disease (PAD) in Unani medicine
Total Learning Housrs (3) Activity 1: Literature Review and Comparative Analysis (1 hr) Students will conduct a detailed literature survey using classical Unani texts and modern medical literature to explore the Unani perspective of symptoms, etiology, and pathophysiology of peripheral arterial disease. Activity 2: Diagnostic Interpretation Workshop (1 hr) Students will evaluate mock case files, including history, clinical signs, and diagnostic reports (e.g., Doppler ultrasound, Ankle-Brachial Index, lipid profile). They will interpret the reports and confirm the diagnosis of PAD. Activity 3: Unani Treatment Planning Session (1 hr) Based on the diagnosis, students will formulate a comprehensive treatment plan using Unani principles.
Experiential-Learning Learning 15.3: Management of Buerger's disese and Raynaud’s disease
Total Learning Hours (3) Activity 1: Presentation & Case Study Discussion (1 hr) Students will prepare and deliver a presentation on Buerger’s disease and Raynaud’s disease, covering etiology, pathophysiology, clinical features, and management, followed by case-based discussions. Activity 2: Diagnostic Test Interpretation Workshop (1 Hr) PG students will analyze real or simulated diagnostic test results (e.g., Doppler ultrasound, angiography, Allen’s test, capillaroscopy) and interpret findings to confirm Buerger’s and Raynaud’s disease.

Activity 3: Treatment Planning & Multidisciplinary Approach (1 Hr) Students will formulate individualized treatment plans, incorporating pharmacological (vasodilators, anticoagulants), lifestyle modifications (smoking cessation, temperature regulation), and surgical interventions, followed by faculty feedback.
Experiential-Learning Learning 15.4: Treatment of Thrombophlebitis
Total Learning Hours (3) Activity 1: Case-Based Treatment Planning (1 Hr) Students will analyze thrombophlebitis cases, devise treatment plans including anticoagulation, anti-inflammatory therapy, pain management, and infection control, and present their strategies for faculty feedback. Activity 2: Holistic Management & Lifestyle Modification Workshop (1 Hr) Students will discuss non-pharmacological approaches such as limb elevation, warm compresses, exercise, dietary modifications, and patient counseling for lifestyle changes to prevent recurrence. Activity 3: Interdisciplinary Case Discussion (1 Hr) Students will collaborate with experts from surgery, physiotherapy, and internal medicine to integrate medical, surgical, and rehabilitative approaches for comprehensive thrombophlebitis management.
Experiential-Learning Learning 15.5: Management of Deep vein thrombosis
Total Learning Hours (3) Activity 1: Case-Based Treatment Planning (1 Hr) PG students will evaluate real or simulated deep vein thrombosis (DVT) cases, formulate treatment plans including anticoagulation, thrombolysis, and supportive care, and present their strategies. Activity 2: Preventive Strategies & Risk Assessment Workshop (1 Hr) PG students will assess DVT risk factors using clinical tools (e.g., Wells score), discuss thromboprophylaxis methods (anticoagulants, compression stockings, early mobilization), and role-play patient counseling.

Activity 3: Emergency Management Simulation (1 Hr) PG students will participate in a simulated acute DVT scenario, practicing rapid assessment, initiation of anticoagulation therapy, monitoring for complications, and making decisions on outpatient vs. inpatient management.
Experiential-Learning Learning 15.6: Management of Pulmonary Embolism
Total Learning Hours (3) Activity 1: Case-Based Treatment Planning (1 Hr) Students will analyze real or simulated pulmonary embolism cases, formulate individualized treatment plans (anticoagulation, thrombolysis, supportive care), and present their approach for faculty feedback. Activity 2: Preventive Strategies & Risk Assessment Workshop (1 Hr) Students will assess risk factors using clinical scoring tools (e.g., Wells score), discuss thromboprophylaxis methods (anticoagulants, compression devices), and role-play patient counseling. Activity 3: Emergency Management Simulation (1 Hr) Students will participate in a simulated emergency scenario of an acute pulmonary embolism case, practicing rapid assessment, initiating oxygen therapy, anticoagulation, and managing hemodynamic instability in a team-based approach.
Experiential-Learning Learning 15.7: Diagnosis of Lymphoedemas
Total Learning Hours (3) Activity 1: Case-Based Clinical Examination (1 Hr) PG students will perform history-taking, physical examination, and differential diagnosis on a lymphoedema patient under faculty supervision. Activity 2: Diagnostic Tools Workshop (1 Hr) PG students will interpret imaging modalities like Doppler ultrasound and lymphoscintigraphy for lymphoedema assessment through hands-on practice and case discussions.

Activity 3: Compression Therapy & Patient Care (1 Hr) PG students will practice applying compression bandages, assess garment fitting, and counsel patients on self-care and infection prevention.	
Experiential-Learning Learning 15.8: Diagnosis of Lymphadenopathy	
Total Learning Hours (4) Activity 1: Clinical Examination (1 Hr) Students assess lymph node size, consistency, tenderness, correlating with Unani concepts Activity 2: Diagnostic Interpretation (1 Hr) Students analyze CBC, ESR, FNAC, biopsy, imaging, linking findings with Unani diagnostics. Activity 3: Case Discussion (1 Hr) Students discuss differential diagnoses (infectious, malignant, reactive). Activity 4: Holistic Treatment approach (1 Hr) Students integrate Unani and modern treatments.	
Modular Assessment	
Assessment	**Hour**
Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per table 6 C. Presentation: (50 marks) Formative assessment is based on the presentation during Experiential Learning in Unit-1 to co-relate the Unani concept of Tasalube sharayeen in context of Sudad, its causes, and treatment. • Content and Knowledge: 15 Marks • Structure and Organization: 10 Marks	4

- Delivery and Presentation Skills: 15 Marks
- Visual Aids and Design: 10 Marks

Or

Direct observation of Procedure or Observed Structured Clinical Examination (OSCE). (50 Marks)

- History Taking / Communication Skills (15 Marks)
- Clinical Examination / Procedural Skills (15 Marks)
- Clinical Reasoning / Interpretation (10 Marks)
- Decision-Making / Management Plan (10 Marks)

Or

Any practical in converted form can be taken for assessment. (25 Marks)

and

Any of the experiential as portfolios/ reflections/ presentations can be taken as an assessment. (25 Marks)

Module 16 : Amrāz-i-Tawlīd Dam wa Amrāz-i-Ṣamāmāt-i-Qalb (Diseases of Haemopoietic system and Valvular Heart Disease) امراض تولید دم وامراض صمامات قلب

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Evaluate various cardiac diseases mentioned in Unani classical literature and conventional system of medicine
2. Demonstrate and interpret the clinical examination and investigations of various cardiac diseases.
3. Appraise the treatment guidelines for various cardiac diseases.

Unit 1 Amrāz-i-Tawlīd Dam (Diseases of Haemopoietic system) امراض تولید دم

16.1.1. Faqr al-Dam wa Aqsām (Anemia and its types) فقر الدم واقسام

16.1.2. Abyāzuddam (Leukemia) ابیاض الدم

16.1.3. Thalassemia تھیلیسّیما

References: 4,5,8,10,14,16,17,21,27,28,29,30						
3A	**3B**	**3C**	**3D**	**3E**	**3F**	**3G**
CO1,CO2, CO4,CO6, CO8	Describe *Faqr al-Dam* (Anemia), its etiology, types, pathophysiology, evaluation, management, and complications	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO4,CO6, CO8	Describe *Abyazuddam* (Leukemia), its etiology, types, pathophysiology, evaluation, management, and complications	1	Lecture	CC	Knows-how	L&PPT ,L
CO1,CO2, CO4,CO6, CO8	Describe Thalasaemia, its etiology, types, pathophysiology, evaluation, management, and prognosis, and also discuss *Fasad Khoon* its causes and management	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO4,CO6, CO8	Demonstrate clinical examination, along with medical history and clinical investigations in establishing the diagnosis and directing the management of Anaemia.	2	Practical16.1	PSY-GUD	Shows-how	D,LRI,D-BED
CO1,CO2, CO4,CO6, CO8	Demonstrate clinical examination, along with medical history and clinical investigations in establishing the diagnosis and directing the management of *Abyazuddam* (Leukemia).	2	Practical16.2	PSY-GUD	Shows-how	D,LRI,D-BED
CO1,CO2, CO4,CO6, CO8	Demonstrate clinical examination, along with medical history and clinical investigations in establishing the diagnosis and directing the management of Thalassemia	2	Practical16.3	PSY-GUD	Shows-how	D,LRI,D-BED

CO1,CO2, CO4,CO6, CO8	Conduct clinical examination of patients with (Anemia) and Devise a holistic approach to the treatment	3	Experiential-Learning16.1	PSY-ADT	Does	D-BED,PER
CO1,CO2, CO4,CO6, CO8	Conduct clinical examination of patients with *Abyazuddam* (Leukemia) and devise a holistic approach to the treatment.	2	Experiential-Learning16.2	PSY-ADT	Does	D-BED,PER
CO1,CO2, CO4,CO6, CO8	Conduct clinical examination of patients with Thalasaemia and Devise a holistic approach to the treatment. Correlate the *Fasad khoon* with hemopoietic disorders described in the conventional system of medicine	3	Experiential-Learning16.3	PSY-ADT	Does	PER,LS,D-BED

Unit 2 Amrāz-i-Injamāduddam (Coaugulation Disorders) امراض انجماد الدم

16.2.1. Haemophilia ہیموفیلیا

16.2.2. Thrombocytopenia قلت الصفیحات الدمویہ

16.2.3. Disseminated Intravascular Coagulation (DIC) ڈِسے مِنیٹیڈ اِنٹراواسکولر کوگولیشن

References: 4,5,8,9,10,16,17,21,26,27,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO8	Describe Haemophilia, its etiology, types, pathophysiology, evaluation, management, and complications	1	Lecture	CC	Knows-how	L&PPT ,L
CO1,CO2, CO4,CO6, CO8	Describe Thrombocytopenia its etiology, pathophysiology, evaluation, management, and complications	1	Lecture	CC	Knows-how	L,L&PPT

CO1,CO2, CO4,CO6, CO8	Describe Disseminated intravascular Coagulation (DIC) its etiology, pathophysiology, evaluation, management, and complications	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO4,CO6, CO8	Demonstrate how to Establish the diagnosis of Haemophilia	2	Practical16.4	CS	Shows-how	D,IBL,LRI,SY
CO1,CO2, CO4,CO6, CO8	Demonstrate how to establish the diagnosis of Thrombocytopenia	2	Practical16.5	CS	Shows-how	IBL,LRI,D,SY
CO1,CO2, CO4,CO6, CO8	Demonstrate how to establish the diagnosis of Disseminated Intravascular Coagulation (DIC)	2	Practical16.6	CS	Shows-how	LRI,SY,D,IBL
CO1,CO2, CO4,CO6, CO8	Evaluate the symptomatology and findings of required investigations for the diagnosis of Haemophilia.	2	Experiential-Learning16.4	CS	Shows-how	LRI,PER,W
CO1,CO2, CO4,CO6, CO8	Analyze a case of thrombocytopenia and evaluate the interpretation of required diagnostic tests to confirm the diagnosis and formulate a treatment plan.	3	Experiential-Learning16.5	CS	Does	CBL,LRI,PER,W
CO1,CO2, CO4,CO6, CO8	Analyze a case of Disseminated Intravascular Coagulation (DIC) and evaluate the interpretations of required diagnostic tests to confirm the diagnosis and formulate a treatment plan.	3	Experiential-Learning16.6	CS	Does	LRI,D,PER,W,JC

Unit 3 Amrāz-i-Ṣamāmāt-i-Qalb (Valvular Heart Disease) امراض صمامات قلب

16.3.1. Amrāz Ṣamām-i-Tājī (Mitral Valve Diseases) امراض صمام تاجی

16.3.2. Amrāz Ṣamām-i-*Awrṭī (*Aortic Valve Diseases) امراض صمام اورطیٰ

16.3.3. Amrāz Ṣamām-i-Thlāthi (Tricuspid valve Diseases) امراض صمام ثلاثی

16.3.4. Amrāz Ṣamām-i-Ri'wī (Pulmonary Valve Diseases) امراض صمام ریوی

16.3.5. Ṣamām-i-Qalb Ṣanā'ī (Prosthetic Heart Valve) صمام قلب صناعی

References: 4,5,7,8,16,17,19,21,24,27,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO8	Discuss Mitral stenosis and regurgitation, etiology, pathophysiology, management, prognosis, and complications	1	Lecture	CC	Knows-how	L&PPT ,L
CO1,CO2, CO4,CO6, CO8	Discuss Aortic stenosis and regurgitation, etiology, pathophysiology, management, prognosis and complications	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO4,CO6, CO8	Discuss Tricuspid and Pulmonary valve diseases their etiology, pathophysiology, management, prognosis and complications	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO4,CO6, CO8	Discuss Prosthetic Heart Valves, indications, types and clinical signifiance	1	Lecture	CC	Knows-how	L&PPT ,L

CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical examination on a patient with Mitral valve stenosis and Mitral valve regurgitation.	2	Practical16.7	PSY-GUD	Knows-how	D,EDU,D-BED
CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical examination on a patient with Aortic stenosis and Aortic regurgitation	2	Practical16.8	PSY-GUD	Shows-how	D-BED,EDU,D
CO1,CO2, CO4,CO6, CO8	Demonstrate the clinical examination on a patient with Pulmonary and Tricuspid valve disease.	4	Practical16.9	PSY-GUD	Shows-how	D,EDU,D-BED
CO1,CO2, CO4,CO6, CO8	Conduct clinical examination of patients of mitral stenosis and regurgitation and formulate a line of treatment.	3	Experiential-Learning16.7	PSY-ADT	Does	D,PER,CBL,D-BED
CO1,CO2, CO4,CO6, CO8	Conduct clinical examination of patients of Aortic stenosis and regurgitation and formulate a line of treatment.	3	Experiential-Learning16.8	PSY-ADT	Does	JC,D,D-BED,PER
CO1,CO2, CO4,CO6, CO8	Conduct clinical examination of patients of pulmonary and tricuspid valve disease and formulate a line of treatment.	4	Experiential-Learning16.9	PSY-ADT	Does	D-BED,D,PER
Practical Training Activity						
Practical Training 16.1 Clinical diagnosis and management of Anaemia						

Total Learning Hours (2) Actviity 1: Bedside demonstration (1 hr) The Mentor/teacher will demonstrate how to take a detailed history, perform a clinical examination, and clinical investigations required in establishing the diagnosis and directing the management of Anaemia in OPD/IPD. Activity 2: Hands-on training Session (1 hr) The students will be distributed in groups and asked to demonstrate the same. The teacher shall summarize the key concepts covered in the practical
Practical Training 16.2 Clinical diagnosis and management of *Abyazuddam* (Leukemia)
Total Learning Hours (2) Activity 1: Bedside demonstration (1 hr) The Mentor/teacher will demonstrate how to take a detailed history, perform a clinical examination, and clinical investigations required in establishing the diagnosis and directing the management of *Abyazuddam* (Leukemia) in OPD/IPD. Activity 2: Hands-on training session (1 hr) The students will be distributed in groups and asked to demonstrate the same. The teacher shall summarize the key concepts covered in the practical.
Practical Training 16.3 Clinical diagnosis and management of Thalassemia
Total Learning Hours (2) Activity 1: Bedside demonstration (1 hr) The Mentor/ teacher will demonstrate how to take a detailed history, perform a clinical examination, and clinical investigations required in establishing the diagnosis and directing the management of Thalassemia in OPD/IPD. Activity 2: Hands-on training session (1 hr) The students will be distributed in groups and asked to demonstrate the same. The teacher shall summarize the key concepts covered in the practical.
Practical Training 16.4 Diagnosis of Haemophilia

Total Learning Hours (2) Activity 1: Coagulation Profile Analysis in Hemophilia (1 hr) Teach students to interpret prolonged aPTT, normal PT, and factor assays (Factor VIII for Hemophilia A, Factor IX for Hemophilia B) through case-based discussions and mock laboratory reports. Activity 2: Bleeding Assessment & Clotting Factor Testing (1 hr) Demonstrate and practice clinical evaluation of spontaneous joint bleeds, muscle hematomas, and prolonged bleeding, along with hands-on interpretation of mixing studies and clotting factor assays.
Practical Training 16.5 Diagnosis of Thrombocytopenia
Total Learning Hours (2) Activity 1: Interpretation of Laboratory Tests in Thrombocytopenia (1 hr) Teach students to analyze platelet counts, peripheral blood smears, and bone marrow findings to differentiate causes of thrombocytopenia through case-based discussions. Activity 2: Peripheral Blood Smear Examination & Clinical Correlation (1 hr) Demonstrate and practice identifying platelet morphology, giant platelets, and associated hematological abnormalities in thrombocytopenia using microscope-based learning.
Practical Training 16.6 Diagnosis of Disseminated intravascular Coagulation (DIC)
Total Learning Hours (2) Activity 1: Interpretation of Laboratory Findings in DIC (1 hr) Teach students to analyze PT, aPTT, D-dimer, fibrinogen, and platelet count through case-based mock reports and ISTH DIC score calculation. Activity 2: Peripheral Blood Smear Examination & Clinical Correlation (1 hr) Demonstrate and practice identifying schistocytes in blood smears and correlate findings with clinical features of DIC.

Practical Training 16.7 Diagnosis of Mitral stenosis and Mitral regurgitation
Total Learning Hours (2) Activity 1: Auscultation of Mitral Stenosis and Regurgitation (1 hr) Demonstrate and practice identifying key murmurs, including the mid-diastolic rumble in mitral stenosis and holosystolic murmur in mitral regurgitation, using live auscultation and simulated heart sounds. Activity 2: Palpation and Dynamic Maneuvers in Mitral Valve Disease (1 hr) each students to assess apex beat characteristics, thrill, and response to maneuvers (e.g., handgrip for mitral regurgitation, left lateral decubitus position for mitral stenosis) through demonstration and hands-on practice.
Practical Training 16.8 Diagnosis of Aortic stenosis and regurgitation
Total Learning Hours (2) Activity 1: Auscultation of Aortic Stenosis and Regurgitation (1 hr) Teach students to identify characteristic murmurs and abnormal heart sounds through demonstration, hands-on auscultation practice, and clinical discussion. Activity 2: Pulse & Blood Pressure Assessment in Aortic Valve Disease (1 hr) Demonstrate and practice evaluating characteristic pulse abnormalities and blood pressure changes in aortic stenosis and regurgitation.
Practical Training 16.9 Diagnosis of Pulmonary and Tricuspid valve disease
Total Learning Hours (4) Activity 1: Inspection & Palpation of the Precordium (1 hr) Conduct a 10-minute introduction, 20-minute demonstration of precordial signs, 20-minute hands-on practice, and 10-minute discussion on findings. Activity 2: Auscultation of Pulmonary and Tricuspid Valve Sounds (1 hr) Begin with a 10-minute overview, followed by a 20-minute demonstration, 20-minute student auscultation practice, and a 10-minute review session.

Activity 3: Jugular Venous Pressure & Hepatojugular Reflux Examination (1 hr) Allocate 10 minutes for theoretical background, 20 minutes for JVP and reflux demonstration, 20 minutes for student practice, and 10 minutes for discussion. Activity 4: Clinical Case-Based Examination & Bedside Integration (1 hr) Present a case for 10 minutes, conduct a 30-minute student-led examination, dedicate 10 minutes for findings discussion, and conclude with a 10-minute feedback session.
Experiential Learning Activity
Experiential-Learning Learning 16.1: Diagnosis of Anemia
Total Learning Hours (3) Activity 1: Clinical Examination (1 hr) Students perform a systematic clinical examination on anemic patients, assessing pallor, koilonychia, glossitis, tachycardia, and fatigue, correlating findings with Unani concepts (Zo'f-e-Dam, Fasad Khoon). Activity 2: Diagnostic Interpretation (1 hr) Students analyze **C**BC, peripheral smear, serum iron, ferritin, and vitamin B12 levels, linking findings with Unani diagnostics (Mizaj assessment, Nabz examination, Ghair Tabayi Ratubt). Activity 3: Holistic Treatment Planning (1 hr) Students develop a combined Unani and modern treatment strategy, incorporating Ilaj bil Ghiza (nutrient-rich foods like Anjeer, Khurfa, Beetroot), Munzij-Mushil, Muqawwi Jigar therapy, with modern treatments (iron, vitamin B12, folic acid supplementation, blood transfusion if needed).
Experiential-Learning Learning 16.2: Diagnosis and Management of *Abyazuddam* (Leukemia)
Total Learning Hours (2)

Activity 1: Clinical Examination (1 hr) Students perform a focused clinical examination on a leukemia patient, identifying pallor, lymphadenopathy, hepatosplenomegaly, and bleeding tendencies while correlating with Unani concepts of Abyazuddam (Fasad Khoon, Zo'f-e-Jigar, Imtila-e-Dam). Activity 2: Diagnostic Interpretation and Treatment Plan (1 hr) Students analyze CBC, peripheral smear, bone marrow biopsy, and immunophenotyping and formulate an integrated Unani and modern treatment plan, including Ilaj bil Ghiza, Munzij-Mushil, and Muqawwi Jigar therapy, with modern treatments (chemotherapy, immunotherapy, bone marrow transplant).
Experiential-Learning Learning 16.3: Diagnosis and Managemet of Thalasaemia
Total Learning Hours (3) Activity 1: Clinical Examination (1 hr) Students examine a Thalassemia patient, identifying signs and correlating with Unani concepts of Fasad Khoon and Zo'f-e-Jigar. Activity 2: Diagnostic Interpretation (1 hr) Students analyze CBC, hemoglobin electrophoresis, iron studies, and correlate with Unani diagnostics (Mizaj, Nabz, Ghair Tabayi Ratubt). Activity 3: Holistic Treatment Planning (1 hr) Students integrate Unani (Ilaj bil Ghiza, Munzij-Mushil, Muqawwi Jigar) and modern (transfusion, chelation, gene therapy) treatments.
Experiential-Learning Learning 16.4: Diagnosis of Haemophilia
Total Learning Hours (2) Activity 1: Presentation Preparation (1 hr) Students create and present a structured overview of Hemophilia, covering its types (A, B, C), genetic basis, clinical features, and Unani perspective (Su'-e-Mizaj, Zo'f-e-Urooq, Imtila-e-Dam). Activity 2: Diagnostic Interpretation (1 hr) Students analyze lab reports (PT, aPTT, factor VIII/IX assays, bleeding time) and correlate with Unani diagnostic methods (Mizaj assessment, Nabz examination)

Experiential-Learning Learning 16.5: Diagnosis and Management of Thrombocytopenia
Total Learning Hours (3) Activity 1: Case-Based Discussion (1 hr) Students present a real or simulated case of thrombocytopenia, explaining Unani concepts (Su'-e-Mizaj, Zo'f-e-Jigar) and modern causes (ITP, TTP, DIC, bone marrow failure), followed by group discussion. Activity 2: Diagnostic Interpretation Workshop (1 hr) Students analyze lab reports (CBC, peripheral smear, bone marrow biopsy, coagulation profile) and correlate findings with Unani diagnostics (Mizaj assessment, Nabz examination, Ghair Tabayi Ratubt). Activity 3: Treatment Strategy Session (1 hr) Students formulate and present a holistic treatment plan, integrating Unani therapies (Mufarrehat, Muqawwi Jigar, Ilaj bil Ghiza like Anjeer, Asgand) with modern treatments (steroids, IVIG, platelet transfusion, immunosuppressants).
Experiential-Learning Learning 16.6: Diagnosis and Management of Disseminated Intravascular Coagulation (DIC)
Total Learning Hours (3) Activity 1: Presentation Preparation (1 hr) Students research and create a structured presentation on DIC, covering its pathophysiology, causes, clinical features, diagnostic criteria, and treatment approaches. Activity 2: Diagnostic Test Interpretation (1 hr) Students analyze lab reports (PT, aPTT, fibrinogen levels, D-dimer, platelet count) to identify DIC patterns, correlating findings with clinical cases. Activity 3: Case-Based Treatment Planning (1 hr) Students discuss patient scenarios, formulate management strategies including treating the underlying cause, blood product transfusion, and anticoagulation, and justify their decisions based on guidelines.
Experiential-Learning Learning 16.7: Diagnosis and Management of Mitral stenosis and Regurgitation

Total Learning Hours (3) Activity 1: Clinical Examination (1 hr) Students perform history-taking, auscultation for murmurs (mid-diastolic in stenosis, pansystolic in regurgitation), and assess signs like malar flush and pulmonary congestion. Activity 2: Diagnostic Interpretation (1 hr) Students analyze echocardiograms, ECGs, and chest X-rays to identify left atrial enlargement, pulmonary hypertension, and valve abnormalities. Activity 3: Treatment Planning (1 hr) Students discuss case scenarios in groups, deciding on medical (e.g., diuretics, anticoagulants) vs. surgical (e.g., balloon valvotomy, valve replacement) management.
Experiential-Learning Learning 16.8: Diagnosis and Management of Aortic stenosis and Regurgitation
Total Learning Hours (3) Activity 1: Clinical Examination (1 hr) Students perform history-taking, auscultation, and pulse assessment on patients with suspected aortic stenosis or regurgitation. Activity 2: Diagnostic Interpretation (1 hr) Students analyze echocardiograms, ECGs, and X-rays to correlate findings with aortic valve disease severity. Activity 3: Treatment Planning (1 hr) Students discuss cases in groups, formulating medical and surgical treatment strategies based on clinical guidelines.
Experiential-Learning Learning 16.9: Diagnosis and Management of Pulmonary and tricuspid valve disease
Total Learning Hours (4) Activity 1: Bedside Clinical Examination (1 hr) Students perform history-taking and a focused cardiovascular examination on a real or simulated patient, documenting findings and presenting their diagnosis.

Activity 2: Diagnostic Test Interpretation (1 hr)

Students analyze echocardiograms, ECGs, and chest X-rays of patients with pulmonary and tricuspid valve disease, correlating findings with clinical presentation.

Activity 3: Case-Based Treatment Planning (1 hr)

Students discuss case scenarios in groups, formulate medical and surgical treatment plans, and justify their decisions based on clinical guidelines.

Activity 4: Murmur Identification Simulation (1 hr)

Using digital stethoscopes or murmur simulators, students listen to, identify, and differentiate heart murmurs associated with pulmonary and tricuspid valve diseases.

Modular Assessment

Assessment	**Hour**
Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per table 6 C. **Case based assesment**: (50 marks) Formative assessment is based on the Experiential Learning in Unit-1—Clinical Examination of the Patient in addition to the literature survey for evidence-based studies carried out on Faqr al-Dam (Anaemia). • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or Direct observation of Procedure or Observed Structured Clinical Examination (OSCE) (50 Marks) • History Taking / Communication Skills (15 Marks) • Clinical Examination / Procedural Skills (15 Marks)	4

• Clinical Reasoning / Interpretation (10 Marks) • Decision-Making / Management Plan (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any of the experiential as portfolios/ reflections/ presentations can be taken as an assessment. (25 Marks)	

Paper No : 3(Moalajat (Medicine) Paper III)

Semester No : 3

Module 17 : Amrāz-i-Nizām-i-Hazm Bālāyi (Diseases of The Upper Gastrointestinal System) امراض نظام ہضم بالائی

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describes a comprehensive understanding of the gastrointestinal anatomy, physiology, and common diseases, along with their diagnostic and therapeutic approaches mentioned in Unani classical literature and conventional system of medicine.

2. Demonstrate evaluation of the patients by history taking, physical examination of upper GI diseases and explain required diagnostic tests and line of management.

3. Apply diagnostic tools and clinical assessment techniques for effective evaluation and treatment of gastrointestinal and oral conditions.

Unit 1 Amrāz-i-Hazm ke Marīz se rujū‘ ka Zābta (Approach to the patient with gastrointestinal disease) امراض ہضم کے مریض سے رجوع کا ضابطہ

17.1.1. Qanāt Ghizāyi ka iṭlāqi Tashrīh wa Manāfe‘ (Applied anatomy and functions of the gastrointestinal tract) قناۃ غذائی کا اطلاقی تشریح و منافع

17.1.2. Amrāz-i-Hazm ka Jāiza wa Taqsīm (Overview and classification of gastrointestinal disease) امراض ہضم کا جائزہ و تقسیم

17.1.3. Tajziya Marīz (Evaluation of the patient: history, physical examination) تجزیہ مریض

17.1.4. Baṭan Hād (Acute Abdomen) بطن حاد

17.1.5. Tashkhīs Maraz ki Taftīshāt wa Zarāye (Investigations and tools for patient evaluation; laboratory, luminal contents, endoscopy, radiography/nuclear medicine, histopathology, functional testing. تشخیص مرض کی تفتیشات و ذرائع

17.1.6. Amrāz-i-Hazm ka Uṣul-i-Ilāj (Principles of treatment of gastrointestinal disease) امراض ہضم کا اصول علاج

References: 4,5,7,17,18,19,26,27,28,29,30

3A	3B	3C	3D	3E	3F	3G

CO1,CO2, CO3,CO6	Describe the applied structure and function of the gastrointestinal (GI) tract and comprehend the digestion, absorption, and motility mechanisms	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO3,CO7	Discuss clinical manifestations their etiology, pathophysiology, differential diagnosis, and diagnostic test for GI diseases.	1	Lecture	CC	Knows-how	L&GD,L
CO1,CO2, CO3,CO7	Discuss treatment principles for ommon GI diseases and their mechanisms of action, indications, and side effects, and apply evidence-based principles to guide patient care for common GI diseases	1	Lecture	CAP	Knows-how	L,L&PPT
CO1,CO2, CO3,CO7, CO8	Elicit a detailed history and perform a comprehensive general physical and abdominal examination and differentiate based on clinical presentation, to establish clinical diagnosis for common GI diseases	3	Practical17.1	PSY-GUD	Shows-how	CBL,D-BED
CO1,CO2, CO3,CO6, CO7	Demonstrate the indications, contraindications, and interpretations of required diagnostic tests for GI diseases to confirm clinical diagnosis and demonstrate principles of treatment.	3	Practical17.2	PSY-GUD	Shows-how	D-BED,CBL
CO1,CO2, CO3,CO7	Conduct a detailed history and examinations, differential diagnosis, investigations, diagnosis, and principles of treatment for GI diseases.	3	Experiential-Learning17.1	PSY-MEC	Does	TPW,PBL,SIM,RLE,RP
CO1,CO2, CO3,CO7	Apply principles of treatment for GI diseases and educate patients on oral hygiene, prevention of GI diseases, address patients' concerns, and provide reassurance.	2	Experiential-Learning17.2	PSY-ADT	Does	SIM,RLE,D-BED,RP,PrBL
CO1,CO2, CO3,CO6, CO7	Formulate a personalized treatment plan based on the patient's condition, comorbidities, and preferences for GI diseases and apply evidence-based principles	3	Experiential-Learning17.3	PSY-MEC	Does	RLE,SIM,RP,PER,D-BED

Unit 2 Amrāz-i-Fam (Diseases of Mouth) امراضِ فم

17.2.1. Izm-i-Lisān (Macroglossia) عظم لسان

17.2.2. Warm-i-Lisān (Glossitis) ورم لسان

17.2.3. Hurqat-i-Lisān (Burning Mouth Syndrome) حرقت لسان

17.2.4. Qulā' wa Qurūh-i-Khabīsa (Aphthous Ulcers) قلاع و قروح خبیثہ

17.2.5. Bakhr (Halitosis) بخر

17.2.6. Busūr-i-Fam (Candidiasis) بثور فم.

17.2.7. Saṛtān-i-Fam (Oral Cancer) سرطان فم

References: 4,5,8,10,12,16,17,21,27,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO7	Describe Diseases of the Mouth (Oral mucosal diseases, diseases of tongue and Oral cancers) and identify the associated conditions.	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO3,CO7	Discuss the etiology, pathophysiology, clinical manifestations, and diagnostic test for Diseases of the Mouth.	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO3,CO7	Discuss treatment principles for Diseases of the Mouth and their mechanisms of action, indications, and side effects, and apply evidence-based principles to guide patient care for Diseases of the Mouth	1	Lecture	CAP	Knows-how	L&PPT ,L
CO1,CO2, CO3,CO4, CO7	Elicit a detailed history and perform a comprehensive general physical and oral examination and differentiate based on clinical presentation, to establish clinical diagnosis for Diseases of the Mouth	3	Practical17.3	PSY-GUD	Shows-how	D-BED,CBL

CO1,CO2, CO3,CO7, CO8	Demonstrate the indications, contraindications, and interpretations of required diagnostic tests for Diseases of the Mouth to confirm clinical diagnosis and demonstrate principles of treatment	3	Practical17.4	PSY-ADT	Shows-how	D-BED,CBL
CO1,CO2, CO3,CO4, CO7	Conduct a detailed history and examinations, differential diagnosis, investigations, and diagnosis of Diseases of the Mouth.	3	Experiential-Learning17.4	PSY-MEC	Does	SIM,TPW,PrBL,RLE,D-BED
CO1,CO2, CO3,CO7	Evaluate the principles of treatment of Diseases of the Mouth and educate patients on oral hygiene, prevention of oral diseases, address patients' concerns, and provide reassurance.	3	Experiential-Learning17.5	PSY-MEC	Does	RLE,RP,L&PPT ,D-BED,PBL
CO1,CO2, CO3,CO7	Formulate a personalized treatment plan based on the patient's condition, comorbidities, and preferences for Diseases of the Mouth	3	Experiential-Learning17.6	PSY-ADT	Does	TPW,TBL,L&PPT ,D-BED,PBL

Unit 3 Amrāz-i-Marī (Diseases of Oesophagus) امراض مری

17.3.1. 'Usr al-Bal' (Dysphagia) عسر البلع

17.3.2. Waram-i-Marī (Oesophagitis) ورم مری

17.3.3. Taqahqur Mi'dī Marī (Gastro-Oesophageal Reflux Disease) تقہقر معدی مری

17.3.4. Fataq-i-Furjavi (Hiatus Hernia) فتق فرجوی

17.3.5 Istirkhā' al-Marī, Intebāq al-Marī (Motility disorders of the esophagus, Diffuse oesophageal spasm) استرخاء مری، انتباق مری

References: 4,7,21,24,26,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO7	Explain the mechanisms of swallowing and esophageal peristalsis. Describe Diseases of the Oesophagus and identify the associated conditions.	1	Lecture	CC	Knows-how	L,L&PPT

CO1,CO2, CO3,CO7	Discuss the etiology, pathophysiology, clinical manifestations, and diagnostic test for Diseases of the Oesophagus.	2	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO3,CO6	Discuss treatment principles including ilaj bil tadbeer and ilaj bil dawa and their mechanisms of action, indications, and side effects, and apply evidence-based principles to guide patient care for Diseases of the Oesophagus	1	Lecture	CE	Knows-how	L,L&PPT
CO1,CO2, CO3,CO6	Elicit a detailed history and perform a comprehensive general physical and oral examination and differentiate based on clinical presentation, to establish clinical diagnosis for Diseases of the Oesophagus	4	Practical17.5	PSY-GUD	Shows-how	CBL,D-BED
CO1,CO2, CO3,CO6, CO7	Demonstrate the indications, contraindications, and interpretations of required diagnostic tests for Diseases of the Oesophagus to confirm clinical diagnosis and demonstrate principles of treatment	4	Practical17.6	PSY-GUD	Shows-how	D-BED,CBL
CO1,CO2, CO3,CO6, CO8	Conduct a detailed history and examinations, differential diagnosis, investigations, diagnosis, and principles of treatment for Diseases of Oesophagus	3	Experiential-Learning17.7	PSY-MEC	Does	CBL,L&PPT ,RLE,SIM,GBL
CO1,CO2, CO3,CO7	Decide the principles of treatment of Diseases of the Oesophagus and educate patients on lifestyle modifications, medication use, and the importance of follow-up care for esophageal diseases. Address patients' concerns and provide reassurance.	3	Experiential-Learning17.8	PSY-MEC	Does	SIM,JC,RP,L&PPT ,D-BED
CO1,CO2, CO3,CO7	Formulate a personalized treatment plan based on the patient's condition, comorbidities, and preferences for Diseases of the Oesophagus	3	Experiential-Learning17.9	PSY-ADT	Does	L&PPT ,PBL,D-BED
Practical Training Activity						

Practical Training 17.1 Clinical Diagnosis of upper GI diseases
Total Learning Hours (3) Activity 1: Supervised patient interaction (1 Hr) Supervised patient interaction where students practice eliciting detailed histories and performing physical and abdominal examinations focused on GI symptoms. Activity 2: Small-group clinical case scenarios (1 hr) Small-group clinical case scenarios where students differentiate between GI diseases (e.g., gastritis, IBS, IBD) based on history and examination findings. Activity 3: Objective Structured Clinical Examination (OSCE) (1 hr) Objective Structured Clinical Examination (OSCE) stations to assess students' ability to identify key clinical signs and formulate provisional diagnoses for common GI conditions.
Practical Training 17.2 Investigations and Principles of treatment for upper GI diseases
Total Learning Hours (3) Activity 1: Hands-on demonstration and interpretation (1 hr) Hands-on demonstration and interpretation of common diagnostic tests for GI diseases (e.g., stool analysis, abdominal ultrasound, endoscopy) with discussion on clinical indications and contraindications. Activity 2: Simulated lab session (1 hr) Simulated lab session where students analyze diagnostic reports (e.g., LFTs, imaging, biopsy) to confirm GI disease diagnoses and outline relevant Unani and modern treatment principles. Activity 3: Case-based practical workshop (1 hr) Case-based practical workshop where students match specific GI symptoms with appropriate diagnostic tests, justify their selection, and propose evidence-based treatment strategies.
Practical Training 17.3 Clinical Diagnosis of Diseases of the Mouth

Total Learning Hours (3) Activity 1: Demonstration of Clinical Diagnosis (1 hr) The teacher/mentor will discuss and demonstrate how to take a detailed history perform a comprehensive general physical and oral examination and differentiate based on clinical presentation, to establish a clinical diagnosis Activity 2: Hands-on Training (1 hr) Hands-on training- The students will be asked to demonstrate the same Activity 3: Conclusion of Clinical diagnosis (1 hr) The teacher shall summarize the key concepts covered in the practical
Practical Training 17.4 Investigations and Principles of treatment for diseases of Mouth
Total Learning Hours (3) Activity 1: Clincal diagnosis and Management (1 hr) The teacher/mentor will discuss the indications, contraindications, and interpretations of required diagnostic tests for Diseases of the Mouth to confirm clinical diagnosis and demonstrate principles of treatment Activity 2: Hands-on training (1 hr) Hands-on training- The students will be asked to demonstrate the same Activity 3: Conclusion by teacher (1 hr) The teacher shall summarize the key concepts covered in the practical
Practical Training 17.5 Clinical Diagnosis for Diseases of Oesophagus
Total Learning Hours (4) Activity 1: Demonstration of Clinical diagnosis of oesophageal disease (2 hrs) The teacher/mentor will discuss and demonstrate how to take a proper history and perform a Physical Examination including Inspection, Palpation, Percussion, and Auscultation on the Patient at the Bedside.

Activity 2: Hands-on training (1 hr) Hands-on training- The students will be asked to demonstrate the same Activity 3: Conclusion (1 hr) The teacher shall summarize the key concepts covered in the practical
Practical Training 17.6 Investigations and Principles of treatment for diseases of Oesophagus
Total Learning Hours (4) Activity 1: Clinical Diagnosis session (2 hrs) The teacher/mentor will discuss the indications, contraindications, and interpretations of required diagnostic tests for Diseases of the Oesophagus to confirm clinical diagnosis and demonstrate principles of treatment Activity 2: Hands-on training session (1 hr) Hands-on training- The students will be asked to demonstrate the same Activity 3: Conclusion (1hr) The teacher shall summarize the key concepts covered in the practical
Experiential Learning Activity
Experiential-Learning Learning 17.1: Clinical Diagnosis, investigations, and Principles of treatment for Gastrointestinal diseases
Total Learning Hours (3) Activity 1: Detailed history-taking and physical examination (1 hr) Perform detailed history-taking and physical examination of patients with GI complaints under supervision, focusing on symptom analysis and relevant signs. Activity 2: Small group discussions (1 hr) Participate in small group discussions analyzing clinical cases to develop differential diagnoses and select appropriate investigations for GI diseases.

Activity 3: Case presentation (1 hr) Present patient cases in clinical rounds to discuss diagnosis and outline principles of Unani and evidence-based treatment plans with faculty feedback.
Experiential-Learning Learning 17.2: Management of Gastrointestnial diseases and Patient Education
Total Learning Hours (2) Activity 1: Patient Counseling Session (1 hr) Conduct patient counseling sessions focusing on explaining treatment principles, preventive oral hygiene practices related to gastrointestinal health, and addressing patient concerns with reassurance. Activity 2: Interactive Health Education session (1 hr) Prepare and deliver an interactive health education session for patients on prevention of gastrointestinal diseases, emphasizing oral hygiene and lifestyle modifications, followed by a Q&A to address concerns.
Experiential-Learning Learning 17.3: Treatment plan for GI diseases
Total Learning Hours (3) Activity 1: Analysis of GI diseases case scenarios (1 hr) Analyze diverse GI disease case scenarios in groups and develop personalized treatment plans considering patient comorbidities, preferences, and current evidence-based guidelines. Activity 2: Simulated patient consultations (1 hr) Conduct simulated patient consultations where students gather clinical data and collaboratively formulate individualized treatment strategies applying Unani and modern evidence-based principles. Activity 3: Clinical case analysis (1 hr) Present real or simulated GI cases in clinical rounds, justify chosen treatment plans based on patient factors and latest research, and receive faculty and peer feedback.

Experiential-Learning Learning 17.4: Evaluation and Management of patient for diseases of Mouth
Total Learning Hours (3) Activity 1: History and Oral examination session (1 hr) Students will Perform patient interview and oral examination to gather detailed history and clinical findings for mouth diseases. Activity 2: Case analysis for diagnosis and management or oral diseases (1 hr) Students will Work in small groups to analyze clinical cases, formulate differential diagnoses, and decide appropriate investigations for mouth diseases. Activity 3: Case presentation (1 hr) Students will Present patient cases in a clinical round to discuss findings, interpret investigation results, and finalize diagnosis with faculty feedback.
Experiential-Learning Learning 17.5: Prevention and management of oral diseases and patient education
Total Learning Hours (3) Activity 1: Patient counseling session (1 hr) Conduct a patient counseling session focused on oral hygiene education, Unani treatment principles, and addressing patient concerns with reassurance. Activity 2: Patient awareness session for prevention of oral diseases (1 hr) Designing and presenting a patient awareness session on oral disease prevention, combining Unani and modern approaches. Activity 3: Role-play to communicate the treatment plan (1 hr) Engage in a 60-minute role-play exercise to practice communicating treatment plans, answering patient questions, and providing emotional support.
Experiential-Learning Learning 17.6: Treatment plan for diseases of Mouth
Total Learning Hours (3) Activity 1: Case-Based Treatment Planning Workshop (1 hr) Students will be divided into small groups, each goup will be goven diffrent diseases of mouth (e.g., aphthous ulcer with anemia, oral candidiasis in a diabetic, leukoplakia in a smoker) and tasked with formulating a personalized Unani treatment plan, considering mizaj, comorbidities, and patient preferences.

Activity 2: Role Play and Patient Simulation (1 hr) Students will perform role-play as Unani physicians, taking a simulated patient's history and comorbidity details, and presenting a tailored treatment plan using appropriate Unani drugs, diet regimen, and lifestyle advice. Activity 3: Clinical Case Presentation in OPD/Indoor Setting (1 hr)) Students will assess a real patient with a disease of the mouth under supervision, perform complete history and physical examination, identify comorbidities, and present a personalized treatment plan to peers and faculty for discussion and feedback.
Experiential-Learning Learning 17.7: Evaluation of patients with diseases of the Oesophagus
Total Learning Hours (3) Activity 1: Clinical Skill Station (1 hr) Students rotate through simulated stations where they perform detailed history-taking, physical examination, and formulate differential diagnoses based on standardized patients or case scenarios of esophageal diseases. Activity 2: Case-Based Learning (CBL) Workshop (1 hr) Students analyze a real or structured clinical case from OPD/IPD, identify key findings, order relevant investigations, reach a diagnosis, and propose both Unani and modern principles of management collaboratively. Activity 3: Integrated OPD/Bedside Teaching (1hr) Students assess patients with esophageal complaints in OPD or wards, document history and examination findings, suggest investigations, present their differential diagnosis, and discuss treatment plans based on Unani principles.
Experiential-Learning Learning 17.8: Principles of treatment and Patient Education for Diseases of Oesophagus
Total Learning Hours (3) Activity 1: Patient Counseling Role Play (1 hr) Students will engage in role-play exercises where they act as Unani physicians and patients to practice effective communication of treatment principles, diet and regimen advice, medication usage, and the importance of follow-up, including addressing common patient concerns and emotional reassurance.

Activity 2: Interactive Treatment Planning & Education Workshop (1 hr) Students will work in small groups to review Unani principles of treatment for various esophageal diseases, prepare patient-friendly educational explanations, and simulate delivering this information clearly and empathetically to mock patients. Activity 3: OPD Patient Education Practice (1 hr) During a live OPD session, students will identify patients with esophageal diseases and, under faculty supervision, explain the diagnosis, Unani treatment options, necessary lifestyle modifications, and the importance of adherence and follow-up, while answering patient queries and offering reassurance.
Experiential-Learning Learning 17.9: Treatment plan for Oesophageal diseases
Total Learning Hours (3) Activity 1: Clinical Case Simulation and Role Play (1 hr) Students engage in a simulated clinical scenario to take history, assess *mizaj*, and formulate a personalized Unani treatment plan based on the patient's condition, comorbidities, and preferences. Activity 2: Bedside Clinical Teaching with Real Patient (1 hr) Under faculty supervision, students interact with an actual patient suffering from an esophageal disorder to evaluate and design an individualized treatment plan considering both Unani principles and patient-specific factors. Acitvity 3: Collaborative Case-Based Group Discussion with Evidence Integration (1 hr) Students collaboratively analyze a complex case, integrate classical Unani references with current evidence, and present a comprehensive, patient-centered management plan.
Modular Assessment

Assessment	**Hour**

Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per table 6 C. Case-based evaluation: (50 Marks) Each student will be given a case history or problem situation to evaluate the patient and create a treatment/ management plan with justification. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any of the experiential as portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)	4
Module 18 : Amrāz-i-Mi'da wa Am'ā' (Diseases of Stomach and Intestine) امراض معدہ وامعاء	
Module Learning Objectives (At the end of the module, the students should be able to) 1. Describe the diseases of the stomach and small intestine, their etiopathogenesis, pathophysiology, manifestations, investigations, and management. 2. Demonstrate evaluation of the patients by history taking, physical examination, and investigations for the stomach and small intestine diseases and explain the management. 3. Appraise the treatment guidelines for various stomach and small intestine diseases and acquire presentation and teaching skills.	
Unit 1 Amrāz-i-Mi'da-01 (Diseases of Stomach-01) امراض معدہ ا	

18.1.1. Sū'-i-Mizāj-i-Mi'da (morbid temperament of Stomach) سوءمزاج معدہ

18.1.2. Ḍu'f al-Shahwa (Decreased Appetitie) ضعف الشھوۃ,Buṭlān al-Shahwa (Loss of Appetite) بطلان الشھوۃ,Fasād al-Shahwa (Impaired Appetite) فساد الشھوۃ

18.1.3. Ḍu'f al-Haḍm (Delayed digestion) ضعف الھضم,Sū'al-Haḍm (Dyspepsia) سوءالھضم,Al-Tukhma (Indigestion) التخمۃ

18.1.4. Aṭash Mufṛit (Polydipsia) عطش مفرط

18.1.5. Waja' al-Fuwād (Cardalgia) وجع الفواد,Waja' al-Mi'da (Gastralgia) وجع المعدۃ

18.1.6. Ḥurqat-i-Mi'da (Burning sensation of stomach) حرقت معدہ

18.1.7. Kathrat-i-Jushā' (Excessive belching) کثرت جشاء ، Fuwāq (Hiccup) فواق

18.1.8.Qay' (Vomiting) قیء, Al-Tahawwu (Retching) التھوع,Al-Ghathayān (Nausea) الغثیان

18.1.9. Qay' al-Dam ((Hematemesis/Upper GI bleeding) قیءالدم

References: 1,2,4,5,7,8,27,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO7	Explain Quwate Ghaziya (nutritive faculty) and describe the mechanisms of gastric secretion, digestion, and motility.	1	Lecture	CK	Knows-how	L&PPT ,L
CO1,CO2, CO3,CO7	Discuss different disease conditions (clinical presentation) of the stomach mentioned in classical literature and describe the underlying etiopathogenesis pathophysiology and diagnosis forDiseases of Stomach.	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO3,CO7	Evaluate treatment principles for Diseases of Stomach. and their mechanisms of action, indications, and side effects, and apply evidence-based principles to guide patient care.	1	Lecture	CC	Knows-how	L&PPT ,L

CO1,CO2, CO3,CO7	Demonstrate and elicit a detailed history, perform a comprehensive general physical and abdominal examination, and differentiate based on clinical presentation to establish a clinical diagnosis for Diseases of the Stomach	3	Practical18.1	PSY-GUD	Shows-how	CBL,D-BED,DIS
CO1,CO2, CO3,CO7	Demonstrate the indications, contraindications, and interpretations of required diagnostic tests for diseases of the stomach to confirm clinical diagnosis and demonstrate principles of treatment.	3	Practical18.2	PSY-GUD	Shows-how	CBL,D-BED
CO1,CO2, CO3,CO7	Conduct a detailed history and examinations, differential diagnosis, investigations, diagnosis, and principles of treatment. for diseases of the stomach	3	Experiential-Learning18.1	PSY-MEC	Does	D-BED,PBL
CO1,CO2, CO3,CO7	Analyze the literature critically to acquire advanced knowledge and apply evidence-based principles to guide patient care and explain the Principles of Treatment in stomach diseases.	3	Experiential-Learning18.2	PSY-MEC	Does	JC,SY
CO1,CO2, CO3,CO7	Formulate a personalized treatment plan based on the patient's condition, comorbidities, and preferences. Educate patients on lifestyle modifications, and medication use. Address patients' concerns, and provide reassurance for Diseases of Stomach	2	Experiential-Learning18.3	PSY-MEC	Does	D-BED,L&PPT ,PBL

Unit 2 Amrāz-i-Mi'da-02 (Diseases of Stomach-02) امراض معدہ ۲

18.2.1. Waram-i-Mi'da ma Aqsām (Gastritis; Acute/Chronic/Atrophic) ورم معدہ مع اقسام

18.2.2. Qurūḥ-i-Mi'da wa Isna Ashari (Ulcers of Stomach and deuodenum) قروح معدہ واثنا عشری

18.2.3. Kasrat wa Qillate Hamuzate Mi'di (Achlorhydria/ hypochlorhydria and Zollinger–Ellison syndrome) کثرت وقلت حموضت معدی

18.2.4. Ḍu'f al-Mi'da (gastric debility) ضعف المعدۃ

18.2.5. Sartān-i-Mi'da (Carcinoma of Stomach) سرطان معدہ

18.2.6. Nafsiyāti Amrāz Mi'di (Functional Upper Gastrointestinal disorders) نفسیاتی امراض معدی

18.2.6.1. Nafsiyāti Waja' al-Fuwād (Functional chest pain) نفسیاتی وجع الفواد

18.2.6.2. Nafsiyāti Hurqat al-Mi'da (Functional heartburn) نفسیاتی حرقت المعدۃ

18.2.6.3. Nafsiyāti Sū'al-Haḍm (Functional Dyspepsia) نفسیاتی سوء الہضم

18.2.6.4. Rumination syndrome رومینیشن سنڈروم

18.2.7. Insāni Mi'wi microbiome: iski ahmiyat aur Mo'āljāti itlāq (Human gut microbiome; its Importance and therapeutic application) انسانی معوی مائکروبایوم: اسکی اہمیت اور معالجاتی اطلاق

References: 1,4,5,8,10,21,27,28,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO7	Describe the diseases of the stomach, their types and underlying etiopathogenesis and pathophysiology, clinical presentation diagnosis, and investigations	1	Lecture	CC	Knows-how	L&PPT ,L&GD
CO1,CO2, CO3,CO7	Describe recent advancements and guidelines for managing stomach diseases including functional gastrointestinal disease	1	Lecture	CAN	Knows-how	L,L&PPT
CO1,CO2, CO3,CO7	Evaluate treatment principles for Diseases of Stomach and their mechanisms of action, indications, and side effects, and apply evidence-based principles to guide patient care.	1	Lecture	CAN	Knows-how	L&GD,L&PPT
CO1,CO2, CO3,CO7	Elicit a detailed history, perform a comprehensive general physical and abdominal examination, and differentiate based on clinical presentation, to establish clinical diagnosis for Diseases of Stomach	3	Practical18.3	PSY-GUD	Shows-how	CBL,D-BED,D
CO1,CO2, CO3,CO7	Demonstrate the indications, contraindications, and interpretations of required diagnostic tests to confirm clinical diagnosis and demonstrate principles of treatment for Diseases of Stomach	3	Practical18.4	PSY-GUD	Shows-how	D,D-BED,CBL

CO1,CO2, CO3,CO7	Conduct a detailed history and examinations, differential diagnosis, investigations, diagnosis, and principles of treatment for diseases of the stomach.	3	Experiential-Learning18.4	PSY-MEC	Does	W,RLE,SIM,PBL
CO1,CO2, CO3,CO7	Analyze the literature Critically to acquire advanced knowledge and apply evidence-based principles to guide patient care and explain the Principles of Treatment for stomach diseases.	3	Experiential-Learning18.5	PSY-MEC	Does	PBL,TPW,JC,DIS
CO1,CO2, CO3,CO7	Formulate a personalized treatment plan based on the patient's condition, comorbidities, and preferences. Educate patients on lifestyle modifications, and medication use. Address patients' concerns, and provide reassurance for Diseases of Stomach	3	Experiential-Learning18.6	PSY-MEC	Does	TBL,RLE,PBL,D-BED,PER

Unit 3 Amrāz-i-Am‘ā’ Daqīq (Diseases of small intestines) امراض امعاء دقیق

18.3.1. Ishāl (Diarrhoea) اسہال

18.3.1.1. Dharab-o-Khilfa ذرب وخلفہ

18.3.1.2. Zalq al-Am‘ā’ (Lienteric diarrhoea) زلق الامعاء

18.3.1.3. Hayḍa (Gastroenteritis) ہیضہ

18.3.1.4. Eosinophilic gastroenteritis ایسنوفلک ہیضہ

18.3.1.5. Ishaal Mi‘dī اسہال معدی

18.3.1.6. Ishaal Mi‘wī Bilā Saḥaj اسہال معوی بلا سحج

18.3.2. Amrāz Jadhb (Disorders of Absorption) امراض جذب

18.3.2.1. Coeliac disease سیلیک مرض

18.3.2.2. Tropical sprue ٹروپیکل اسپرو

18.3.2.3. Small bowel bacterial overgrowth امعاء صائم میں جرثومہ کی زیادتی

18.3.2.4. Protein-losing enteropathy پروٹین لوزینگ اینٹیروپیتھی

18.3.2.5. Lactose intolerance لیکٹوزانٹولیرنس

18.3.2.6. Food allergy حساسیت غذاء

References: 1,4,26,27,28,29

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO7	Describe the mechanisms of intestinal digestion, absorption, and motility.	1	Lecture	CC	Knows-how	L&PPT ,L
CO1,CO2, CO3,CO7	Describe the diseases of the Small Intestine, their types and underlying etiopathogenesis and pathophysiology, clinical presentation clinical diagnosis, and investigations.	2	Lecture	CE	Knows-how	L,L&PPT
CO1,CO2, CO3,CO7	Evaluate treatment principles for diseases Small Intestine and their mechanisms of action, indications, and side effects, and apply evidence-based principles to guide patient care.	1	Lecture	CC	Knows-how	L,L&PPT
CO1,CO2, CO3,CO7	Demonstrate the detailed history taking, perform a comprehensive general physical and abdominal examination, and differentiate based on clinical presentation, to establish the clinical diagnosis of diseases of the small Intestine.	4	Practical18.5	PSY-GUD	Shows-how	CBL,D,D-BED
CO1,CO2, CO3,CO7	Demonstrate the indications, contraindications, and interpretations of required diagnostic tests to confirm clinical diagnosis and demonstrate principles of treatment for diseases Small Intestine	4	Practical18.6	PSY-GUD	Shows-how	D-BED,CBL
CO1,CO2, CO3,CO7	Conduct a detailed history and examinations, differential diagnosis, investigations, diagnosis, and principles of treatment for diseases of small intestine.	3	Experiential-Learning18.7	PSY-MEC	Does	D-BED,TBL,TPW,W,CD

CO1,CO2, CO3,CO7	Analyze the literature critically to acquire advanced knowledge and apply evidence-based principles to guide patient care and explain the Principles of Treatment for diseases small Intestine	3	Experiential-Learning18.8	PSY-MEC	Does	CBL,D-BED,JC,CD,PBL
CO1,CO2, CO3,CO7	Formulate a personalized treatment plan based on the patient's condition, comorbidities, and preferences. Educate patients on lifestyle modifications, and medication use. Address patients' concerns, and provide reassurance for diseases for small intestine.	3	Experiential-Learning18.9	PSY-MEC	Does	W,SIM,RLE,CD,RP
Practical Training Activity						
Practical Training 18.1 Clinical Diagnosis of diseases of stomach						
Total Learning Hours (3) Activity 1: Case-based demonstration (1 hr) The teacher/mentor will discuss and demonstrate how to take a proper history and perform a Physical Examination, including Inspection, Palpation, Percussion, and Auscultation on the Patient at the Bedside. Activity 2: Summarization of key concepts by teacher (1 hr) The teacher shall summarize the key concepts covered in the practical Activity 3: Hands-on training (1 hr) The students shall perform and demonstrate hands-on examination under the supervision of the teacher.						
Practical Training 18.2 Investigations and Treatment for diseases of stomach						
Total Learning Hours (3)						

Activity 1: Demonstration on how to choose a proper investigation and formulate a line of treatment (1 hr) The teacher/mentor will explain how to choose the proper investigation and confirm the diagnosis based on investigations relevant to the specific case of diseases of the stomach and how to formulate a line of treatment in the particular case of diseases of the stomach. Activity 2: Summarization of key concepts by teacher (1 hr) The teacher shall summarize the key concepts covered in the practical Activity 3: Demonstration by students (1 hr) The students will be asked to demonstrate the same.
Practical Training 18.3 Clinical Diagnosis of diseases of stomach
Total Learning Hours (3) Activity 1: Clinical Demonstration (1 hr) The teacher/ mentor will discuss and demonstrate how to take a detailed history perform a comprehensive general physical and oral examination and differentiate based on clinical presentation, to establish a clinical diagnosis Activity 2: Hands-on training (1 hr) The students will demonstrate the same under the supervision the teacher Activity 3: Summarization and correction session (1 hr) The teacher shall summarize the key concepts covered in the practical and correct any mistake done by student.
Practical Training 18.4 Investigations and Principles of treatment for diseases of stomach
Total Learning Hours: 3 Activity 1: Investigation and treatment plan demo (1 hr) The teacher/ mentor will discuss the indications, contraindications, and interpretations of required diagnostic tests for Diseases of the stomach to confirm clinical diagnosis and demonstrate principles of treatment

Activity 2: Hands-on training for investigations and treatment plan (1 hr) The students will given a specific case scenario of disease of stomach and will be asked to propose required investigations and write a treatment plan Activity 3: Sumamrization and clarification session (1 hr) The teacher shall summarize the key concepts covered in the practical and clarify the doubts and mistakes done by students.
Practical Training 18.5 Clinical Diagnosis of diseases of small intestine
Total Learning Hours (4) Activity: Discussion and Demonstration of clinical diagonsis of small intestinal diseases (2 hrs) The teacher/mentor will discuss and demonstrate how to take a proper history and perform a Physical Examination including Inspection, Palpation, Percussion, and Auscultation on the Patient at the Bedside. Activity 2: Practical demonstration by the student (1 hr) The students shall demonstrate the same history taking and clinical examination of the patients under the supervision of the teacher Activity 3: Conclusion session (1 hr) The teacher shall summarize the key concepts covered in the practical and conclude by correcting the mistakes
Practical Training 18.6 Investigations and Treatment for diseases of small intestine
Total Learning Hours (4) Activity 1: Discussion on investigations and treatment (1 hr) The teacher/mentor will discuss the indications, contraindications, and interpretations of required diagnostic tests for Diseases of the Small Intestine to confirm clinical diagnosis and demonstrate principles of treatment Activity 2: Hands-on training Session (2 hrs) The students do hands on training to propose and interpret investigations and formulate line of treatment Activity 3: Summarization and conclusion session (1 hr) The teacher shall summarize the key concepts covered in the practical and give their conclusion and remarks

Experiential Learning Activity
Experiential-Learning Learning 18.1: Clinical Diagnosis, investigations and treatment of diseases of stomach
Total Learning Hours (3) Activity 1: Case -based learning (2 hrs) The student shall take a proper history, perform a General Physical and Systemic examination, advise for relevant investigation, and interpret to confirm the diagnosis of diseases of the stomach and principles of treatment in OPD or IPD and Note all in a Logbook. Activity 2: Case Presentation (1 hr) The student may record the details of history and examination and present in the departmental seminar presentation to develop presentation and teaching skills
Experiential-Learning Learning 18.2: Treatment of stomach diseases
Total Learning Hours (3) Activity 1: Journal Club session (1 hr) Conduct a journal club session reviewing recent research on stomach diseases, critically appraising methodology, results, and treatment implications. Activity 2: Literature review assignments (1 hr) Organize group literature review assignments to summarize current evidence-based treatment strategies for specific stomach disorders and present to peers. Activity 3: Case-based disucssion (1 hr) Engage in case-based discussions integrating literature findings to formulate and justify treatment plans according to latest evidence for stomach diseases.
Experiential-Learning Learning 18.3: Treatment and Patient education for diseases of stomach
Total learning Hours: 2 The student shall formulate a personalized treatment plan and line of treatment and explain the same to the patient. Educate how to modify life style to prevent stomach diseases and address patients' concerns, and provide reassurance.

or The student may demonstrate the same in IPD/OPD and present in the departmental seminar presentation or teaching to his peers, juniors and undergraduate to develop presentation and teaching skills
Experiential-Learning Learning 18.4: Clinical Diagnosis, investigatios and Principles of treatment for diseases of stomach
Total Learning Hours (3) Activity 1: Case-based diagnosis (1 hr) Studets will Perform detailed history-taking and physical examination of patients presenting with stomach complaints, emphasizing symptom analysis and relevant signs. Activity 2: Investigational approach for the diagnosis (1 hr) Participate in small group case discussions to develop differential diagnoses, choose appropriate investigations, and interpret results for stomach diseases. Activity 3: Case presentation (1 hr) Present patient cases during clinical rounds to discuss diagnosis, evidence-based treatment principles, and personalized management plans for stomach disorders.
Experiential-Learning Learning 18.5: Principles of Treatment for stomach diseases
Total Learning Hours (3) Activity 1: Journal Club session (1 hr) Lead a journal club session where students critically appraise recent research articles on stomach diseases and discuss their impact on treatment guidelines. Activity 2: Literature review session on the treatment of stomach diseases (1 hr) Assign small groups to conduct literature reviews on specific stomach disorders, summarize evidence-based treatment approaches, and present their findings. Activity 3: Case-based discussion (1 hr) Facilitate case-based discussions integrating current research evidence to formulate and justify treatment plans for stomach diseases.

Experiential-Learning Learning 18.6: Treatment and Patient Education for diseases of Stomach
Activity 1: Analysis for personalized treatment plan (1 hr) Analyze diverse patient cases with stomach diseases, incorporating comorbidities and patient preferences, to create personalized treatment plans in small groups. Activity 2: Counseling session (1 hr) Conduct patient counseling sessions focusing on lifestyle advice, medication instructions, and addressing patient concerns with empathy and reassurance. Activity 3: Role play exercise (1 hr) Engage in role-play exercises to practice communicating treatment plans, lifestyle modifications, and managing common patient questions and anxieties about stomach diseases.
Experiential-Learning Learning 18.7: Diagnosis and Management of diseases of small intestine
Total Learning Hours (3) Activity 1: Clinical Round-up in the hospital (1 hr) Perform detailed history-taking and physical examination of patients presenting with small intestine symptoms, focusing on symptom patterns and relevant clinical signs in IPD or OPD of the hospital. Activity 2: Group Discussion (1 hr) Discuss in groups to analyze clinical cases, develop differential diagnoses, select appropriate investigations, and interpret results for small intestine diseases. Activity 3: Case presentation (1 hr) Present clinical cases in faculty-led rounds or departmental seminar to discuss diagnosis, treatment principles, and evidence-based management plans for small intestine disorders
Experiential-Learning Learning 18.8: Treatment plan and Education of the patient for diseases of Small Intestine
Total Learning Hours (3)

Activity 1: Treatment plan workshop (1 hr) Develop personalized treatment plans for small intestine diseases in case-based group discussions, considering patient comorbidities and preferences. Activity 2: Patient counselig session (1 hr) Conduct patient counseling sessions focusing on lifestyle advice, medication instructions, and addressing patient concerns with empathy and reassurance. Activity 3: Role-play (1 hr) Role-play scenarios to practice explaining treatment plans, lifestyle changes, and answering common patient questions about small intestine disorders.
Experiential-Learning Learning 18.9: Principles of Treatment for diseases Small Intestine
Total Learning Hours (3) Activity 1: Critical Analyze the literature (1 hr) Analyze the literature critically to acquire advanced knowledge and apply evidence-based principles to guide patient care and explain the principles of treatment for diseases of the small intestine." Activity 2: Journal Club session (1 hr) Students will conduct a journal club session where they will critically appraise recent research articles on small intestine diseases and discuss implications for treatment. Activity 3: Group discussion (1 hr) Students will engage in case-based discussions, integrating the latest research evidence to formulate and justify treatment plans for small intestine diseases.
Modular Assessment

Assessment	**Hour**
Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per table 6 C.	4

Directly observed Clinical Examination of a patient of Gastric or Duodenal diseases. (50 Marks) • History Taking / Communication Skills (15 Marks) • Clinical Examination / Procedural Skills (15 Marks) • Clinical Reasoning / Interpretation (10 Marks) • Decision-Making / Management Plan (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any of the experiential as portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)	

Semester No : 4

Module 19 : Amrāz-i-Nizām-i-Mi'da wa Am'ā' Zerīn (Diseases of Lower Gastrointestinal System) امراض نظام معدہ وامعاء زیریں

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describe the Diseases of the Lower Gastrointestinal System, their etiopathogenesis, pathophysiology, manifestations, investigations, and management.

2. Demonstrate evaluation of the patients by history taking, physical examination, and investigations of the Diseases of the Lower Gastrointestinal System and explain the management.

3. Appraise the treatment guidelines for various Diseases of Lower Gastrointestinal System diseases and acquire presentation and teaching skills.

Unit 1 Amrāz-i-Ta'diya wa al'iisabat bialdīdān wa Jurūḥ Iflās al-Dam (Diseases of infections, infestation, and ischaemic injury) امراض تعدیہ والایصابات بالدیدان وجروح الافلاس الدم

19.1.1. Ta'diya wa al'iisabat bi al-dīdān (Infections and Infestation) تعدیہ والایصابات بالدیدان

19.1.2. Zaḥīr Am'ā' wa Aqsām (Dysentery, Giardiasis, Amoebiasis) زحیر امعاء واقسام

19.1.3. Diqq-i-Am'ā' (Intestinal Tuberculosis) دق امعاء

19.1.4. Dīdān al-Am'ā' (worm infestations) دیدان امعاء

19.1.5. Jurūḥ Iflās al-Am'ā' (Ischaemic Gut Injury: Acute small bowel ischemia, Acute colonic ischemia, Acute Mesenteric Ischaemia (AMI), Chronic Mesenteric ischemia) جروح افلاس الامعاء

References: 4,5,8,10,14,17,21,24,27,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO4, CO7	Describe diseases of infections and infestation of the intestine and diseases due to ischaemic injury and explain etiopathogenesis, pathophysiology, manifestations, and complications.	1	Lecture	CC	Knows-how	L&PPT ,L_VC,L
CO1,CO2, CO3,CO4, CO7	Discuss differential and clinical diagnosis and advanced diagnostic tools to confirm the clinical diagnosis for diseases of infections and infestation of the intestine and diseases due to ischaemic injury.	1	Lecture	CC	Knows-how	EDU,L&PPT ,L_VC
CO1,CO2, CO3,CO4, CO7	Appraise, treatment principles and their mechanisms of action, indications, and side effects, and apply evidence-based principles to guide patient care for diseases of infections and infestation of the intestine and diseases due to ischaemic injury	1	Lecture	CE	Knows-how	L&PPT ,DIS,EDU
CO1,CO2, CO3,CO4, CO7	Demonstrate and elicit a detailed history, perform a comprehensive general physical and abdominal examination, and differentiate based clinical presentation to establish a clinical diagnosis for diseases of infections and infestation of the intestine and diseases due to ischaemic injury	3	Practical19.1	PSY-GUD	Shows-how	CBL,EDU,CD,D-BED
CO1,CO2, CO3,CO4, CO7	Demonstrate the indications, contraindications, and interpretations of required diagnostic tests for the Diseases of infections, infestation, and ischaemic injury to confirm clinical diagnosis and demonstrate treatment principles.	3	Practical19.2	PSY-GUD	Shows-how	CBL,D-BED,L_VC

CO1,CO2, CO3,CO4, CO7	Perform a detailed history taking and examinations, differential diagnosis, investigations, diagnosis, and principles of treatment for intestinal infections, infestations, and ischaemic injury	3	Experiential-Learning19.1	PSY-MEC	Does	PBL,TPW,PER,D-BED,RLE
CO1,CO2, CO3,CO4, CO7	Analyze the literature critically to acquire advanced knowledge and apply evidence-based principles to guide patient care and explain the Principles of treatment for diseases of infections and infestation of the intestine, and diseases due to ischaemic injury	3	Experiential-Learning19.2	PSY-MEC	Does	JC,LS
CO1,CO2, CO3,CO4, CO7	Formulate a personalized treatment plan based on the patient's condition, comorbidities, and preferences. Educate patients on cleanliness and practice of hygiene to prevent disease and medication use. Address patients' concerns, and provide reassurance for diseases of infections and infestation of the intestine and diseases due to ischaemic injury	3	Experiential-Learning19.3	PSY-MEC	Does	L&PPT ,PBL,D-BED

Unit 2 Amrāz-i-Iltihab, Tasaddud wa Nafsiyati Amrāz (Diseases of inflammation, obstruction, and functional disorders امراض التہاب، تسدد و نفسیاتی امراض

19.2.1. Waram, Saḥaj wa Qurūḥ Am‘ā’ (Inflammatory Bowel Disease) ورم، سحج و قروح امعاء

19.2.1.1. Warme Qawlon Qarhi (Ulcerative colitis) ورم قولون قرحی

19.2.1.2. Crohn'sdisease کرونس ڈیز

19.2.2. Tasaddud-i-Am‘ā’ (Intestinal Obstruction) تسدد امعاء

19.2.3. Waja‘ al-Am‘ā’ (Intestinal Colic) وجع الامعاء

19.2.3.1. Maghṣ (Tenesmus/ Gripes) مغص

19.2.3.2. Īlā’ūs (severe colicky pain of small intestine) ایلاؤس

19.2.3.3. Qūlanj (Large intestinal colic) قولنج

19.2.4. Amraz Qolon Hirki (Motility Disorders of Colon) امراض قولون حرکی: Ḥād Insdād-i- Kādhib Qolon (Acute colonic pseudo-obstruction) حاد انسداد کاذب قولون

19.2.5. Dhūsanṭāriyā / Ishāl al-Dam (Bloody diarrhoea, Lower GI Bleeding, Malena) ذوسنطاریا/اسھال الدم

19.2.6. Nafsiyāti Amrāz Am'ā' Zeri (Functional Gastrointestinal Disorders of Lower GIT)

19.2.6.1. Irritable bowel syndrome اِرّیٹیبل بوویل سنڈروم

19.2.6.2. Nafsiyāti Qabz (Functional constipation) نفسیاتی قبض

19.2.6.3. Nafsiyāti Ishāl (Functional diarrhea) نفسیاتی اسہال

19.2.6.4. Nafsiyāti Nafakh-i-Shikam (Functional abdominal bloating/distension) نفسیاتی نفخ شکم

References: 4,5,8,10,27,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO4, CO7	Describe the diseases of inflammation, obstruction, and functional disorders of lower GIT and explain underlying etiopathogenesis and pathophysiology, manifestations, and complications.	1	Lecture	CC	Knows-how	L_VC,L&PPT
CO1,CO2, CO3,CO4, CO7	Discuss differential and clinical diagnosis and recent advancements and guidelines for the diagnosis to confirm the clinical diagnosis for diseases of inflammation, obstruction, and functional disorders of lower GIT	1	Lecture	CE	Knows-how	LRI,L_VC,L&PPT
CO1,CO2, CO3,CO4, CO7	Apprise Principles of Treatment including Ilaj bilTadbeer and Ilaj bil Dawa and their mechanisms of action, indications, and side effects and apply evidence-based principles to guide patient care	1	Lecture	CAP	Knows-how	L&PPT ,L_VC
CO1,CO2, CO3,CO4, CO7	Demonstrate a detailed history taking and elicit a comprehensive general physical and abdominal examination, and differentiate based on clinical presentation, to establish clinical diagnosis.	3	Practical19.3	PSY-GUD	Shows-how	D-BED,CD,CBL

CO1,CO2, CO3,CO4, CO7	Demonstrate the indications, contraindications, and interpretations of required diagnostic tests to confirm clinical diagnosis and demonstrate treatment principles.	3	Practical19.4	PSY-GUD	Shows-how	CBL,D-BED,EDU
CO1,CO2, CO3,CO4, CO7	Conduct a detailed history and examinations, differential diagnosis, investigations, diagnosis, and principles of treatment for diseases of the intestine.	3	Experiential-Learning19.4	PSY-MEC	Does	D-BED,PBL,CD
CO1,CO2, CO3,CO4, CO7	Analyze the literature Critically to acquire advanced knowledge and apply evidence-based principles to guide patient care and explain the Principles of Treatment including Ilaj bilTadbeer and Ilaj bil Dawa in intestinal diseases.	3	Experiential-Learning19.5	PSY-MEC	Does	TBL,JC,LS
CO1,CO2, CO3,CO4, CO7	Formulate a personalized treatment plan based on the patient's condition, comorbidities, and preferences. Educate patients on lifestyle modifications, and medication use. Address patients' concerns, and provide reassurance for intestinal diseases.	3	Experiential-Learning19.6	PSY-MEC	Does	D-BED,PBL

Unit 3 Amrāz-i-Maq'ad, Zāyad A'or wa Bāritūn (Diseases of Anorectum, Appendix and Peritoneum) امراض مقعد، زائد اعور وباریطون

19.3.1. Constipation and Disorders of Defecation: Qabḍ قبض/I'tiqāl al-Baṭn اعتقال البطن/Ḥuṣr حصر/Iḥtibās al-Baṭn احتباس البطن/Iḥtibās al-Ṭabī'a احتباس الطبیعۃ/I'tiqāl al-Ṭabī'a اعتقال الطبیعۃ/Imsāk al-Baṭn/ امساک البطن/ Ehtibās Thufl احتباس ثفل/ Hirschsprung's disease ہرسچ پرنگس ڈیسیز

19.3.2. Amrāz Mlq'ad wa Am'ā Mustaqīm (Anorectal Disorders) امراض مقعد وامعاء مستقیم

19.3.2.1. Bawāsīr (Haemorrhoids) بواسیر

19.3.2.2. Ḥikka al-Maq'ad (Pruritus ani) حکۃ المقعد

19.3.2.3. Shiqāq al-Maq'ad (Anal fissure) شقاق المقعد

19.3.2.4. Nawāṣīr wa Nawāṣīr Nafiza (Anorectal abscesses, and fistula in ano) نواصیر ونواصیر نافذہ .

19.3.2.5. Waram al-Maq'ad (Proctitis) ورم المقعد

19.3.3. Saṛtān Am'ā (Tumours of the colon and rectum) سرطان امعاء

19.3.4. Polyps and polyposis syndromes (Familial adenomatous polyposis, Peutz–Jeghers syndrome. Diverticulosis) پولپس اینڈ پولیپوسس سنڈروم

19.3.5. Iltihāb Zāyad al-Dūdiya (Appendicitis) التہاب الزائدہ الدودیہ

19.3.6. Waram Bāritūn (Peritonitis) ورم باریطون

References: 4,7,21,25,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO4, CO7	Describe the diseases of Diseases of Anorectum, Appendix, and Peritoneum and explain underlying etiopathogenesis and pathophysiology, manifestations and complications.	1	Lecture	CC	Knows-how	L_VC,L&GD
CO1,CO2, CO3,CO4, CO7	Apprise differential and clinical diagnosis and recent advancements and guidelines for the diagnosis to confirm the clinical diagnosis for diseases of inflammation, obstruction, and functional disorders of lower GIT	2	Lecture	CE	Knows-how	L_VC,L&PPT ,D-BED
CO1,CO2, CO3,CO4, CO7	Discuss Principles of Treatment and their mechanisms of action, indications, and side effects and apply evidence-based principles to guide patient care for diseases of inflammation, obstruction, and functional disorders of lower GIT	1	Lecture	CAP	Knows-how	D-BED,L&GD,L&PPT
CO1,CO2, CO3,CO4, CO7	Elicit a detailed history, perform a comprehensive general physical and abdominal examination, and differentiate based on clinical presentation, to establish clinical diagnosis for diseases of inflammation, obstruction, and functional disorders of lower GIT	4	Practical19.5	CC	Shows-how	D-BED,D,CBL

CO1,CO2, CO3,CO4, CO7	Illustrates the indications, contraindications, and interpretations of required diagnostic tests to confirm clinical diagnosis and demonstrate treatment principles for diseases of inflammation, obstruction, and functional disorders of lower GIT	4	Practical19.6	PSY-MEC	Shows-how	D-BED,CBL,CD,EDU
CO1,CO2, CO3,CO4, CO7	Conduct a detailed history and examinations, differential diagnosis, investigations, diagnosis, and treatment principles for diseases of inflammation, obstruction, and functional disorders of lower GIT	3	Experiential-Learning19.7	PSY-MEC	Does	DL,PBL,PER,D-BED
CO1,CO2, CO3,CO4, CO7	Analyze the literature Critically to acquire advanced knowledge and apply evidence-based principles to guide patient care and explain the Principles of Treatment for diseases of inflammation, obstruction, and functional disorders of lower Gastro-Intestinal Tract.	3	Experiential-Learning19.8	PSY-MEC	Does	TPW,SY,JC,LS
CO1,CO2, CO3,CO4, CO7	Formulate a personalized treatment plan based on the patient's condition, comorbidities, and preferences. Educate patients on lifestyle modifications, and medication use. Address patients' concerns, and provide reassurance for diseases of inflammation, obstruction, and functional disorders of lower GIT	2	Experiential-Learning19.9	PSY-MEC	Does	PER,PrBL,D-BED

Practical Training Activity

Practical Training 19.1 Clinical Diagnosis for diseases of infection, infestation and ischaemic injury of the intestine

Total Learning Hours (3)

Activity 1: Bedside Demonstration of clinical examination (1 hr)

The teacher/ mentor will discuss and demonstrate how to take a proper history and perform a Physical Examination including Inspection, Palpation, Percussion, and Auscultation on the Patient of ischaemic injury of intestine at the bedside.

Activity 2: Examination by the students (1 hr) The students shall demonstrate supervised examination of patient of ischaemic injury of intestine at the bedside. Activity 3: Summarization by teacher (1 hr) The teacher shall summarize the key concepts covered in the practical and clear the doubts and recitfy the mistakes done by students.
Practical Training 19.2 Investigations and Treatment for infections, infestations, and ischaemic injury of intestine
Total Learning Hours (3) Activity 1: Investigation and Treatment proposal workshop (1 hr) The teacher/mentor will explain how to choose the proper investigation and confirm the diagnosis based on investigations relevant to the specific case of GI diseases and how to formulate a line of treatment in the particular Diseases of infections, infestation, and ischaemic injury. Activity 2: Hands-on training session (1 hr) The students shall propose required investigations and formulate a treatment plan Activity 3: Summarization and conclusion session (1 hr) The teacher shall summarize the key concepts covered in the practical and conclude the session by clarifying the doubts and mistakes.
Practical Training 19.3 Clinical Diagnosis of inflammatory and obstructive diseases of lower gastrointestinal tract
Total Learning Hours (3) Activity 1: Bedside demonstration (1 hr) The teacher/mentor will discuss and demonstrate how to take a detailed history, perform a comprehensive general physical and oral examination and differentiate based on clinical presentation, to establish a clinical diagnosis Activity 2: Hands-on training (1 hr) The students shall practice and demonstrate clinical eaxmination on patient lower gastrointestinal diseases. Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical

Practical Training 19.4 Investigations and treatment for inflammatory and obstructive diseases of lower gastrointestinal tract
Total Learning Hours (3) Activity 1: Investigations, interpretation and treatment plan session (1 hr) The teacher/mentor will discuss the indications, contraindications, and interpretations of required diagnostic tests for Diseases of inflammation, obstruction, and functional disorders to confirm clinical diagnosis and demonstrate principles of treatment Activity 2: Hands-on training session (1 hr) Students shall suggest required investigations and expected finding for the diagnosis and formulate treatment plan Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical, clear the doubts and recify the mistakes done by students during hands-on training session.
Practical Training 19.5 Clinical diagnosis of diseases of lower gastrointestinal tract
Total Learning Hours (4) Activity 1: Bedside demonstration (1 hr) The teacher/mentor demonstrate how to take a proper history and perform a Physical Examination including Inspection, Palpation, Percussion, and Auscultation on the Patient at the Bedside. Activity 2: Hands-on training session (2 hrs) The students shalll do a hand-on training to demonstrate the same under the supervision of a teacher. Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical, clear the doubts and rectify the mistakes done during hand-on training session.
Practical Training 19.6 Investigations and treatment for diseases of lower gastrointestinal tract
Total Learning Hours (4)

Activity 1: Case-based management plan (1 hr) The teacher/mentor will discuss the indications, contraindications, and interpretations of required diagnostic tests for Diseases of Anorectum, Appendix, and Peritoneum to confirm clinical diagnosis and demonstrate principles of treatment Activity 2: Hands-on training (2 hr) Students shall propose the required investigations, interpret the reports and formulate the treatemnt plan for lower GI diseases. Activity 3: (1 hr) The teacher shall summarize the key concepts covered in the practical
Experiential Learning Activity
Experiential-Learning Learning 19.1: Clinical Diagnosis and Management of intestinal infections, infestation, and ischaemic injury
Total Learning Hours (3) Activity 1: Case-based Diagnosis and Management (2 hrs) The student shall take a proper history, perform a General Physical and Systemic examination, advise for relevant investigation, and interpret to confirm the diagnosis of intestinal infections, infestation, and ischaemic injury and principles of treatment in OPD or IPD and Note all in a Logbook. Activity 2: Case Presentation (1 hr) The student may demonstrate the same in IPD/OPD and present in the departmental seminar presentation or teaching to his peer, juniors and undergraduate to develop presentation and teaching skills.
Experiential-Learning Learning 19.2: Treatment of diseases of infection, infestation and ischaemic injury of intestine
Total Learning Hours (3) Activity 1: Literature survey (2 hrs) The student shall survey the classical literature (books) and advanced guidelines (online databases for medical journals) and establish Principles of Treatment including Ilaj bilTadbeer and Ilaj bil Dawa.

Activity 2: Seminar Presentation (1 hr) The student may present in the departmental seminar presentation or teaching to his peer, juniors and undergraduate to develop presentation and teaching skills.
Experiential-Learning Learning 19.3: Treatment and Patient Education for intestinal infection and infestation and ischaemic injury
Total Learning Hours (3) Activity 1: Case-based personalized treatment plan workshop (1 hr) The student shall formulate a personalized treatment plan and line of treatment for specific cases of intestinal infection and infestation and ischaemic injury. Activity 2: Patient Education and Counseling Session (1 hr) Students shall educate the patient on how to modify their lifestyles to prevent infectious diseases of the intestine, address patients' concerns, and provide reassurance. Activity 3: Seminar Presentation (1 hr) The student may demonstrate the same to peer/ juniors and present in the departmental seminar presentation.
Experiential-Learning Learning 19.4: Clinical Diagnosis and treatment for intestinal diseases
Total Learning Hours (3) Activity 1: Case-based diagnosis (2 hrs) Students shall perform clinical examination, advise for relevant investigation, and interpret to confirm the diagnosis of diseases of inflammation, obstruction, and functional disorders and formulate line of treatment. Activity 2: Presentation (1 hr) The student may present in the departmental seminar presentation or teaching to his peer, juniors and undergraduates.
Experiential-Learning Learning 19.5: Principles of Treatment for Intestinal diseases
Total Learning Hours (3)

Activity 1: Journal Club session (1 hr) Conduct a journal club session where students critically evaluate classical Unani texts and modern research articles on intestinal diseases, comparing Ilaj bil Tadbeer and Ilaj bil Dawa with evidence-based approaches. Activity 2: Group Discussion (1 hr) Organize group discussion and presentation in which students analyze case reports and literature on intestinal disorders, outlining treatment strategies that integrate Unani principles with contemporary clinical guidelines. Activity 3: Interactive Seminar presentation (1 hr) Facilitate interactive seminars where students apply findings from both Unani and modern medical literature to justify personalized treatment plans for intestinal diseases, incorporating both regimental therapies and pharmacological interventions.
Experiential-Learning Learning 19.6: Treatment and Patient education for intestinal diseases
Total Learning Hours (3) Activity 1: Preparation of Personalized treatment plan (1 hr) The student shall formulate a personalized treatment plan and line of treatment and explain the same to the patient. Activity 2: Patient Education and Counseling session (1 hr) Educate the patient on how to modify their lifestyles to prevent diseases of inflammation, obstruction, and functional disorders, address patients' concerns, and provide reassurance.or Activity 3: Seminar Presentation (1 hr) The student may present in the departmental seminar presentation or teaching to his peer, juniors and undergraduates.
Experiential-Learning Learning 19.7: Clinical diagnosis, investigations and management of lower gastrointestinal diseases
Total Learning Hours (3)

Activity 1: Case-based diagnois on clinical round (2 hrs) The student shall take a proper history, perform a General Physical and Systemic examination, advise for relevant investigation, and interpret to confirm the diagnosis of diseases of small intestine and principles of treatment in hospital. Activity 2: Seminar Presentation (1 hr) The student may present in the departmental seminar presentation or teaching to his peer, juniors and undergraduates.
Experiential-Learning Learning 19.8: Treatment and Patient Education for diseases of stomach
Total Learning Hours (2) Activity 1: Personalized treatment plan workshop (1 hr) The student shall formulate a personalized treatment plan based on the line of treatment for specific diseases of stomach. Activity 2: Patient Education and Counseling Session (1 hr) Educate the patient on how to modify their lifestyles to prevent diseases of inflammation, obstruction, and functional disorders, address patients' concerns, and provide reassurance.
Experiential-Learning Learning 19.9: Treatment of diseases of lower gastrointestinal tract
Total Learning Hours (3) Acticity 1: Journal Club session (1 hr) Conduct a journal club session where students critically appraise current research articles on inflammatory, obstructive, and functional lower GI disorders, focusing on treatment outcomes and clinical relevance. Activity 2: Projects for evidence based therapeutic strategies (1 hr) Facilitate small group projects to review and present evidence-based guidelines and therapeutic strategies for conditions like IBD, intestinal obstruction, and IBS. Activity 3: Interactive clinical discussions (1 hr) Lead interactive clinical case discussions where students apply recent literature to justify diagnostic decisions and personalized treatment plans for lower GI tract diseases.

Modular Assessment	
Assessment	**Hour**
Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C. Case-based evaluation: (50 Marks) Each student will be given a case history or problem situation to evaluate the patient of GIT Disease covered in this module and create a treatment/ management plan with justification. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any of the experiential as portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)	4
Module 20 : Amrāz-i-Kabid (Diseases of Liver) امراض کبد	
Module Learning Objectives (At the end of the module, the students should be able to) 1. Describe the Applied anatomy and functions of the Liver, Biliary system, and Gallbladder, Overview/ classification, presenting problems, Investigations, and Principles of treatment of diseases of the Liver and Gallbladder. 2. Demonstrate evaluation of the patients by history taking, physical examination of patients of diseases of Liver and Gallbladder and explain the management. 3. Appraise the treatment guidelines for various Liver and Gallbladder diseases and acquire presentation and teaching skills.	

Unit 1 Amrāz-i-Kabid wa Marāra ke Marīz se rujū‘ ka Zābta (Approach to The Patient with Liver, Biliary System, and Gallbladder Disease امراض کبد و مرارہ کے مریض سے رجوع کا ضابطہ

20.1.1. Applied anatomy and functions of the Liver, Biliary system, and Gallbladder. کبد و مرارہ کا اطلاقی تشریح و منافع

20.1.2. Presenting problems and patient evaluation (history, physical examination) موجودہ شکایات اور مریض کا تجزیہ

20.1.3. Investigations and tools for patient evaluation: laboratory and Imaging تفتیشات و ذرائع تشخیص

20.1.4. Abnormal liver function tests and management of abnormal LFTs in asymptomatic patients غیر طبعی ایل ایف ٹی اور اسکا تدارک

20.1.5. Principles of treatment of Liver and Hepatobiliary Disease: nutritional manipulation, pharmacotherapy امراض کبد و مرارہ کا اصول علاج

References: 4,5,10,15,17,21,26,27,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO7	Describe the applied structure and function of the Liver and Gallbladder and comprehend the digestion, and metabolism mechanisms.	1	Lecture	CC	Knows-how	L,L&PPT ,L_VC
CO1,CO2, CO3,CO7	Discuss clinical manifestations their etiology, pathophysiology, differential diagnosis, and diagnostic test for diseases of Liver, Biliary System, and Gallbladder Disease	1	Lecture	CE	Knows-how	PER,L&PPT
CO1,CO2, CO3,CO7	Explain treatment principles and their mechanisms of action, indications, and side effects, and apply evidence-based principles to guide patient care, for diseases of Liver, Biliary System, and Gallbladder Disease	1	Lecture	CK	Knows-how	L&PPT ,L_VC,L&GD
CO1,CO2, CO3,CO7, CO8	Demonstrate history taking, perform a comprehensive general physical and abdominal examination, and differentiate clinical presentation to establish a clinical diagnosis for diseases of the Liver, Biliary System, and Gallbladder Disease	3	Practical20.1	PSY-GUD	Shows-how	PER,CD,D-BED,CBL

CO1,CO2, CO3,CO7, CO8	Demonstrate the indications, contraindications, and interpretations of required diagnostic tests for Liver and Gallbladder Disease to confirm clinical diagnosis and demonstrate treatment principles for diseases of the Liver, Biliary System, and Gallbladder.	3	Practical20.2	PSY-GUD	Shows-how	D-BED,CBL,DL
CO1,CO2, CO3,CO7, CO8	Conduct a detailed history and examinations, differential diagnosis, investigations, diagnosis, and principles of treatment for diseases of the Liver and Gall bladder	3	Experiential-Learning20.1	PSY-MEC	Does	PBL,D-BED,CD
CO1,CO2, CO3,CO6, CO7	Analyze the literature critically to acquire advanced knowledge and apply evidence-based principles to guide patient care and explain the Principles of Treatment, including Ilaj bil Tadbeer and Ilaj bil Dawa for diseases of the Liver and Gallbladder	3	Experiential-Learning20.2	PSY-MEC	Does	JC,L&PPT ,LS
CO1,CO2, CO3,CO7	Formulate a personalized treatment plan based on the patient's condition, comorbidities, and preferences for diseases of the Liver and Gallbladder. Educate patients on lifestyle modifications and medication use. Address patients' concerns and provide reassurance.	3	Experiential-Learning20.3	PSY-MEC	Does	D-BED,CD,SIM,PBL

Unit 2 Waram-i-Kabid wa Yarqān Damwi (Hepatitis and Hyperbilirubinemia) ورم کبد و یرقان دموی

20.2.1. Sū' Mizāj al-Kabid / Sū' i-Mizāj-i-Jigar (Morbid temperament of liver) سوءمزاج کبد/سوءمزاج جگر

20.2.2. Ḍu'f al-Kabid / Ḍu'f-i Jigar (Hepatic insufficiency) ضعف الکبد/ ضعف جگر

20.2.3. 'Izm-i-Kabid (Hepatomegaly) عظم کبد

20.2.4. Suqūt al-Kabid (Hepatic Failure) سقوط کبد

20.2.5. Ta'diya Kabid (Infections of the Liver) تعدیہ کبد

20.2.5.1. Waram al-Kabid / Waram-i-Jigar (Hepatitis - Viral and other forms of hepatitis) ورم الکب/ ورم جگر

20.2.5.2. Dubayla al-Kabid / Dubayla'-i-Jigar (Amoebic and Pyogenic Liver abscess) دبیلۃ الکبد/ دبیلہ جگر

20.2.5.3. Hydatid cysts ہائڈیٹڈ سسٹ

20.2.6. Khud Manā'ti Amrāz-i-Jigar (Autoimmune Liver and Biliary Disease): Khud Manā'ti Waram Jigar (Autoimmune Hepatitis) خودمناعتی ورم جگر,Talayyuf al-Kabid Ibtidāyī (Primary Biliary Cirrhosis) تلیّف الکبد ابتدائی

20.2.7. Maraz-i-Kabid Khumri (Alcoholic Liver Disease) مرض کبد خمری

20.2.8. Tasḥaḥum-i-Kabid (Fatty Liver Disease)

20.2.81.1 تشحم الکبد Ghayr Khumri Tasḥaḥum-i-Kabid (Non-Alcoholic Fatty Liver Disease (NAFLD) غیر خمری تشحم الکبد

20.2.8.2. Istiḥālāti Tasḥaḥum-i-Kabid (Metabolic-associated fatty liver diseases (MAFLD) استحالاتی تشحم الکبد.

20.2.9. Yarqān (Jaundice) یرقان (Pre-hepatic jaundice, Hepatocellular jaundice, Obstructive (cholestatic) jaundice)

20.2.10. Amrāz Dimāgh Kabadi (Hepatic encephalopathy) امراض دماغ کبدی

References: 5,8,10,15,16,27,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO7	Describe Hepatitis and Hyperbilirubinemia and explain underlying etiopathogenesis and pathophysiology, manifestations and complications.	1	Lecture	CC	Knows-how	L&GD,L_VC,L&PPT
CO1,CO2, CO3,CO4, CO7	Discuss differential and clinical diagnosis and recent advancements and guidelines for the diagnosis to confirm the clinical diagnosis for Hepatitis and Hyperbilirubinemia	1	Lecture	CC	Knows-how	L&GD,L&PPT ,EDU
CO1,CO2, CO3,CO7	Discuss Principles of Treatment including Ilaj bilTadbeer and Ilaj bil Dawa and their mechanisms of action, indications, and side effects and apply evidence-based principles to guide patient care	1	Lecture	CE	Knows-how	L&PPT ,PER,L

CO1,CO2, CO3,CO7	Demonstrate a detailed history taking, perform a comprehensive general physical and abdominal examination, and differentiate based on clinical presentation, to establish a clinical diagnosis for Hepatitis and Hyperbilirubinemia	3	Practical20.3	PSY-GUD	Shows-how	CD,D-BED,CBL
CO1,CO2, CO3,CO7	Demonstrate the indications, contraindications, and interpretations of required diagnostic tests to confirm clinical diagnosis and demonstrate treatment principles for Hepatitis and Hyperbilirubinemia	3	Practical20.4	PSY-GUD	Shows-how	D,D-BED,D-M,CBL
CO1,CO2, CO3,CO7	Conduct a detailed history taking and physical examinations, differential diagnosis, investigations, diagnosis, and principles of treatment for Hepatitis and Hyperbilirubinemia	3	Experiential-Learning20.4	PSY-MEC	Does	D-BED,CD,PBL,L&PPT
CO1,CO2, CO3,CO7	Analyze the literature critically to acquire advanced knowledge and apply evidence-based principles to guide patient care and explain the Principles of Treatment in Hepatitis and Hyperbilirubinemia.	3	Experiential-Learning20.5	PSY-MEC	Does	L&PPT ,JC,LS
CO1,CO2, CO3,CO7	Formulate a personalized treatment plan based on the patient's condition, comorbidities, and preferences. Educate patients on lifestyle modifications, and medication use. Address patients' concerns, and provide reassurance for Hepatitis and Hyperbilirubinemia	3	Experiential-Learning20.6	PSY-MEC	Does	D-BED,PER,L&GD

Unit 3 Amrāz-i-Mawrūsi, Talayyif, Sal'āt wa Urūq-i-Kabid (Inherited Diseases, Cirrhosis, Tumors, and Diseases of Vessels of The Liver) امراض موروثی،تلیف،سلعات وعروق کبد

20.3.1. Amrāz-i-Kabid Morūthi (Inherited Liver Diseases) امراض کبد موروثی

20.3.1.1. Haemochromatosis ہیموکرومیٹوسس

20.3.1.2. Hereditary haemochromatosis ہیموکرومیٹوسس موروثی

20.3.1.3. Wilson's disease ولسنز ڈِسیز

20.3.1.4. Alpha1-antitrypsin deficiency قلت الفاا اینٹی ٹرِپسن

20.3.1.5. Gilbert's syndrome گلبرٹ سنڈروم

20.3.2. Talayyuf al-Kabid (Cirrhosis of liver) تلیف الکبد

20.3.3. Sal'āt-i-Kabid (Liver Tumours) سلعات کبد

20.3.3.1. Saraṭān Khalayyat Kabid (Hepatocellular carcinoma) سرطان خلیات کبدی

20.3.3.2. Saraṭān Qanat-i-Ṣafrāwiya Cholangiocarcinoma سرطان قناۃ صفراویہ

20.3.4. Amrāz-i-Urūqi Kabdi (Diseases of vessels of the Liver) امراض عروق کبدی

20.3.4.1. Budd–Chiari syndrome بڈ چیری سنڈروم

20.3.4.2. Portal hypertension پورٹل ہاپرٹینشن

20.3.4.3. Portal vein thrombosis تخثر ورید الکبد

20.3.4.4. Istisqā' Ziqqī (Ascitis) استسقاء زقی

20.3.5. Jurūḥ al Kabid Dawāyi (Drug-induced liver injury) جروح الکبد دوائی

References: 1,2,4

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO7	Describe Inherited Diseases, Cirrhosis, Tumors, and Diseases of Vessels of The Liver and explain underlying etiopathogenesis and pathophysiology, manifestations and complications	2	Lecture	CC	Knows-how	L_VC,L,L&GD
CO1,CO2, CO3,CO7	Discuss differential and clinical diagnosis and recent advancements and guidelines for the diagnosis to confirm the clinical diagnosis for Inherited Diseases, Cirrhosis, Tumors, and Diseases of Vessels of The Liver	1	Lecture	CE	Knows-how	L&PPT ,L

CO1,CO2, CO3,CO7	Appraise Principles of Treatment including and their mechanisms of action, indications, and side effects and apply evidence-based principles to guide patient care for Inherited Diseases, Cirrhosis, Tumors, and Diseases of Vessels of The Liver	1	Lecture	AFT-SET	Knows-how	L,L&PPT
CO1,CO2, CO3,CO7	Demonstrate a detailed history taking, perform a comprehensive general physical and abdominal examination, and differentiate based on clinical presentation, to establish clinical diagnosis for Inherited Diseases, Cirrhosis, Tumors, and Diseases of Vessels of the Liver	4	Practical20.5	PSY-GUD	Shows-how	CD,D-M,CBL,D-BED
CO1,CO2, CO3,CO7	Demonstrate the indications, contraindications, and interpretations of required diagnostic tests to confirm clinical diagnosis and demonstrate treatment principles for Inherited Diseases, Cirrhosis, Tumors, and Diseases of Vessels of The Liver	4	Practical20.6	PSY-GUD	Shows-how	CD,CBL,D-BED
CO1,CO2, CO3,CO7	Conduct a detailed history and examinations, differential diagnosis, investigations, diagnosis, and treatment principles for Inherited Diseases, Cirrhosis, Tumors, and Diseases of Vessels of The Liver	3	Experiential-Learning20.7	PSY-MEC	Does	D-BED,PBL,DL
CO1,CO2, CO3,CO7	Analyze the literature Critically to acquire advanced knowledge and apply evidence-based principles to guide patient care and explain the Principles of Treatment for Inherited Diseases, Cirrhosis, Tumors, and Diseases of Vessels of The Liver	3	Experiential-Learning20.8	PSY-MEC	Does	LS,L&PPT ,JC
CO1,CO2, CO3,CO7	Formulate a personalized treatment plan based on the patient's condition, comorbidities, and preferences. Educate patients on lifestyle modifications, and	2	Experiential-Learning20.9	PSY-MEC	Does	RLE,D,D-BED,PBL

	medication use. Address patients' concerns, and provide reassurance for Inherited Diseases, Cirrhosis, Tumors, and Diseases of Vessels of The Liver					

Practical Training Activity

Practical Training 20.1 Clinical Diagnosis for diseases of Liver, Biliary System, and Gallbladder Disease

Total Learning Hours (3)

Activity 1: Bedside demonstration (1 hr)

The teacher/mentor will discuss and demonstrate how to take a proper history and perform a Physical Examination including Inspection, Palpation, Percussion, and Auscultation on the Patient at the Bedside.

Activity 2: Clinical Diagnosis Practical (1 hr)

Under the supervision of a teacher, students shall take history and perform clinical examination of patients with Liver, Biliary System, and Gallbladder Disease

Activity 3: Summarization and Conclusion (1 hr)

The teacher shall summarize the key concepts covered in the practical, clear the doubts, and rectify the mistakes of the students.

Practical Training 20.2 Investigations and treatment for diseases of the Liver and Biliary System

Total Learning Hours (3)

Activity 1:Management plan demosntration (1 hr)

The teacher/mentor will explain how to choose the proper investigation and confirm the diagnosis based on investigations relevant to the specific case of Liver and Gall bladder disease and how to formulate a line of treatment in the particular case of Liver and Gallbladder Disease.

Activity 2: Management plan workshop (1 hr)

The students shall plan different management plan for specific diseases of liver, and biliary system.

Activity 3: Summarization and Conclusion (1 hr)

The teacher shall sumarize the all sessions, clear doubts and rectify the mistakes

Practical Training 20.3 Clinical Diagnosis for Hepatitis and Hyperbilirubinemia
Total Learning Hours (3) Activity 1: Bedside demonstration of clinical diagnosis (1 hr) The teacher/mentor will discuss and demonstrate how to take a detailed history, perform a comprehensive general physical and oral examination, and differentiate based on clinical presentation, to establish a clinical diagnosis Activity 2: Hands-on training session (1.5 hr) The students shall do supervised history taking and clinical examination to establish clinical diagnosis Activity 3: Summarization (0.5 hr) The teacher shall summarize the key concepts covered in the practical, clear the doubts, and rectify the mistakes of the students
Practical Training 20.4 Principles of treatment for Hepatitis and Hyperbilirubinemia
Total Learning Hours (3) Activity 1: Demnostration by teacher (1 hr) The teacher/mentor will discuss the indications, contraindications, and interpretations of required diagnostic tests for Hepatitis and Hyperbilirubinemia to confirm clinical diagnosis and demonstrate principles of treatment Activity 2: Hands-on training (1 hr) The students will be asked to demonstrate the same Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical
Practical Training 20.5 Clinical Diagnosis for Inherited Diseases, Cirrhosis, Tumors, and Diseases of Vessels of The Liver
Total Learning Hours (4)

Activity 1: Bedside demonstration of clinical diagnosis (2 hrs) The teacher/mentor will discuss and demonstrate how to take a proper history and perform a Physical Examination, including Inspection, Palpation, Percussion, and Auscultation on patients of cirrhosis/ hepatic tumours/ vascular diseases of liver. Activity 2: Hands-on training session (1 hrs) The students shall take a proper history and do the clinical examination to establish a diagnosis under the supervision of a teacher. Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical
Practical Training 20.6 Investigations and Principles of treatment: for Inherited Diseases, Cirrhosis, Tumors, and vascular disease of the Liver
Total Learning Hours (4) Activity 1: Investigation and Management Plan Workshop (1 hr) The teacher/mentor will discuss the indications, contraindications, and interpretations of required investigations for Inherited diseases, Cirrhosis, Tumors, and Diseases of the Vessels of the Liver to confirm clinical diagnosis and discuss the principles of treatment and plan of treatment. Activity 2: Hands-on training session (2 hrs) The students shall propose required investigations and interpret the findings, and formulate a line of treatment and treatment. Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical, clear the doubts, and rectify the mistakes made by students.
Experiential Learning Activity
Experiential-Learning Learning 20.1: Diagnosis and Management of Diseases of the Liver and Gallbladder
Total Learning Hours (3) Activity 1: Case-based Diagnosis (2 hrs)

The student shall take a proper history, perform a General Physical and Systemic examination, advise for relevant investigation, and interpret to confirm the diagnosis of Liver and Gallbladder Disease and principles of treatment in OPD or IPD and Note all in a Logbook. Activity 2: Seminar Presentation (1 hr) The student may present in the departmental seminar presentation or teaching to his peers, junior and undergraduates to develop presentation and teaching skills
Experiential-Learning Learning 20.2: Principles of Treatment of the Liver and Gallbladder diseases
Total Learning Hours (3) Activity 1: Literature survey (2 hrs) The student shall survey the classical literature (books) and advanced guidelines (online databases for medical journals) and establish Principles of Treatment, including Ilaj bil Tadbeer and Ilaj bil Dawa. Activity 2: Teaching and Presentation (1 hr) The student may demonstrate the same in IPD/OPD and present in the departmental seminar presentation or teaching to his peers, junior and undergraduates to develop presentation and teaching skills (1 hr)
Experiential-Learning Learning 20.3: Personalized treatment plan and Patient Education for diseases of the Liver and Gallbladder
Total Learning Hours (3) Activity 1:Personlized treatment plan (1 hr) Personalized treatment plan for diseases of the Liver and Gallbladder The student shall formulate a personalized treatment plan and line of treatment and explain the same to the patient. Activity 2: Patient Education (1 hr) Educate how to modify their lifestyles to prevent Liver and Gallbladder Disease., address patients' concerns, and provide reassurance. Activity 3: Seminar Presentation (1 hr) The student may present in the departmental seminar presentation or teach the peers, juniors or undergraduates.

Experiential-Learning Learning 20.4: Clinical Diagnosis and Management of Hepatitis and Hyperbilirubinemia
Total Learning Hours (3) Activity 1: Case-based diagnosis (2 hrs) The student shall take a proper history, perform a General Physical and Systemic examination, advise relevant investigations, and interpret to confirm the diagnosis of Hepatitis and Hyperbilirubinemia and principles of treatment in OPD or IPD, and note all in a Logbook. Activity 2: Presentation (1 hr) The student may demonstrate the same in IPD/OPD and present in the departmental seminar presentation or teach peers, juniors, and undergraduates
Experiential-Learning Learning 20.5: Principles of Treatment in Hepatitis and Hyperbilirubinemia
Total Learning Hours (3) Activity 1: Literature Survey (2 hrs) The student shall survey classical literature (books) and advanced guidelines (online databases for medical journals), and establish Principles of Treatment, including Ilaj bil Tadbeer and Ilaj bil Dawa. Activity 2: Presentation (1 hr) The student may demonstrate the same in IPD/OPD and present in the departmental seminar presentation or teach peers, juniors, and undergraduates
Experiential-Learning Learning 20.6: Management and Prevention of Hepatitis and Hyperbilirubinemia
Total Learning Hours (3) Activity 1: Formulation of personalized treatment plan (1 hr) The student shall formulate a personalized treatment plan and line of treatment and explain the same to the patient. Activity 2: Patient Education and Counseling session (1 hr) Educate the patient on how to modify their lifestyles to prevent Hepatitis and Hyperbilirubinemia, address patients' concerns, and provide reassurance.

Activity 3: Presentation (1 hr) The student may demonstrate the same in IPD/OPD and present in the departmental seminar presentation or teach peers, juniors and undergraduates
Experiential-Learning Learning 20.7: Clinical Diagnosis and Management of Inherited diseases, Cirrhosis, Tumors, and Diseases of the Vessels of The Liver
Total Learning Hours (3) Activity 1: Case-based diagnosis and Management plan (2 hrs) The student shall take a proper history, perform a General Physical and Systemic examination, advise relevant investigation, and interpret to confirm the diagnosis of Inherited Diseases, Cirrhosis, Tumors, and Diseases of Vessels of The Liver, and principles of treatment in OPD or IPD, and note all in a Logbook. Activity 2: Presentation (1 hr) The student may demonstrate the same in IPD/OPD and present in the departmental seminar presentation or teaching to peers, juniors and undergraduates.
Experiential-Learning Learning 20.8: Principles of Treatment for Inherited Diseases, Cirrhosis, Tumors, and Diseases of the Vessels of the Liver
Total Learning Hours (3) Activity 1: Literature survey (2 hrs) The student shall survey the classical literature (books) and advanced guidelines (online databases for medical journals) and establish Principles of Treatment, including Ilaj bil Tadbeer and Ilaj bil Dawa. Activity 2: Presentation (1 hr) The student may demonstrate the same in IPD/OPD and present in the departmental seminar presentation or teaching to peers, juniors and undergraduates.
Experiential-Learning Learning 20.9: Treatment plan for Inherited Diseases, Cirrhosis, Tumors, and Diseases of the Vessels of the Liver
Total Learning Hours (3) Activity 1: Personalized treatment plan workshop (1 hr) The student shall formulate personalized treatment plans and line of treatment for inherited diseases, Cirrhosis, Tumors, and diseases of the Vessels of the Liver and explain the same to the patient.

Activity 2: Patient Education and Counseling Session (1 hr)

Educate how to modify their lifestyles to prevent Inherited Diseases, Cirrhosis, Tumors, and Diseases of the Vessels of the Liver, address patients' concerns, and provide reassurance.

Activity 3: Presentation (1 hr)

The student may present in the departmental seminar presentation or teach to peers, juniors and undergraduates.

Modular Assessment

Assessment	Hour
Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C. Case-based evaluation: (50 Marks) Each student will be given a case history or problem situation to evaluate the patient with hepatobiliary diseases and create a treatment/ management plan with justification. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or OSCE or Clinical Work Sampling. (50 Marks) • History Taking / Communication Skills (15 Marks) • Clinical Examination / Procedural Skills (15 Marks) • Clinical Reasoning / Interpretation (10 Marks) • Decision-Making / Management Plan (10 Marks)	4

Or Any practical in converted form can be taken for assessment. (25 Marks) and Any of the experiential as portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)	

Semester No : 5

Module 21 : Amrāz-i-Qanāt-i-Ṣafrā, Banqrās wa Ṭiḥāl (Diseases of the Biliary Tract, Pancreas and Spleen) امراض قناۃ صفراء، بانقراس وطحال

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describe applied anatomy, physiology, aetiology, and pathophysiology of diseases affecting the biliary tract, pancreas, and spleen.
2. Conduct a comprehensive patient assessment, including detailed history-taking, physical examination, and accurate diagnosis of diseases of the biliary tract, pancreas, and spleen.
3. Identify the key diagnostic features and analyze the principles of treatment for managing diseases of the biliary tract, pancreas, and spleen effectively.

Unit 1 Jumūd al-Ṣafrā wa Amrāz-i-Ṣafrāwiyya (Cholestatic and Biliary Disease) جمود الصفراء وامراض صفراویہ

21.1.1. Dākhil al-Kabid Amrāz Ṣafrāwiya (Intrahepatic biliary disease) داخل الکبد امراض صفراویہ

21.1.1.1. Iltihābi wa Manā'ti Maraz (Inflammatory and immune disease) التہابی ومناعتی مرض

21.1.1.2. Caroli's disease کیرولیز ڈیز

21.1.1.3. Congenital hepatic fibrosis 21.1.1.4. خلقی کبدی فائبروسس .Cystic fibrosis سسٹک فائبروسس

21.1.2. Khārij al-Kabid Amrāz Ṣafrāwiya (Extrahepatic biliary disease) خارج الکبد امراض صفراویہ

21.1.2.1.Choledochal cysts کولیڈوکل سسٹ

21.1.2.2. Secondary biliary cirrhosis تلیف صفراوی ثانوی

21.1.2.3.Hisātul Marāra (Cholelithiasis/ Gallstones) حصاۃ المرارہ

21.1.2.4.Choledocholithiasis کولیڈوکولیتھیسس

21.1.2.5. Recurrent pyogenic cholangitis ورم صفراوی صدیدی متکرر

21.1.3. Warm-i-Marāra (Cholecystitis) ورم مرارہ

21.1.3.1. Acute cholecystitis ورم مرارہ حاد

21.1.3.2. Chronic cholecystitis ورم مرارہ مزمن

21.1.3.3. Acute cholangitis ورم مجاری صفراویہ

References: 2,4,5,8,10,15,16,17,27,29,30

3A	3B	3C	3D	3E	3F	3G
CO1	Describe the applied structure and function of Biliary system	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Discuss the etiology,pathophsiology,clinical manifestations and diagnostic test for cholestatic and biliary diseases.	1	Lecture	CC	Knows-how	L,L&GD,DIS
CO1,CO2, CO4,CO6, CO7	Discuss advancement and evidence based priciples of traetment of cholestatic biliary diseases	1	Lecture	CC	Knows-how	DIS,L&GD,L&PPT ,L_VC
CO1,CO2, CO4,CO6, CO7	Demonstrate history taking and perform a thorough general physical and abdominal examination to establish a diagnosis of cholestasis and biliary diseases; and differentiate potential diagnosis based on clinical findings	3	Practical21.1	PSY-GUD	Shows-how	CBL

CO1,CO2, CO4,CO6, CO7	Demonstrate the indications, contraindications, and investigations required for diagnosis of intrahepatic and extrahepatic biliary diseases; demonstrate principles of treatment.	3	Practical21.2	PSY-GUD	Shows-how	JC,LRI,CBL
CO1,CO2, CO3,CO4, CO6,CO7	Conduct details history and examination, diffrential diagnosis, investigations, diagnosis and principles of treatment of tumor of gall bladder.	3	Experiential-Learning21.1	PSY-MEC	Does	CBL
CO1,CO2, CO4,CO6, CO7	Formulate a personalized treatment plan based on patient's condition, comorbidities, and preferences for Biliary diseases	3	Experiential-Learning21.2	PSY-MEC	Does	CBL
CO1,CO2, CO4,CO6, CO7	Demonstrate patient-centered care ,ensure clear communication and maintain professional and ethical standars when managing the patients condition.	2	Experiential-Learning21.3	AFT-RES	Does	CBL

Unit 2 Sal'āt Marara wa Qanāt-i-Ṣafrā wa Digar Amrāz-i-Ṣafrāwiyya (Tumors of the Gallbladder and Bile Duct and Other Biliary Diseases) سلعات مرارہ وقناۃ صفراء ودیگر امراض صفراویہ

21.2.1. Sal'āt Marāra wa Majāri Ṣafrā (Tumors of the Gallbladder and Bile Duct) سلعات مرارۃ ومجاری صفراء

21.2.1.1. Sartān Marāra (Carcinoma of the gallbladder) سرطان مرارۃ

21.2.1.2. Sartān Majāri Ṣafrā (Cholangiocarcinoma) سرطان مجاری صفراء

21.2.1.3. Carcinoma at the ampulla of Vater سرطان ایمپولا آف ویٹر

21.2.2. Dīgar Amrāz Ṣafrāwiya (Other Biliary Diseases) دیگر امراض صفراویہ

21.2.2.1. Post-cholecystectomy syndrome

21.2.2.2. Sphincter of Oddi dysfunction

21.2.2.3. Cholesterolosis of the gallbladder

21.2.2.4. IgG4-associated cholangitis.

21.2.3. Pregnancy-Associated Liver Disease

21.2.3.1. Acute cholestasis of pregnancy,

21.2.3.2. Toxemia of pregnancy and HELLP

References: 4,5,8,11,16,17,27,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6	Describe the Applied Anotomy and physiology of the Gall Bladder and Bile Duct.	1	Lecture	CC	Knows-how	L&GD,L_VC,L&PPT
CO1,CO2, CO4,CO6, CO7	Discuss the etiology ,pathophysiology ,clinical manifestations and diagnostic test for tumors of gall bladder, bile duct and other biliary diseases.	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Analyze the literature critically and explain the principles of treatment including for tumors of gall bladder ,bile duct and others biliary diseases and apply evidence based principles to guide patient care.	1	Lecture	CC	Knows-how	L
CO1,CO2, CO4,CO6, CO7	Demonstrate history taking and perform a thorough general physical and diagnostic examination and procedure of tumors of the gall bladder, bile duct, and other biliary diseases.	3	Practical21.3	PSY-GUD	Shows-how	CBL
CO1,CO2, CO4,CO6, CO7	Demonstrate the indications, contraindications, and interpretation of required diagnostic tests for tumors of the gall bladder to confirm clinical diagnosis and demonstrate principles of treatment.	3	Practical21.4	PSY-GUD	Shows-how	CBL

CO1,CO2, CO4,CO6	Conduct a detailed history taking and thorough examination of diseases of bile duct, make differential diagnosis, and propose investigations	2	Experiential-Learning21.4	PSY-MEC	Does	D-BED
CO1,CO2, CO4,CO6, CO7	Formulate a personalized treatment plan in light of the principles of treatment of diseases of gall bladder and bile duct	2	Experiential-Learning21.5	PSY-ADT	Does	CBL
CO1,CO2, CO4,CO6, CO7	Conduct patient education and counseling sessions about the prevention of biliary diseases and tumors of gall bladder, address their concern regarding potential complications, and provide reassurance about the treatment options available.	3	Experiential-Learning21.6	AFT-VAL	Does	PBL

Unit 3 Amrāz-i-Banqrās wa Ṭiḥāl (Diseases of the Pancreas and Spleen) امراض بانقراس وطحال

21.3.1. Amrāz Bānqarās (Diseases of Pancreas) امراض بانقراس

21.3.1.1. Waram-i-Bānqarās (Acute pancreatitis, Chronic pancreatitis, Autoimmune pancreatitis) ورم بانقراس

21.3.1.2. Cystic fibrosis سسٹک فائبروسس

21.3.1.3. Sartān-i-Bānqarās (Tumours of the pancreas, Pancreatic neuroendocrine tumors) سرطان بانقراس

21.3.2. Amrāz-i-Ṭiḥāl (Diseases of Spleen) امراض طحال

21.3.2.1. Sū' Mizāj al-Ṭiḥāl (Morbid temperament of Spleen) سوءمزاج الطحال

21.3.2.2. Waja' al-Ṭiḥāl (Pain of Spleen) وجع الطحال

21.3.2.3. Waram-i-Ṭiḥāl (Inflammation of spleen) ورم طحال

21.3.2.4. Ṣalābat Ṭiḥāl (Stiffness of Spleen) صلابت طحال

21.3.2.5. Ḍu'f al-Ṭiḥāl (Debility of Spleen) ضعف الطحال

21.3.2.6. 'Iẓam al-Ṭiḥāl (Splenomegaly) عظم الطحال

21.3.2.7. Sudad al-Ṭiḥāl (Obstruction within Spleen) سدد الطحال

References: 4,5,16,17,19,26,27,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO7	Describe the applied anatomy and physiology of the Pancreas and Spleen.	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Discuss the etiology, pathophysiology, clinical manifestation, and diagnostic test for pancreas and spleen.	2	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Describe the principales of treatment for Pancreas ,Spleen and apply evidence-based principle to guide patient care.	1	Lecture	CC	Knows-how	L
CO1,CO2, CO4,CO6, CO7	Demonstrate a detailed medical history and s of perform a through general physical and diagnostic examinatoion and procedure for patient with suspected disease pancreas and spleen.	3	Practical21.5	PSY-GUD	Shows-how	CBL
CO1,CO2, CO4,CO6, CO7	Demonstrate required investigations for the diagnosis of diseases of the pancreas and spleen, discuss their indications and contraindications, and interprete the findings.	3	Practical21.6	PSY-GUD	Shows-how	CBL
CO1,CO2, CO4,CO6, CO7	Demonstrate the principles of treatment and the treatment plan for the pancreatic and splenic diseases	2	Practical21.7	PSY-GUD	Shows-how	CBL

CO1,CO2, CO4,CO6, CO7	Conduct clinical case recording with a detailed history and thorough examination for the diagnosis of Pancreatic and Splenic diseases.	3	Experiential-Learning21.7	PSY-MEC	Does	D-BED
CO1,CO2, CO4,CO6, CO7	Conduct an investigational approach personalized treatment plan workshop based on the patient's condition, comorbidities for the diseases of the pancreas and spleen.	3	Experiential-Learning21.8	PSY-MEC	Does	CBL
CO1,CO2, CO4,CO6, CO7	Evaluate the significance of Su-e-Mizaj Tihal, Izm-e-Tihal, and Sudda Tihal in spleen pathology, comparing these conditions with the general principles of splenic diseases and their impact on health and disease.	3	Experiential-Learning21.9	PSY-MEC	Does	DL,CBL
CO1,CO2, CO4,CO6, CO7	Formulate and appraise the dietary plan to follow in the management of patients suffering from diseases of the pancreas and spleen.	2	Experiential-Learning21.10	AFT-SET	Does	PER,RLE

Practical Training Activity

Practical Training 21.1 Clinical diagnosis of Cholestasis and billiary disorders

Total Learning Hours (4)

Activity 1: Bedside demonstration of clinical diagnosis (1 hr)

The teacher/mentor will discuss and demonstrate how to take a proper history and perform a Physical Examination, including Inspection, Palpation, Percussion, and Auscultation on patients of Cholestasis and billiary disorders

Activity 2: Hands-on training session (2 hrs)

The students shall take a proper history and do the clinical examination to establish a diagnosis under the supervision of a teacher.

Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical, clear doubts ,and rectify the mistakes made by students.
Practical Training 21.2 Investigations and Treatment of intrahepatic and extrahepatic biliary diseases
Total Learning Hours (4) Activity 1: Investigation and Management Plan Workshop (1 hr) The teacher/mentor will discuss the indications, contraindications, and interpretations of required investigations for intrahepatic and extrahepatic biliary diseases; discuss the principles of treatment and plan of treatment. Activity 2: Hands-on training session (2 hrs) The students shall propose required investigations and interpret the findings, and formulate a line of treatment and treatment. Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical, clear the doubts, and rectify the mistakes made by students.
Practical Training 21.3 Clinical diagnosis of tumors of gall bladder, bile duct, and other biliary diseases.
Total Learning Hours (3) Activity 1: Bedside demonstration of clinical diagnosis (1 hr) The teacher/mentor will discuss and demonstrate how to take a proper history and perform a Physical Examination on patients of gall bladder tumour, bile duct, and other biliary diseases. Activity 2: Hands-on training session (1 hr) The students shall take a proper history and do the clinical examination to establish a diagnosis under the supervision of a teacher. Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical
Practical Training 21.4 Investigations and treatment of tumours of the gall bladder.

Total Learning Hours (3) Activity 1: Investigation and Management Plan Workshop (1 hr) The teacher/mentor will discuss the indications, contraindications, and interpretations of required investigations for tumours of gall bladder, to confirm clinical diagnosis and discuss the principles of treatment and plan of treatment. Activity 2: Hands-on training session (1 hr) The students shall propose required investigations and interpret the findings, and formulate a line of treatment and treatment. Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical, clear the doubts, and rectify the mistakes made by students.
Practical Training 21.5 Clinical Diagnosis of Pracreatic and Splenic disorders
Total Learning Hours (3) Activity 1: Bedside demonstration simulation (1 hr) The teacher/mentor will discuss and demonstrate how to take a proper history and perform a Physical Examination, including Inspection, Palpation, Percussion, and Auscultation on patients' Pracreatic and Splenic disorders. Activity 2: Hands-on training session (1 hr) The students shall take a proper history and do the clinical examination to establish a diagnosis under the supervision of a teacher. Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical
Practical Training 21.6 Investigation for diseases of the pancreas and spleen
Total Learning Hours (3) Activity 1: Investigation and Management Plan Workshop (1 hr) The teacher/mentor will discuss the indications, contraindications, and interpretations of required investigations for diseases of the pancreas and spleen.

Activity 2: Hands-on training session (1 hr) The students shall propose required investigations and interpret the findings, and formulate a line of treatment and treatment. Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical, clear the doubts, and rectify the mistakes made by students.
Practical Training 21.7 Treatment of pancreatic and splenic diseases
Total Learning Hours (2) Activity 1: Treatment Plan workshop (1 hr) The teacher/ mentor will demonstrate how to formulate a treatment plan for specific pancreatic and splenic disorders. Activity 2: Hands-on Training Session (1 hr) In the presence of a teacher, the students shall prepare treatment plans for the given diseases of the pancreas and spleen, and record all in their logbook.
Experiential Learning Activity
Experiential-Learning Learning 21.1: Tumor of gall bladder.
Total Learning Hours (3) Activity 1: Simulated Patient Encounter (1 hr) Students perform detailed history-taking and focused physical examination on a standardized or simulated patient presenting with symptoms suggestive of gallbladder tumor. Activity 2: Clinical Reasoning Case Discussion (1 hr) Students analyze a clinical scenario to formulate differential diagnoses, discuss and select relevant investigations to establish a diagnosis of gallbladder tumor. Activity 3: Treatment Strategy Workshop (1 hr) Students outline and present principles of treatment for gallbladder tumors, considering staging, patient condition, and treatment modalities.
Experiential-Learning Learning 21.2: Treatment plan of Biliary diseases

Total Learning Hours (3) Activity 1: Case-Based Treatment Planning (1 hr) Students evaluate patient scenarios with biliary diseases to develop personalized treatment plans considering comorbidities and patient preferences for Biliary diseases. Activity 2: Simulated Multidisciplinary Team Meeting (1 hr) Students collaborate in a mock MDT setting to create and justify individualized treatment strategies for complex biliary cases. Activity 3: Patient-Centered Counseling Role-Play (1 hr) Students role-play consultations where they explain personalized treatment options to a patient, addressing concerns and incorporating their values and choices.
Experiential-Learning Learning 21.3: Diseases of Biliriary system
Total Learning Hours (2) Activity 1: Role-Play on Patient-Centered Communication (1 hr) Students engage in a simulated clinical encounter to practice empathetic, clear communication while addressing patient concerns and preferences. Activity 2: Ethics and Professionalism Case Discussion (1 hr) Students analyze clinical scenarios highlighting ethical dilemmas and discuss appropriate professional behavior and patient-centered decision-making.
Experiential-Learning Learning 21.4: Diagnosis and Management of disease of bile duct
Total Learning Hours (2) Activity 1: Clinical Skills Simulation (1 hr) Students perform a detailed history and physical examination on a standardized patient presenting with biliary symptoms, followed by formulation of differential diagnoses. Activity 2: Diagnostic and Management Workshop (1 hr) Students analyze case scenarios to select appropriate investigations, establish a diagnosis, and outline the principles of management for bile duct diseases.

Experiential-Learning Learning 21.5: Treatment of diseases of Gall bladder and bile duct
Total Learning Hours (2) Activity 1: Case-Based Treatment Planning Workshop (1 hr) Students review clinical cases of gallbladder and bile duct diseases and formulate individualized treatment plans considering comorbidities and patient preferences. Activity 2: Simulated Clinical Consultation (1 hr) Students interact with standardized patients to assess their condition and develop a personalized treatment and follow-up plan, including surgical and non-surgical options.
Experiential-Learning Learning 21.6: Patient Education for Biliary diseases and tumors of gall bladder
Total Learning Hours (3) Activity 1: Patient Education Role-Play (1 hr) Students role-play as healthcare providers, educating a standardized patient on prevention strategies for biliary diseases and gallbladder tumors, addressing concerns, and explaining treatment options. Activity 2: Health Talk Simulation (1 hr) Students prepare and deliver a mock community health talk focused on lifestyle changes, early signs, complications, and treatment of biliary and gallbladder diseases. Activity 3: Interactive Counseling Skills Workshop (1 hr) Students practice one-on-one counseling with peers acting as patients, focusing on empathetic communication, prevention education, and reassurance about medical and surgical treatments.
Experiential-Learning Learning 21.7: Clinical Diagnosis of Diseases of the Spleen and Pancreas
Total Learning Hours (3)

Activity 1: Standardized Patient Encounter (2 hrs) Students perform detailed history-taking and physical examination on a standardized patient presenting with abdominal complaints to establish the diagnosis of Pancreatic and Splenic diseases. Activity 2: Clinical Case Analysis Workshop (1 hr) Students work through a clinical scenario to generate differential diagnoses.
Experiential-Learning Learning 21.8: Management of Diseases of pancreas and spleen.
Total Learning Hours (3) Activity 1: Case-Based Treatment Planning (1 hr) Students analyze detailed patient scenarios with pancreatic or splenic diseases to formulate individualized treatment plans and required investigations. Activity 2: Multidisciplinary Role-Play (1 hr) Students role-play as physicians, dietitians, and patients to collaboratively develop and communicate a personalized treatment and follow-up plan. Activity 3: Simulated OPD Consultation (1 hr) In a simulated outpatient setup, students interact with standardized patients to assess their condition and create a tailored treatment strategy aligned with their lifestyle and health needs.
Experiential-Learning Learning 21.9: Dietary implications in the diseases of the pancreas and spleen.
Total Learning Hours (2) Activity: Case-Based Diet Planning Workshop (1 hr) Students assess clinical cases of pancreatic and splenic diseases and formulate individualized dietary plans considering disease stage and nutritional needs. Activity 2: Diet Counseling Role-Play (1 hr) Students practice patient counseling through role-play, explaining and justifying dietary modifications for conditions like pancreatitis and splenomegaly.
Experiential-Learning Learning 21.10: Su-e-Mizaj-e-Tihal, Izm-e-Tihal and Sudda Tihal

Total Learning Hours (3)

Activity 1: Comparative Pathology Discussion (1 hr)

Students compare Su-e-Mizaj-e-Tihal, Izme Tihal, and Sudda Tihal with modern splenic pathologies through case-based group discussion to understand their systemic impact.

Activity 2: Interactive Concept Mapping (1 hr)

Students create visual concept maps linking Unani and modern concepts of spleen diseases, highlighting clinical features, systemic effects, and diagnostic overlaps.

Activity 3: Unani-Modern Integration Seminar (1 hr)

Students present short seminars on Su-e-Mizaj Tihal and related conditions, integrating Unani principles with contemporary medical understanding of splenic disorders.

Modular Assessment

Assessment	**Hour**
Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C. Case-based evaluation: (50 Marks) Each student will be given a case history or problem situation to evaluate the patient with diseases of the Biliary Tract, Pancreas and Spleen and create a treatment/ management plan with justification. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or	4

OSCE or Clinical Work Sampling. (50 Marks) • History Taking / Communication Skills (15 Marks) • Clinical Examination / Procedural Skills (15 Marks) • Clinical Reasoning / Interpretation (10 Marks) • Decision-Making / Management Plan (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any of the experiential as portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)	

Module 22 : Amrāz-i-Kulya (Diseases of The Kidney) امراض کلیہ

Module Learning Objectives

(At the end of the module, the students should be able to)

Describes the anatomy, physiology, and pathophysiology of the kidneys.

Conduct detailed history and examination, and diagnosis of kidney disorders.

Identify the diagnostic features and analyze the principle of treatment for diseases of the kidney.

Unit 1 Amrāz-i-Kulya wa Nizam-i-Bawl ke Marīz se rujū‘ ka Zābta (Approach to the patient with Diseases of the Kidney and Urinary System) امراض کلیہ ونظام بول کے مریض سے رجوع کا ضابطہ

22.1.1. Applied anatomy and functions of Kidney and Urinary System

22.1.2. Presenting problems and patient evaluation (history, physical examination).

22.1.3. Investigations and tools for patient evaluation; laboratory and Imaging.

22.1.4. Principles of treatment of Kidney and Urinary System: nutritional manipulation, pharmacotherapy

References: 5,10,11,12,14,15,16,17,18,19

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO7	Describe the applied Anatomy and function of the Kidney and Urinary system. Explain the mechanism of urine formation.	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Discuss the Etiology, clinical manifestations and diagnostic test with advanced tools and techniques for kidney and urinary system diseases.	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Analyze the literature and explain the Principles of Treatment including Ilaj bil Tadbeer and Ilaj bil Dawa for kidney and urinary system, and apply evidence-based principle to guide patient care.	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Demonstrate detailed history taking, a thorough general physical and urinary system examination, and differentiate other potential diagnoses based on clinical findings to establish a provisional diagnosis.	4	Practical22.1	AFT-RES	Shows-how	CBL,D-BED
CO1,CO2, CO4,CO6, CO7	Conduct a detailed history and examination, differential diagnosis, investigations, diagnosis and principles of treatment.	3	Experiential-Learning22.1	PSY-ADT	Does	RLE,PER
CO1,CO2, CO4,CO6, CO7	Demonstrate the indications, contraindications, and interpretation of required investigations for kidney and urinary system diseases like tumors of the kidney to confirm clinical diagnosis and demonstrate principles of treatment.	4	Practical22.2	AFT-REC	Shows-how	D-BED

CO1,CO2, CO4,CO6, CO7	Formulate a personalized treatment plan and subsequent follow-up plan based on the patient's condition, comorbidities, and preferences. Counsel patients on Renal diet adherence.	4	Experiential-Learning22.2	PSY-ADT	Does	D-BED

Unit 2 Amrāz-i-Kulya-01:Glomerular Amrāz (Diseases of Kidney-01:Glomerular Diseases) امراض کلیہ ا: گلومیرولرامراض

22.2.1. Sū'-i-Mizāj Kulya (Morbid temperament of Kidney) سوءمزاج کلیہ

22.2.2. Ḍu'f -i-Kulya (Renal insufficiency / Renal debility) ضعف کلیہ

22.2.3. Huzāl al-Kulya / Ḍumūr al-Kulya (Renal atrophy) ضمورالکلیہ /ھزال الکلیہ

22.2.4. 'Usr al-Bawl (Dysuria) عسرالبول

22.2.5. Waja' al-Kulya (Loin pain) وجع الکلیہ

22.2.6. Qillat al-Bawl (Oliguria/ Anuria) قلت البول

22.2.7. Kathrat al-Bawl (Polyuria) کثرت البول

22.2.8. Bawl fi'l Farāsh (Nocturia/ Bed wetting) بول فی الفراش

22.2.9. Salas al-Bawl (Urinary incontinence) سلسل البول

22.2.10. Bawl al-Dam (Haematuria) بول الدم

22.2.11. Suqūṭ-i-Kulya Ḥād (Acute Kidney Injury) سقوط کلیہ حاد

22.2.12. Suqūṭ-i-Kulya Muzmin (Chronic Kidney Disease) سقوط کلیہ مزمن

References: 2,4,8,10,16,17,27,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO7	Describe the glomerular diseases of kidney ike sue-mizaj kulliya, zof-e-kulliya, Bauluddam, Nephrotic syndrome and renal failure) and identify the associated conditions and define and classify glomerular diseases.	2	Lecture	CC	Knows-how	L&PPT

CO1,CO2, CO4,CO6, CO7	Demonstrate a medical history that will differentiate the etiologies of glomerular diseases and distinguish between acute and chronic renal failure.	4	Practical22.3	AFT-SET	Shows-how	D-BED,CBL
CO1,CO2, CO4,CO6, CO7	Conduct a detailed history, examination, and generate a differential diagnosis; propose required investigations for the confirmation of diagnosis and formulate principles of treatment of glomerular diseases.	3	Experiential-Learning22.3	PSY-ADT	Does	PER,RLE
CO1,CO2, CO4,CO6, CO7	Demonstrate the indications, contraindications, and interpretation of required diagnostic tests for glomerular diseases to confirm clinical diagnosis and demonstrate principles of treatment.	4	Practical22.4	AFT-REC	Shows-how	D-BED
CO1,CO2, CO4,CO6, CO7	Formulate a personalized treatment plan and subsequent follow up plan for glomerular kidney diseases based on the patient's condition, comorbidities and preferences.	3	Experiential-Learning22.4	PSY-ADT	Does	D-BED
CO1,CO2, CO4,CO6, CO7	Formulate a Diet chart, water intake management, and other priorities in the management of acute and chronic renal failure	1	Experiential-Learning22.5	PSY-ADT	Does	D-BED
CO1,CO2, CO4,CO6, CO7	Analyze the literature critically and explain the Principles of Treatment including Ilaj bil Tadbeer and ilaj bil Dawa for glomerular kidney diseases and apply evidence-based principle to guide patient care.	1	Lecture	AFT-SET	Knows-how	L_VC,L&PPT
Unit 3 Amrāz-i-Kulya-02:Glomerular Amrāz (Diseases of Kidney-02:Glomerular Diseases) امراض کلیہ ۲: گلومیرولر امراض						

22.3.1. Waram al-Kulya wa Aqsām (Glomerulonephritis and its types) ورم کلیہ واقسام

22.3.2. Inherited Glomerular Diseases مرض گلومیرولس موروثی

22.3.3. Alport's syndrome الپورٹس سنڈروم

22.3.4. Thin glomerular basement membrane disease تھن گلومیرولر بیسمینٹ میمبرین ڈزیز

22.3.5. Tubulointerstitial Diseases ٹیوبیولوانٹر سٹیشیل ڈزیز

22.3.6. Acute interstitial nephritis انٹر سٹیشیل نیفرائٹس حاد

22.3.7. Chronic interstitial nephritis انٹر سٹیشیل نیفرائٹس مزمن

22.3.8. Reflux nephropathy ریفلکس نیفروپیتھی

22.3.9. Renal papillary necrosis رینل پیپلّری نیکروسس

References: 2,4,16,19,21,25,26,27

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO7	Analyse the causes of glomerulonephritis, its types and other inherited glomerular diseases.	1	Lecture	CAN	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Discuss the Etiology, pathophysiology, clinical manifestations and diagnostic test for glomerulonephritis, it's types and other inherited glomerular diseases.	2	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Analyze the literature and explain the Principles of Treatment including Ilaj bil Tadbeer and Ilaj bil Dawa for glomerulonephritis, it's types and other inherited glomerular diseases. and apply evidence-based principle to guide patient care.	1	Lecture	CAN	Knows-how	L&PPT

CO1,CO2, CO4,CO6, CO7	Demonstrate a medical history exploration that will differentiate the etiologies of glomerulonephritis and distinguish the other inherited glomerular diseases.	4	Practical22.5	AFT-SET	Shows-how	CD,D-BED
CO1,CO2, CO4,CO6, CO7	Evaluate the key principles of treatment for glomerulonephritis and inherited glomerular diseases, and explain how do they vary depending on the specific etiology	3	Experiential-Learning22.6	PSY-ADT	Does	RLE
CO1,CO2, CO4,CO6, CO7	Conduct a detailed history and examination, differential diagnosis, investigations, diagnosis and principles of treatment of glomerulonephritis and formulate a personalized treatment plan based on the patient's condition, comorbidities and preferences.	3	Experiential-Learning22.7	PSY-ADT	Does	PER,RLE
CO1,CO2, CO4,CO6, CO7	Conduct a patient education and counseling session about the different types of glomerulonephritis, and address their concerns regarding potential complications and discuss prevention strategies for tubulointerstitial diseases, including acute and chronic interstitial nephritis, reflux nephropathy, and renal papillary necrosis. Provide reassurance about the available treatment options for these conditions.	3	Experiential-Learning22.8	PSY-ADT	Does	TBL,D-BED
CO1,CO2, CO6,CO7	Evaluate the indications, contraindications of required investigations, and interpretation for glomerulonephritis and other inherited glomerular diseases to confirm clinical diagnosis and to decide the line of treatment.	3	Experiential-Learning22.9	AFT-REC	Shows-how	D-BED
Practical Training Activity						
Practical Training 22.1 Clinical Diagnosis of Kidney diseases						

Total Learning Hours (4) Activity 1: Bedside demonstration of clinical diagnosis (1 hr) The teacher/mentor will discuss and demonstrate how to take a proper history and perform a Physical Examination, including Inspection, Palpation, Percussion, and Auscultation on patients of kidney diseases. Activity 2: Hands-on training session (2 hrs) The students shall take a proper history and do the clinical examination to establish a diagnosis under the supervision of a teacher. Activity 3: Summarization (1 hrs) The teacher shall summarize the key concepts covered in the practical
Practical Training 22.2 Investigations and Treatment for Kidney diseases
Total Learning Hours (4) Activity 1: Investigations, interpretation and treatment plan session (1 hr) The teacher/mentor will discuss the indications, contraindications, and interpretations of required required investigations for Kidney diseases Activity 2: Hands-on training session (2 hrs) Students shall suggest required investigations and expected finding for the diagnosis and formulate treatment plan Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical, clear the doubts and recify the mistakes done by students during hands-on training session.
Practical Training 22.3 Acute and chronic renal failure diagnosis
Total Learning Hours (4) Activity 1: Bedside demonstration of clinical diagnosis (1 hr) The teacher/mentor will discuss and demonstrate how to take a proper history and perform a clinical examination on patients of acute and chronic kidney failure.

Activity 2: Hands-on training session (2 hrs) The students shall take a proper history and do the clinical examination to establish a diagnosis under the supervision of a teacher. Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical
Practical Training 22.4 Investigations and treatment of glomerular diseases
Total Learning Hours (4) Activity 1: Investigation and Management Plan Workshop (1 hr) The teacher/mentor will discuss the indications, contraindications, and interpretations of required investigations for glomerular diseases and discuss the principles of treatment and plan of treatment. Activity 2: Hands-on training session (2 hrs) The students shall propose required investigations and interpret the findings, and formulate a line of treatment and treatment. Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical, clear the doubts, and rectify the mistakes made by students.
Practical Training 22.5 Diagnosis and differential diagnosis of Glomerulonephritis
Total Learning Hours (4) Activity 1: Bedside demonstration of clinical diagnosis (1 hr) The teacher/mentor will discuss and demonstrate the history and perform clinical examination on patients of Glomerulonephritis. Activity 2: Hands-on training session (2 hrs) The students shall take a proper history and do the clinical examination to establish a diagnosis under the supervision of a teacher. Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical

Experiential Learning Activity
Experiential-Learning Learning 22.1: Diagnosis and Management of Kidney diseases
Total Learning Hours (3) Activity 1: Case-based diagnosis (1 hr) Perform patient history-taking and physical examination sessions to identify key clinical features and correlate with possible diagnoses. Activity 2: Group discussion (1 hr) Participate in small-group case-based discussions to formulate differential diagnoses and plan appropriate investigations based on clinical findings. Activity 3: Personalized treatment plan (1 hr) Present real or simulated patient cases, integrating clinical data to arrive at a diagnosis and propose a treatment plan based on Unani and modern principles.
Experiential-Learning Learning 22.2: Personalized treatment and counseling of kidney diseases
Total Learning Hours (4) Activity 1: Case Study Discussion (1 hr) Students analyze patient cases to create and present personalized treatment and follow-up plans based on clinical status and preferences for the patients of kidney diseases. Activity 2: Role-Play on Decision-Making and Diet Counseling (1 hr) Students practice shared decision-making and renal diet counseling through role-play with a standardized patient. Activity 3: Renal Diet Workshop (1 hr) Students create individualized renal diet plans using food models and case scenarios, followed by simulated patient counseling. Activity 4: Simulated OPD Consultation (1 hr) In a mock outpatient setup, students assess patients, formulate treatment plans, and provide dietary counseling based on comorbidities and patient concerns.
Experiential-Learning Learning 22.3: Diagnosis and Management of Glomerular Diseases.

Total Learning Hours (3) Activity 1: Standardized Patient Encounter (1 hr) Students take a detailed history and perform a focused physical examination on a standardized patient presenting with glomerular disease symptoms. Activity 2: Clinical Reasoning Case Discussion (1 hr) Students analyze a case, formulate differential diagnoses, select appropriate investigations, and arrive at a final diagnosis of a glomerular disease. Activity 3: Integrated Management Workshop (1 hr) Students outline the principles of treatment based on a confirmed diagnosis, linking clinical findings, investigations, and patient-specific factors.
Experiential-Learning Learning 22.4: Treatment for glomerular kidney diseases
Total Learning Hours (3) Activity 1: Case-Based Treatment Planning Session (1 hr) Students analyze detailed patient case vignettes with varied comorbidities and preferences, and in groups, formulate individualized treatment and follow-up plans, presenting their rationale to peers and faculty. Activity 2: Simulated Multidisciplinary Team Meeting (1 hr) Students take on roles (nephrologist, dietitian, pharmacist, patient advocate) in a simulated MDT meeting to collaboratively create a personalized care and follow-up plan for a patient with glomerular disease, considering medical, dietary, and psychosocial factors. Activity 3: Patient Preference and Shared Decision-Making Role-Play (1 hr) Through role-play scenarios, students practice engaging with standardized patients to explore treatment preferences, explain therapeutic options, and jointly develop a personalized treatment and monitoring plan aligned with the patient's lifestyle and values
Experiential-Learning Learning 22.5: Diet chart for Chronic kidney diseases
Total Learning Hours (1)

Activity: Clinical Management Planning Workshop (1 hr) Students work in small groups to review case scenarios of acute and chronic renal failure, identify and prioritize key management steps, including dietary modifications, fluid and electrolyte balance, drug dose adjustments, and monitoring plans.
Experiential-Learning Learning 22.6: Treament of Glomerulonephritis
Total Learning Hours (3) Activity 1: Etiology-Based Treatment Mapping (1 hr) Students work in groups to create flowcharts linking specific types of glomerulonephritis and inherited glomerular diseases with their tailored treatment principles. Activity 2: Interactive Case-Based Discussion (1 hr) Students review multiple case scenarios with different etiologies and compare how treatment strategies vary based on underlying cause and disease type. Activity 3: Small Group Teaching Presentation (1 hr) Each group presents a specific glomerular disease, describing its etiology and explaining how treatment principles are adapted accordingly, followed by peer Q&A.
Experiential-Learning Learning 22.7: Diagnosis and Management of Glomerulonephritis
Total Learning Hours (3) Activity 1: Clinical Case Simulation (1 hr) Students conduct a detailed history and physical examination on a standardized patient presenting with suspected glomerulonephritis, followed by differential diagnosis and discussion. Activity 2: Diagnostic Reasoning Workshop (1 hr) Students analyze clinical data, choose appropriate investigations, arrive at a diagnosis, and outline the principles of treatment for different types of glomerulonephritis.

Activity 3: Personalized Treatment Planning Session (1 hr) Using patient scenarios with comorbidities and preferences, students formulate individualized treatment and follow-up plans through group discussion and presentation.
Experiential-Learning Learning 22.8: Patient education and counseling for Acute and Chronic interstitial nephritis, reflux nephropathy, and renal papillary necrosis
Total Learning Hours (3) Activity 1: Patient Counseling Role-Play (1 hr) Students engage in structured role-play where one acts as a healthcare provider and the other as a patient, practicing how to explain different types of glomerulonephritis, complications, and preventive strategies for tubulointerstitial diseases. Activity 2: Interactive Patient Education Workshop (1 hr) Students, in groups, design and present a mock educational session (using posters, flipcharts, or digital tools) for patients explaining glomerulonephritis types, tubulointerstitial disease prevention, and available treatments. Activity 3: Simulated OPD Communication Exercise (1 hr) In a simulated outpatient setting, students counsel a standardized patient presenting with early signs of renal disease, addressing concerns, explaining disease types and complications, prevention of interstitial nephritis, and providing reassurance on treatment options, with facilitators evaluating communication skills and clinical accuracy.
Experiential-Learning Learning 22.9: glomerulonephritis and other inherited glomerular diseases
Total Learning Hours (3) Activity 1: Diagnostic Test Simulation Lab (1 hr) Students spend 60 minutes analyzing simulated clinical cases and lab reports to identify indications, contraindications, and interpret diagnostic findings in glomerulonephritis.

Activity 2: Role-Play (1 hr)

Students engage in structured physician–patient role-plays to practice clinical history-taking, test selection with justifications, identify test contraindications, and propose initial treatment plans.

Activity 3: Problem-Based Learning (PBL) Discussion (1 hr)

Students participate in a 60-minute PBL session where they work through inherited glomerular disease scenarios, interpret relevant investigations, and collaboratively decide on appropriate treatment strategies.

Modular Assessment

Assessment	**Hour**
Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C. Case-based evaluation: (50 Marks) Each student will be given a case history or problem situation to evaluate the patient with renal diseases and create a treatment/ management plan with justification. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or OSCE or Clinical Work Sampling (50 Marks) • History Taking / Communication Skills (15 Marks) • Clinical Examination / Procedural Skills (15 Marks) • Clinical Reasoning / Interpretation (10 Marks)	4

- Decision-Making / Management Plan (10 Marks)

Or

Any practical in converted form can be taken for assessment. (25 Marks)

and

Any of the experiential as portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)

Semester No : 6

Module 23 : Amrāz-i-Kulya wa Majārī-i-Bawl (Diseases ofthe Kidney and Urinary Tract) امراض کلیہ ومجری بول

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describe the pathophysiology, clinical features, and diagnostic methods for cystic and renal vascular diseases, urinary tract infections, and prostate disorders, integrating both modern and Unani medical perspectives.

2. Develop diagnostic and clinical skills to evaluate and manage kidney stones, prostate diseases, and urological tumours using advanced diagnostic tools and treatment options.

3. Formulate personalized treatment plans by integrating modern medical interventions and Unani remedies, addressing the unique needs of patients with renal and urological diseases.

Unit 1 Cystic disease wa Amraz Kulya Uruqi (Cystic diseases and Renal Vascular Diseases) سسٹک ڈزیز وامراض کلیہ عروقی

23.1.1. Jarab al-Kulya (Renal irritability) جرب الکلیہ

23.1.2. Polycystic kidney disease پالی سسٹک مرض کلیہ

23.1.3. Medullary sponge kidney disease میڈلری اسپنج مرض کلیہ

23.1.4. Medullary cystic kidney disease میڈلری سسٹک مرض کلیہ

23.1.5. Amrāz ‘Urūq Kulya (Renal Vascular Diseases) امراض عروق کلیہ

23.1.5.1. Tazayyuq ‘Urūq Kulya (Renal artery stenosis) تضیق عروق کلیہ

23.1.5.2. Tanakhkhur Kulya Ḥād (Acute renal infarction) تنخر کلیہ حاد

23.1.5.3. Amrāz Dākhil al-Kulya Shiryān-i-Ṣaghīra (Diseases of small intrarenal vessels --Haemolytic uraemic syndrome, Thrombotic thrombocytopenic purpura, Disseminated intravascular coagulation, Systemic sclerosis, Cholesterol emboli, Small-vessel vasculitis) امراض داخل الکلیہ شریان صغیرہ

References: 1,5,9,15,16,17,19,23,24,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO7	Describe the applied Anatomy and Functional implication of cystic kidney diseases such as polycystic kidney disease, medullary sponge kidney disease and medullary cystic kidney diseases and discuss how these conditions affect renal structure and function.	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Discuss the Etiology, clinical manifestations of cystic diseases and renal vascular diseases, describe the diagnostic tests, including advanced imaging and blood tests, used to identify these conditions.	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Analyze the unani literature and explain the Principles of Treatment for renal vascular diseases and cystic diseases and apply evidence-based principle to guide patient care.	1	Lecture	CAN	Knows-how	L&PPT
CO1,CO2, CO3,CO5, CO6,CO7	Demonstrate the clinical approach to evaluate Renal artery stenosis and acute renal infarction by history taking and physical examination	3	Practical23.1	AFT-RES	Shows-how	PER
CO1,CO2, CO4,CO6, CO7	Demonstrate how to propose the required investigation to confirm the diagnosis of Cystic renal diseases and renal vascular diseases, and to formulate treatment plan	3	Practical23.2	AFT-REC	Shows-how	D,D-BED

CO1,CO2, CO4,CO6, CO7	Conduct a detailed history and examination for he diagnosis and differential diagnosis, investigations, and principles of treatment of Cystic diseases and renal vascular diseases.	3	Experiential-Learning23.1	PSY-ADT	Does	RLE
CO1,CO2, CO4,CO6, CO7	Formulate a personalized treatment plan for patients with renal vascular diseases (e.g., Renal Artery Stenosis, Acute Renal Infarction) based on their condition, comorbidities, and preferences. Discuss the principles of Unani medicine in developing a follow-up plan that ensures effective long-term management.	3	Experiential-Learning23.2	PSY-ADT	Does	PER,RLE
CO1,CO2, CO4,CO6, CO7	Counsel patients on dietary modifications for managing cystic diseases (e.g., Adult Polycystic Kidney Disease) and renal vascular diseases (e.g., Renal Artery Stenosis).	3	Experiential-Learning23.3	PSY-ADT	Does	RLE,PER

Unit 2 Amrāz Nizām Tajmī‘ wa Ta‘diya Majra-i-Bawl (Diseases of the Collecting System and Urinary Tract Infection) امراض نظام تجمیع وتعدیہ مجری بول

23.2.1. Takhlīqi Naqāiṣ (Congenital abnormalities-Single kidneys, Ureterocele, Ectopic ureters and duplex kidneys, Obstructive megaureter) تخلیقی نقائص

23.2.2. Pelvic-ureteric junction obstruction

23.2.3. Retroperitoneal fibrosis ریٹروپیریٹونیل فائبروسس

23.2.4. Diabetic nephropathy

23.2.5. Amrāz-i-Kulya Basabab Adviya (Drug-induced renal diseases) امراض کلیہ بسبب ادویہ

23.2.6.Ta‘diya Majra-i-Bawl (Urinary tract infection) تعدیہ مجریٰ بول

23.2.7. Waram-i-Hauzul Kulya (pyelonephritis) مجریٰ حوض الکلیہ

23.2.8. Diqul Kuliya wa Quruhul Kuliya (Tuberculosis of the kidney) دق الکلیہ وقروح الکلیہ

References: 4,5,9,12,16,17,18,19,23,24,29,30

3A	3B	3C	3D	3E	3F	3G

CO1,CO2, CO4,CO6, CO7	Describe the kidney and urinary tract disorders (congenital abnormalities, obstructions, retroperitoneal fibrosis, diabetic kidney disease, drug-induced renal disease, UTIs) and identify associated conditions.	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Describe the Etiology, pathophysiology, clinical manifestations and diagnostic test for congenital abnormalities, obstructions, retroperitoneal fibrosis, diabetic kidney disease, drug-induced renal disease, UTIs, and Warme Hauzul Kuliya (pyelonephritis).	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO5,CO6, CO7	Analyze the literature critically and explain the Principles of Treatment for Nephropathies and Uropathies and apply evidence-based principle to guide patient care of collecting system and urinary tract infection.	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Demonstrate the clinical diagnosis of congenital abnormalities, obstructions, retroperitoneal fibrosis, diabetic kidney disease, drug-induced renal disease, UTIs, and Warme Hauzul Kuliya (pyelonephritis) by history taking and clinical examination.	3	Practical23.3	AFT-REC	Shows-how	D-BED
CO1,CO2, CO3,CO6, CO7	Demonstrate the indications, contraindications, and interpretation of diagnostic tests for congenital abnormalities, obstructions, retroperitoneal fibrosis, diabetic kidney disease, drug-induced renal disease, UTI, and pyelonephritis, and how to formulate Unani treatment stretegies	3	Practical23.4	AFT-REC	Shows-how	D-BED
CO1,CO2, CO4,CO6, CO7	Conduct a detailed medical history and examination for a patient with diabetic nephropathy, chronic pyelonephritis, and drug induced renal disease. Discuss the	3	Experiential-Learning23.4	PSY-ADT	Does	RLE,PER

	differential diagnosis, required investigations, and principles of Unani treatment for managing Cystic diseases and renal vascular diseases					
CO1,CO2, CO4,CO6, CO7	Formulate treatment plans for Drug-induced renal disease, diabetic nephropathy, and chronic pyelonephritis.	3	Experiential-Learning23.5	PSY-ADT	Does	PER,RLE
CO1,CO2, CO4,CO6, CO7	Conduct patient education and Counseling sessions on dietary modifications for managing conditions like drug-induced renal disease, diabetic nephropathy, and chronic pyelonephritis.	3	Experiential-Learning23.6	PSY-ADT	Does	RLE,PER

Unit 3 Hisāt Kulya wa Amrāz Ghudda-i-Mazī w Majra-i-Bawl wa Sal'āt (Renal Calculi and Diseases of the Prostate and Urethra and Tumours حصاۃ کلیہ وامراض غدہ مذی و مجری بول وسلعات

23.3.1 Ḥaṣāt al-Mathāna wa Kulya (Stone of the Urinary Tract) حصاۃ المثانہ و کلیہ

23.3.2. Waram al-Mathāna (Cystitis) ورم المثانہ

23.3.3. Ḍu'f al-Mathāna (Insufficiency of Urinary bladder) ضعف المثانہ

23.3.4. Istirkhā' wa Khal' al-Mathāna (atonia of urinary bladder) استرخاو خلع المثانہ

23.3.5. 'Iẓm Ghudda Mazī Salīma (Benign Prostatic Enlargement) عظم غدہ مذی سلیمہ

23.3.6. Waram-i-Ghudda Mazī (Prostatitis) ورم غدہ مذی

23.3.7. Waram al-Qaḍīb (Inflammation of penis) ورم القضیب

23.3.8. Sudda Majārī al-Qaḍīb (obstruction of penile urethra) سدۃ مجاری القضیب

23.3.9. Sal'āt Kulya wa Majra-i-Bawl (Tumors of The Kidney and Urinary Tract) سلعات کلیہ و مجریٰ بول

23.3.10. Sarṭan Kulya (Renal adenocarcinoma) سرطان کلیہ

23.3.11. Sal'āt Masālik Bauliya (Urothelial tumors) سلعہ مسالک بولیہ

23.3.12. Sarṭan Ghudda Mazī (Prostate cancer) سرطان غدہ مذی

23.3.13. Sal'āt Khuṣṣiya (Tumors of the testes) سلعات خصیہ

References: 1,4,5,11,14,15,16,17,19,26,27,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO7	Describe stone of urinary tract, it's types and classify testicular and urothelial tumors	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Discuss the Etiology, pathophysiology, clinical manifestations and diagnostic test for stone of the Urinary tract, Disease of prostrate and urethra.	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Describe the Etiology, pathogenesis, presenting and distinguishing features, diagnostic tests, progression and spread of testicular diseasees.	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Describe the Etiology, pathogenesis, presenting and distinguishing features, diagnostic tests, progression and spread of urothelial tumors	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO3,CO6, CO7	Explain the clinical approach to evaluating Hisatul Kuliya wa Masana (urinary tract stones), Warme Masana (Har wa Sulb) (bl, benign prostatic enlargement, and prostatitis. Discuss the use of imaging (e.g., ultrasound, CT), lab tests, and Unani principles in diagnosing and managing these conditions	4	Practical23.5	AFT-REC	Shows-how	D-BED

CO1,CO2, CO3,CO4, CO6,CO7	Demonstrate the indications, contraindications, and interpretation of diagnostic tests for conditions such as urinary stones, prostatic enlargement, Zufe Masana, Warme Qazeeb, urethral stricture, and tumors	4	Practical23.6	AFT-REC	Shows-how	DG
CO1,CO2, CO4,CO6, CO7	Conduct history taking and clinical examination for the diagnosis and differentiating between congenital abnormalities (e.g., single kidney, ureterocele), bladder conditions (e.g., Warme Masana, Zufe Masana), prostate diseases (benign prostatic enlargement, prostatitis), urethral obstructions (Suddae Majarae Qazeeb), and tumors (kidney, urinary tract, prostate, testicular). How would clinical findings guide Unani diagnosis and treatment?	4	Experiential-Learning23.7	PSY-ADT	Does	RLE,PER
CO1,CO2, CO4,CO6, CO7	Formulate a personalized treatment plan for patients with urothelial tumors, renal adenocarcinoma, prostate cancer, testicular tumors, Warme Qazeeb, Zufe Masana, and Hisatul Kuliyawa Masana. How do Unani principles inform the treatment approach, considering patient-specific conditions and preferences?	2	Experiential-Learning23.8	PSY-ADT	Does	RLE,PER
CO1,CO2, CO4,CO6, CO7	Conduct patient education and counseling sessions, show empathy and compassion for patients, and maintain a professional demeanor and ethical standards in the patient care of kidney stone, prostate, and urethral tumours.	2	Experiential-Learning23.9	PSY-ADT	Does	PER
Practical Training Activity						
Practical Training 23.1 Clinical Diagnosis of Renal artery stenosis and acute renal infarction						
Total Learning Hours: 03						

Activity 1: Bedside demonstration of clinical diagnosis (1 hr) The teacher/mentor will discuss and demonstrate how to take a proper history and perform a Physical Examination on patient of Renal artery stenosis and acute renal infarction. Activity 2: Hands-on training session (1 hr) The students shall take a proper history and do the clinical examination to establish a diagnosis under the supervision of a teacher. Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical, clear the doubts and to rectify the mistakes made by students.
Practical Training 23.2 Management of Cystic renal diseases and renal vascular diseases
Total Learning Hours (3) Activity 1: Investigation and Management Plan Workshop (1 hr) The teacher/mentor will discuss the indications, contraindications, and interpretations of required investigations for Cystic renal diseases and renal vascular diseases to confirm clinical diagnosis and discuss the principles of treatment and plan of treatment. Activity 2: Hands-on training session (1 hr) The students shall propose required investigations and interpret the findings, and formulate a line of treatment and treatment. Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical, clear the doubts, and rectify the mistakes made by students.
Practical Training 23.3 Clinical Diagnosis of Congenital kidney diseases
Total Learning Hours (3) Activity 1: Bedside demonstration of clinical diagnosis (1 hr) The teacher/mentor will discuss and demonstrate how to take a proper history and perform a Physical Examination on patient of Congenital kidney disease. Activity 2: Hands-on training session (1 hr) The students shall take a proper history and do the clinical examination to establish a diagnosis under the supervision of a teacher.

Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical, clear the doubts and to rectify the mistakes made by students.
Practical Training 23.4 Management of congenital abnormalities, obstructions, retroperitoneal fibrosis etc.
Total Learning Hours (3) Activity 1: Investigation and Management Plan Workshop (1 hr) The teacher/mentor will discuss the indications, contraindications, and interpretations of required investigations for congenital abnormalities, obstructions, retroperitoneal fibrosis etc. to confirm clinical diagnosis and discuss the principles of treatment and plan of treatment. Activity 2: Hands-on training session (1 hr) The students shall propose required investigations and interpret the findings, and formulate a line of treatment and treatment. Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical, clear the doubts, and rectify the mistakes made by students
Practical Training 23.5 Clinical approach to evaluating Hisatul Kuliya wa Masana (urinary tract stones), Warme Masana (Har wa Sulb) (bl, benign prostatic enlargement, and prostatitis. Discuss the use of imaging (e.g., ultrasound, CT), lab tests, and Unani principles in diagnosing and managing these conditions
Total Duration: 4 hours **1. Clinical Assessment & Selection of Investigations (1.5 hours)** The teacher will demonstrate and explain how to assess the clinical presentation of nephropathy and diseases of the urinary tract. This includes gathering relevant history, performing physical examinations, and selecting appropriate investigations such as urinalysis, renal function tests, and imaging studies (e.g., ultrasound, CT urography) based on individual case requirements. **2. Interpretation of Findings & Confirming Diagnosis (1 hour)** The teacher will guide learners in analyzing and interpreting the results of investigations. Emphasis will be placed on identifying key diagnostic patterns and correlating clinical and laboratory findings to confirm a diagnosis specific to nephropathy and urinary tract diseases.

3. Formulation of Management Plan (1.5 hours)

In this final step, the teacher will demonstrate how to formulate an effective and individualized treatment plan. This includes choosing suitable medical or surgical interventions, considering comorbidities, monitoring treatment outcomes, and planning appropriate follow-up care for patients with nephropathy or urinary tract diseases.

Practical Training 23.6 Indications, contraindications, and interpretation of diagnostic tests for conditions such as urinary stones, prostatic enlargement, Zufe Masana, Warme Qazeeb, urethral stricture, and tumors.

Total Learning Hours: 04

1. Clinical Assessment & Selection of Investigations (1.5 hrs)

This step involves understanding the clinical presentation of nephropathy and urinary tract diseases, identifying relevant history and physical examination findings, and learning how to choose appropriate initial and advanced investigations such as urinalysis, renal function tests, and imaging like ultrasound or CT urography.

2. Interpretation of Findings & Confirming Diagnosis (1 hr)

In this step, the focus is on interpreting investigation results in context, recognizing diagnostic patterns specific to different renal and urinary tract pathologies, and confirming the diagnosis using both clinical correlation and investigative evidence.

3. Formulation of Management Plan (1.5 hrs)

This final step includes understanding the treatment options available for various conditions, creating a personalized treatment plan based on the diagnosis, disease severity, comorbidities, and patient factors, and learning how to monitor treatment response and plan follow-up care.

Experiential Learning Activity

Experiential-Learning Learning 23.1: Clinical Diagnosis and Management of Cystic diseases and renal vascular diseases.

Total Learning Hours (3)

Activity 1: History-Taking and Physical Examination Workshop (1 hr)) Students practice eliciting detailed histories and performing focused examinations on patients with suspected cystic or renal vascular diseases using simulated or real clinical cases. Acctivity 2: Diagnostic Reasoning and Investigation Planning Session (1 hr) Students analyze case scenarios to create differential diagnoses and select appropriate modern and Unani investigations for accurate diagnosis of cystic and renal vascular conditions. Activity 3: Treatment Planning and Unani Integration Discussion (1 hr) Students formulate personalized treatment plans based on the confirmed diagnosis, integrating Unani principles such as Mizaj assessment, Ilaj bil Ghiza, Ilaj bid Dawa, and modern therapeutic approaches.
Experiential-Learning Learning 23.2: Treatment plan for Renal Artery Stenosis, Acute Renal Infarction
Total Learning Hours (3) Activity 1: Case-Based Treatment Planning Workshop (1 hr) Students assess clinical scenarios involving renal vascular diseases and formulate personalized treatment plans considering comorbidities and patient preferences. Activity 2: Unani Follow-Up Strategy Development Session (1 hr) Students design long-term follow-up plans rooted in Unani principles like Ilaj bit Tadbeer, Ilaj bil Ghiza, and Tanqiya to support recovery and prevent recurrence. Activity 3: Interdisciplinary Discussion and Peer Review (1 hr) Students present and review each other's treatment and follow-up plans, integrating modern diagnostics with Unani approaches for comprehensive and ethical patient management.
Experiential-Learning Learning 23.3: Patient Education for Polycystic ikdney disease and renal vascular diseases
Total Learning Hours (3)

Activity 1: Role-Play Counseling Session (1 hr) Students practice counseling simulated patients on appropriate dietary modifications for cystic and vascular renal diseases, emphasizing salt restriction, fluid management, and Unani dietary principles. Activity 2: Diet Plan Preparation Workshop (1 hr) Students prepare individualized dietary plans for patients with Adult Polycystic Kidney Disease and Renal Artery Stenosis, integrating Unani recommendations and modern nutritional guidelines. Activity 3: Interactive Case-Based Discussion (1 hr) Students discuss case scenarios to identify key dietary concerns in renal disorders and suggest modifications, considering disease progression, comorbidities, and patient preferences.
Experiential-Learning Learning 23.4: Clinical Diagnosis of Chronic pyelonephritis
Total Learning Hours (3) Activity 1: Clinical History & Examination Simulation (1 hr) Students perform detailed history-taking and physical examination on simulated patients with diabetic nephropathy, chronic pyelonephritis, and drug-induced renal disease, focusing on identifying key Unani and clinical signs. Activity 2: Differential Diagnosis and Investigation Planning Workshop (1 hr) Students discuss and compare symptoms, develop differential diagnoses, and choose relevant investigations for distinguishing between cystic and vascular renal diseases. Activity 3: Unani Treatment Principles and Case-Based Discussion (1 hr) Students formulate Unani management strategies for cystic and renal vascular diseases using Ilaj bil Ghiza, Ilaj bid Dawa, and Ilaj bit Tadbeer, aligned with individual patient conditions.
Experiential-Learning Learning 23.5: Treatment of Drug-induced renal disease, diabetic nephropathy, and chronic pyelonephritis
Total Learning Hours (3)

Activity 1: Case-Based Treatment Planning Workshop (1 hr) Students review clinical case scenarios and formulate individualized treatment plans for drug-induced renal disease, incorporating Unani principles and modern pharmacological approaches. Activity 2: Integrated Management Strategy Discussion (1 hr) Students collaborate in groups to develop comprehensive treatment protocols for diabetic nephropathy, balancing Ilaj bil Ghiza, Ilaj bid Dawa, and modern antidiabetic and nephroprotective therapies. Activity 3: Clinical Reasoning and Prescription Writing Session (1 hr) Students write Unani and modern prescriptions for chronic pyelonephritis based on diagnostic findings and patient-specific factors.
Experiential-Learning Learning 23.6: Dietary management of Drug-induced renal disease, diabetic nephropathy, and chronic pyelonephritis
Total Learning Hours (3) Activity 1: Diet Counseling Simulation (1 hr) Students engage in role-play exercises to practice counseling patients on renal-friendly diets tailored to specific conditions like drug-induced nephropathy and diabetic nephropathy. Activity 2: Case-Based Nutrition Planning Workshop (1 hr) Students analyze patient case histories and create individualized dietary plans aligned with both Unani and modern dietary guidelines for chronic kidney conditions. Activity 3: Interactive Session with a Dietician/Unani Expert (1 hr) Students participate in an expert-led discussion to understand therapeutic nutrition approaches in Unani medicine and modern science for renal disorders, followed by Q&A and reflection.
Experiential-Learning Learning 23.7: Patient counseling for Kidney stone, prostate and urethral tumours.
Total Learning Hours: (2 hours)

Activity 1: Simulated Patient Interaction and Feedback Session (1 hr) Students participate in role-plays simulating clinical encounters with patients suffering from kidney stones or genitourinary tumours, focusing on empathetic communication, active listening, and respectful behavior. Activity 2: Ethical Case Discussion and Reflection (1 hr) Students discuss ethically challenging cases (e.g., patient anxiety, end-of-life issues, or disclosure of diagnosis) and reflect on the importance of empathy, professional conduct, and patient-centered care.
Experiential-Learning Learning 23.8: Clinical Diagnosis of Single kidney, ureterocele, Warme Masana, Zufe Masana, benign prostatic enlargement, prostatitis), Suddae Majarae Qazeeb, and tumors.
Total Learning Hours (4) Activity 1: Structured History-Taking Practice Session (1 hr) Students practice eliciting comprehensive histories from simulated patients with various urogenital disorders, focusing on differentiating congenital, inflammatory, obstructive, and neoplastic conditions. Activity 2: Symptom Pattern Mapping Workshop (1 hr) Students compare and chart key clinical features of different urogenital disorders and correlate them with Unani diagnostic markers such as Su-e-Mizaj, Waram, and Tashkhees bil Amarat. Activity 3: Unani Diagnostic Reasoning and Mizaj Assessment (1 hr) Students assess simulated case findings and determine the Mizaj and Unani diagnosis for each condition, integrating classical principles with clinical logic. Activity 4: Case-Based Treatment Formulation and Discussion (1 hr) Groups formulate Unani treatment strategies for diverse urogenital conditions based on the clinical diagnosis and Mizaj, including Ilaj bil Ghiza, Ilaj bid Dawa, and Ilaj bit Tadbeer.
Experiential-Learning Learning 23.9: Management of Urothelial tumors, renal adenocarcinoma, prostate cancer, testicular tumors, Warme Qazeeb, Zufe Masana, and Hisatul Kuliyawa Masana.

Total Learning Hours (2)

Activity 1: Integrated Case-Based Planning Session (1 hr)

Students work through complex case scenarios involving both modern (e.g., renal adenocarcinoma, prostate cancer) and Unani conditions (e.g., Warme Qazeeb, Zufe Masana), formulating individualized treatment plans that balance Unani principles (like Mizaj, Ilaj bil Ghiza, Ilaj bid Dawa) with modern diagnostics and patient preferences.

Activity 2: Multidisciplinary Case Presentation and Peer Review (1 hr)

Students present comprehensive management plans for assigned cases, incorporating diagnostic reasoning, Unani concepts, and patient-centered care, followed by peer feedback and discussion on aligning traditional approaches with evidence-based practices.

Modular Assessment

Assessment	**Hour**
Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C. Case-based evaluation: (50 Marks) Each student will be given a case history or problem situation to evaluate the patient and create a treatment/management plan with justification. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or OSCE or Clinical Work Sampling. (50 Marks) • History Taking / Communication Skills (15 Marks)	4

- Clinical Examination / Procedural Skills (15 Marks)
- Clinical Reasoning / Interpretation (10 Marks)
- Decision-Making / Management Plan (10 Marks)

Or

Any practical in converted form can be taken for assessment. (25 Marks)

and

Any of the experiential as portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)

Module 24 : Amrāz-i-Nizām-i-Tawlīd wa Istiḥāla (Diseases of The Reproductive System and Metabolism) امراض نظام تولید واستحالہ

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describe applied structure, function, etiology, pathophysiology of reproductive system and metabolism.
2. Conduct a detailed history and examination, diagnosis of reproductive system and metabolic disorders.
3. Identify the diagnostic features and analyze the principle of treatment for reproductive system and metabolic disorders.

Unit 1 Amrāz-i-Bāh wa Nizām Taulīd ke Marīz se rujū‘ ka Zābta (Approach to the patient with Diseases of the Reproductive System and Sexual Disorders) امراض باہ ونظام تولید کے مریض سے رجوع کا ضابطہ

24.1.1. Applied anatomy and functions of the Reproductive System اطلاقی تشریح ومنافع نظام تولید

24.1.2. Manifestations and evaluation of patients of the Reproductive System نظام تولید کے ظواہر وتجزیہ مریض

24.1.3. Diagnosis of a Sexual Disorder (Parameters of The Reported Sexual Dysfunction) Examination and Investigations. امراض باہ کی تشخیص

24.1.4. Principles of treatment of Reproductive System امراض نظام تولید کا اصول علاج

References: 1,4,5,16,17,21,23,24,26,27,29,30

3A	3B	3C	3D	3E	3F	3G

CO1,CO2, CO4,CO6, CO7	Describe the applied structure and function of the Reproductive system and explain the mechanism of spermatogenesis?	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Discuss the Etiology, clinical manifestations and diagnostic test with advanced tool and technique for Reproductive system diseases.	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Analyze the literature and explain the Principles of Treatment for Reproductive system and sexual Disorders, and apply evidence-based principle to guide patient care.	1	Lecture	CAN	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Demonstrate the Clinical Diagnosis for the diseases of Reproductive system and metabolism.	3	Practical24.1	AFT-REC	Shows-how	D-BED
CO1,CO2, CO4,CO6, CO7	Conduct a detailed history taking and physical examination, and differential diagnosis for sexual disorders, discuss the required investigations, and formulate a treatment plan	3	Experiential-Learning24.1	PSY-ADT	Does	PER,RLE
CO1,CO2, CO4,CO6, CO7	Demonstrate the indications, contraindications, and interpretation of required diagnostic tests for the diseases of the reproductive system and metabolic diseases, metabolic syndrome, to confirm clinical diagnosis.	4	Practical24.2	AFT-REC	Shows-how	D-BED,LRI
CO1,CO2, CO4,CO6, CO7	Demonstrate the management plan and treatment guidelines for the patients with diseases of the reproductive system and metabolic disorders, and demonstrate a counseling sessions	4	Practical24.3	AFT-REC	Shows-how	D,D-BED

CO1,CO2, CO4,CO6, CO7	Formulate a Personalized treatment plan for the patient of Sexual disorder and a subsequent follow-up plan based on the patient's condition	3	Experiential-Learning24.2	PSY-ADT	Does	PER
CO1,CO2, CO4,CO6, CO7	Conduct patient education and counseling sessions and exhibit the ability to maintain confidentiality in reproductive and sexual disorders management.	3	Experiential-Learning24.3	PSY-ADT	Does	PER
CO1,CO2, CO4,CO6, CO7	Analyze the literature critically and explain the principles of treatment, including Ilaj bil Tadbeer and Ilaj bil Dawa, for metabolic diseases, inborn errors of metabolism, and metabolic syndrome with emphasis on dietary modifications, lifestyle interventions, and medicinal treatments.	1	Lecture	CC	Knows-how	L&PPT

Unit 2 Amrāz-i-Bāh wa Amrāz Nizām Taulīd (Sexual Disorder and Diseases of the Reproductive System) امراض باہ وامراض نظام تولید

24.2.1. Amrāz-i-Bāh (Sexual Disorders) امراض باہ

24.2.1.1. Ḍu'f al-Bāh wa Shahwa (Deceased Desire/ Libido) ضعف الباہ والشھوۃ

24.2.1.2. Kathra al-Shahwa (Increased Desire/ Libido) کثرۃ الشھوۃ

24.2.2. Amrāz-i-Na'ūz (Disorders of Erection) امراض نعوظ

24.2.2.1. Nuqsān wa Butlāne Na'ūz (Decreased or absence of erection) نقصان وبطلان نعوظ

24.2.2.2. Istirkhā' al-Qaḍīb (Penile flaccidity / incomplete erection of penis) استرخاء قضیب

24.2.2.3. Farīsmūs (Priapism) فریسموس

24.2.2.4. I'wijāj al-Qaḍīb (Chordee) اعوجاج القضیب

24.2.3. Disorders of Orgasm امراض لذت شہویہ

24.2.3.1. Classification of Orgasmic Disorders تقسیم امراض لذت شہویہ

24.2.3.2. Sur'a al-Inzāl (Early Orgasmic Response/ Premature ejaculation) سرعۃ الانزال

24.2.3.3. Delayed Orgasmic Response (DOR) لذت شہویہ کا سست ردعمل

24.2.3.4. Impaired Orgasmic Response (IOR) لذت شہویہ کا ناقص ردعمل

24.2.3.5. Absent Orgasmic Response (AOR) لذت شہویہ کا مفقود ردعمل

24.2.4. Qilla al-Manī (Decreased quantity of semen) قلۃ المنی

24.2.5. Sailan-I-Manī wa Mazī (Discharge of Seminal fluid) سیلان منی ومذی

24.2.6. Kathra al-Iḥtilām (Increased nocturnal emission) کثرت احتلام

24.2.7. Adhyūṭ / ‘Adhīṭa (involuntary passage of stool during coitus) عزیطہ/عزیوط

24.2.8. ‘Āqūnā / Ikhtilāj Tanāsulī (Penile tremors) اختلاج تناسلی /عقونا

24.2.9. Waram al-Khuṣyatayn (Orchitis) ورم الخصیتین

24.2.10. ‘Ānaniyat (Male Infertility) عنانیت

References: 1,4,8,16,17,23,24,26,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO7	Describe the diseases of Reproductive system (zof-e-baah, sur’at anzal, kasrat-e-Ehtalam) and identify the associated conditions.	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Define and classify sexual disorders, enumerate and describe the Etiology, pathophysiology, clinical manifestations, and diagnostic tests for Zof-e-baah, Sur'atinzal, Kasrat-e-Ehtalam, and associated conditions.	1	Lecture	CS	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Analyze the literature critically and explain the Principles of Treatment including Ilaj bil Tadbeer and ilaj bil Dawa for Zof-e-baah, Sur'atinzal, and Kasrat-e-Ehtalam and apply evidence-based principle to guide patient care.	1	Lecture	CAN	Knows-how	L&PPT

CO1,CO2, CO4,CO6, CO7	Demonstrate the clinical approach to evaluate Zof-e-Baah (erectile dysfunction) and Sur'at-e-Inzal (premature ejaculation) patients. Discuss the use of diagnostic tests like penile Doppler ultrasound, hormonal assays, and psychological evaluation in the management of these conditions.	3	Practical24.4	AFT-REC	Shows-how	D-BED
CO1,CO2, CO4,CO6, CO7	Conduct a detailed history taking and examination for the diagnosis and differential diagnosis; Propose required investigations for the diagnosis and formulate a treatment plan based on the Principles of treatment for Sexual disorders and diseases of the reproductive system.	5	Experiential-Learning24.4	PSY-ADT	Does	W,JC,PER,LRI,CD
CO1,CO2, CO4,CO6, CO7	Formulate a personalized treatment plan and subsequent follow up plan based on the patient's condition, comorbidities and preferences Sexual disorders and reproductive diseases.	4	Experiential-Learning24.5	PSY-ADT	Does	RP,SDL,W,PER
CO1,CO2, CO4,CO6, CO7	Demonstrate the indications, contraindications, and interpretation of diagnostic tests such as semen analysis, hormonal testing, and imaging for confirming Kasrat-e-Ehtalam (excessive nocturnal emissions) and sterility.	3	Practical24.5	AFT-REC	Shows-how	D,DIS,LRI

Unit 3 Amrāz-i-Istiḥala (Diseases of Metabolism) امراض استحالہ

24.3.1. Istiḥāla ka buniyādi Jāyza (Basic Considerations of Metabolism) استحالہ کا بنیادی جائزہ

24.3.2. Amrāz-i-Istiḥala Amino Acid: Phenyketonuria, Homocystinuria (Disorders of Amino Acid Metabolism: Phenylketonuria, Homocystinuria) امراض استحالہ امینوایسڈ: فینائل کیٹونوریا، ہوموسسٹینوریا

24.3.3. Disorders of Carbohydrate Metabolism; Inborn Errors of Galactose Metabolism (Galactosaemia), Glycogen storage diseases. امراض استحالہ کاربوہائڈریٹ

24.3.4. Disorders of Blood Lipids and Lipoproteins; Dyslipidaemia امراض شحم الدم ولائپو پروٹین

24.3.5. Disorders of Purine Metabolism; Hyperuricaemia and Gout امراض استحالہ پیورین: فراط حامض بول دموی و نقرس

24.3.6. Disorders of Haem Synthesis: The Porphyrias امراض تولید ہیم

24.3.7. Iron Metabolism and Iron Overload Syndrome; Hereditary Haemochromatosis استحالہ فولاد و متلازمہ زائد فولاد

24.3.8. Wilson's Disease وِلسنس ڈزیز

24.3.9. Lysosomal Storage Disorders لائسوزومل اٹوریج امراض

24.3.10. Amyloidosis امائلوئڈوسس

24.3.11. Disorders of Adipose Tissue and Obesity نسیج شحمی کے امراض و سمن مفرط

24.3.12. Metabolic Syndrome میٹابولک سنڈروم

References: 5,11,12,14,16,17,19

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO4,CO6, CO7	Discuss the mechanisms of metabolic processes, including carbohydrate, lipid, and protein metabolism, and the role of the liver, pancreas, and endocrine organs, while covering inborn errors of metabolism and the components of metabolic syndrome.	2	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO4,CO6, CO7	Demonstrate a detailed medical history taking and perform a thorough physical examination for the diagnosis and differential diagnosis of metabolic disorders, including inborn errors of metabolism and metabolic syndrome.	3	Practical24.6	AFT-REC	Shows-how	CD,D-BED
CO1,CO2, CO4,CO6, CO7	Conduct a detailed history and examination for patients presenting with different metabolic disorders such as diabetes, thyroid dysfunction, hyperlipidemia, metabolic syndrome, and inborn errors of metabolism, and plan the treatment accordingly	4	Experiential-Learning24.6	PSY-ADT	Does	CBL,JC,LRI,PER
CO1,CO2, CO4,CO6, CO7	Describe the etiology, pathophysiology, clinical manifestations, and diagnostic tests for common metabolic diseases, inborn errors of metabolism, and metabolic syndrome.	1	Lecture	CC	Knows-how	L&PPT

CO1,CO2, CO4,CO6, CO7	Formulate and value a personalized treatment plan for patients of different metabolic disorders such as diabetes, thyroid dysfunction, hyperlipidemia, metabolic syndrome, and inborn errors of metabolism.	4	Experiential-Learning24.7	AFT-VAL	Does	PER,SDL,CBL

Practical Training Activity

Practical Training 24.1 Clinical Diagnosis for the diseases of Reproductive system and metabolism.

Total Learning Hours (3)

Activity 1: Bedside demonstration of clinical diagnosis (1 hr)

The teacher/mentor will discuss and demonstrate how to take a proper history and perform a Physical Examination on patient of Reproductive system disease and metabolic diorders.

Activity 2: Hands-on training session (1 hr)

The students shall take a proper history and do the clinical examination to establish a diagnosis under the supervision of a teacher.

Activity 3: Summarization (1 hr)

The teacher shall summarize the key concepts covered in the practical, clear the doubts and to rectify the mistakes made by students.

Practical Training 24.2 Investigations for metabolic diseases

Total Learning Hours (4)

Activity 1: Investigations planning workshops (1 hr)

The teacher/mentor will discuss the indications, contraindications, and interpretations of required diagnostic tests for the diseases of reproductive system and metabolic disorders.

Activity 2: Hands-on training session (2 hrs)

Students shall suggest required investigations and expected finding for the diseases of reproductive system and metabolic disorders.

Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the workshop, clear the doubts and recify the mistakes made by students during hands-on training session.
Practical Training 24.3 Treatment of diseases of Reproductive system and Metabolic disorders
Total Learning Hours (4) Activity 1: Personalized treatment plan workshop (2 hr) The student shall formulate a personalized treatment plan based on the line of treatment for the diseases of the reproductive system and metabolic disorders. Activity 2: Patient Education and Counseling Session (2 hr) Educate the patient on how to modify their lifestyles to prevent diseases of the reproductive system and metabolic disorders, address patients' concerns, and provide reassurance.
Practical Training 24.4 Clinical diagnosis of Zof-e-Baah (erectile dysfunction) and Sur'at-e-Inzal (premature ejaculation)
Total Learning Hours (3) Activity 1: Bedside demonstration for clinical evaluation (1 hr) The teacher/mentor will discuss and demonstrate how to take a proper history and perform a Physical Examination on patient of Zof-e-Baah (erectile dysfunction) and Sur'at-e-Inzal (premature ejaculation). Activity 2: Hands-on training session (1 hr) The students shall take a proper history and do the clinical examination to establish a diagnosis under the supervision of a teacher. Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical, clear the doubts and to rectify the mistakes made by students
Practical Training 24.5 Investigations for Kasrat-e-Ehtalam (excessive nocturnal emissions) and sterility.
Total Learning Hours (3)

Activity 1: Investigational approach Workshop (1 hr) The teacher/mentor will discuss the indications, contraindications, and interpretations of required investigations, such as semen analysis, hormonal testing, and imaging for confirming Kasrat-e-Ehtalam (excessive nocturnal emissions) and sterility. Activity 2: Hands-on training session (1 hr) The students shall propose required investigations and interpret the findings in the light of the patient's condition. Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical, clear the doubts, and rectify the mistakes made by students.
Practical Training 24.6 Diagnosis of metabolic disorders
Total Learning Hours (3) Activity 1: Bedside demonstration of clinical diagnosis (1 hr) The teacher/ mentor will discuss and demonstrate how to take a proper history and perform a Physical Examination on patient of Metabolic disorders such as diabetes, thyroid dysfunction, hyperlipidemia, metabolic syndrome, and inborn errors of metabolism, Activity 2: Hands-on training session (1 hr) The students shall take a proper history and do the clinical examination to establish a diagnosis under the supervision of a teacher. Activity 3: Summarization (1 hr) The teacher shall summarize the key concepts covered in the practical, clear the doubts and to rectify the mistakes made by students.
Experiential Learning Activity
Experiential-Learning Learning 24.1: Clinical Diagnosis and Management of Sexual disorders
Total Learning Hours (3)

Activity 1: Clinical Skills Workshop (1 hr) Students perform detailed history-taking and physical examination of patients with sexual disorders, focusing on identifying symptoms related to Zof-e-Baah, Sur'at Inzaal, and Kasrat-e-Ehtalam. Activity 2: Diagnostic Reasoning and Case Analysis (1 hr) Students work through real or simulated cases to practice differential diagnosis, select appropriate investigations (modern and Unani), and arrive at a final diagnosis. Activity 3: Unani Management Planning Session (1 hr) Students develop personalized Unani treatment plans based on the diagnosis, incorporating Mizaj assessment, Ilaj bil Ghiza, Ilaj bid Dawa, and Ilaj bit Tadbeer principles.
Experiential-Learning Learning 24.2: Treatment plan in Sexual disorder
Total Learning Hours (3) Activity 1: Interactive Case-Based Discussion (1 hr) Students analyze complex cases of sexual disorders with comorbidities, formulate individualized Unani-based treatment plans, and outline appropriate follow-up strategies respecting patient preferences. Activity 2: Clinical Exposure and Supervised Planning (1 hr) Under supervision, students interact with patients in OPD/IPD, gather clinical and psychosocial data, and prepare tailored treatment and follow-up plans for sexual and reproductive health issues. Activity 3: Patient-Centered Counseling Simulation (1 hr) Students engage in simulated counseling sessions where they present and explain personalized treatment and follow-up plans to standardized patients, incorporating Unani principles and ensuring informed consent.
Experiential-Learning Learning 24.3: Ethical issues in Reproductive and sexual disorders.
Total Learning Hours (3)

Activity 1: Role-Play on Ethical Communication (1 hr) Students perform role-plays simulating sensitive patient consultations, focusing on maintaining confidentiality while discussing sexual and reproductive health issues. Activity 2: Case-Based Ethical Dilemma Discussion (1 hr) Analyze case scenarios where confidentiality was breached or challenged, discussing appropriate responses in alignment with ethical and legal standards in Unani and modern medicine. Activity 3: Reflective Writing and Group Sharing (1 hr) Students write short reflections on personal or observed clinical experiences involving confidentiality, followed by a guided group discussion on lessons learned and best practices.
Experiential-Learning Learning 24.4: Diagnosis and Management of Sexual disorder and diseases of reproductive system.
Total Learning Hours (5) Activity 1: Clinical History and Examination Skills Lab (1 hr) Students practice and conduct detailed history-taking and physical examination techniques on simulated or real patients with reproductive or sexual health complaints. Activity 2: Differential Diagnosis Case Discussion (1 hr) Students analyze clinical cases and practice identifying key features to differentiate between common sexual and reproductive disorders such as Zof-e-Baah, Sur’at Inzaal, and Uqr. Activity 3: Investigation Planning and Interpretation Session (1 hr) Students learn to select appropriate modern and Unani diagnostic tools (e.g., semen analysis, hormonal assays, Mizaj assessment) and interpret results to support diagnosis.

Activity 4: Diagnostic Reasoning Workshop (1 hr) Groups present full diagnostic processes for given cases—from history and findings to provisional and final diagnosis—emphasizing the integration of Unani concepts. Activity 5: Unani Management Planning and Discussion (1 hr) Students formulate and justify individualized Unani treatment plans based on disease type, temperament, and patient preferences, aligning with classical principles and current practices.
Experiential-Learning Learning 24.5: Personalized treatment and follow up of Sexual disorders and reproductive diseases.
Total Learning Hours (4) Activity 1: Case Simulation and Treatment Planning (1 hr) PG students work in groups to evaluate simulated patient cases of sexual or reproductive disorders, identify comorbidities, and formulate a personalized Unani treatment and follow-up plan. Activity 2: Patient Interview and Preference Mapping (1 hr) Students conduct structured interviews with patients to understand their clinical issues, psychosocial concerns, and treatment preferences, then integrate this data into an individualized management plan. Activity 3: Follow-up Protocol Development Workshop (1 hr) Students design and present detailed follow-up protocols for chronic sexual and reproductive conditions, incorporating relapse prevention, monitoring strategies, and lifestyle modifications based on Unani and modern guidelines. Activity 4: Role Play and Peer Feedback (1 hr) Students perform mock consultations, including history-taking, counseling, and treatment planning for sexual and reproductive conditions, followed by structured peer and mentor feedback.
Experiential-Learning Learning 24.6: Diagnosis and Management of Metabolic disorders

Total Learning Hours (4) Activity 1: Clinical History-Taking Workshop (60 minutes): Students practice comprehensive history-taking focused on different metabolic disorders such as diabetes, thyroid dysfunction, hyperlipidemia, metabolic syndrome, and inborn errors of metabolism. Activity 2: Focused Physical Examination Skills Session (1 hr) Students learn and conduct targeted physical examination relevant to presenting symptoms, correlating findings with Unani parameters such as Mizaj and Quwā. Activity 3: Diagnostic Report Interpretation and Group Discussion (1 hr) Students review and interpret clinical and laboratory findings (e.g., Blood Sugar, Lipid profile, Thyroid profile, etc.) to distinguish between different mimicking conditions. Activity 4: Unani Treatment Planning Exercise (1 hr) Based on clinical findings, students formulate condition-specific Unani treatment plans, selecting appropriate therapies and rationalizing their choices in group presentations.
Experiential-Learning Learning 24.7: Personalized treatment for Metabolic disorders
Total Learning Hours (4) Activity 1: Clinical Case-Based Discussion (1 hr) PG students discuss and analyze different metabolic disorders such as diabetes, thyroid dysfunction, hyperlipidemia, metabolic syndrome, and inborn errors of metabolism, and design personalized treatment plans using Unani principles. Activity 2: Drug Formulation & Counseling Workshop (2 hrs) Students prepare Unani formulations for metabolic disorders and practice counseling techniques that incorporate patient preferences and Unani guidance. Activity 4: Reflective Practice and Interdisciplinary Review (1 hr) Students reflect on real or observed cases, evaluating how Unani concepts and patient-centered care shaped their therapeutic strategies.
Modular Assessment

Assessment	Hour
Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C. Case-based evaluation: (50 Marks) Each student will be given a case history or problem situation to evaluate the patient and create a treatment/management plan with justification. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any of the experiential as portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)	4

Paper No : 4(Moalajat (Medicine) Paper IV)

Semester No : 3

Module 25 : Amrāz-i-Mut'diyah (Infectious diseases)امراض متعدیہ

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describes the concept of Manā'at in Unani medicine, including its role in the body's defense system.

2. Discuss the factors that influence the body's immunity, such as the balance of humors (Aza), temperament (Mizāj), and the functioning of vital organs

3. Demonstrates how Unani medicine enhances immunity through dietary, medicinal, and lifestyle interventions.

4. Evaluate the relevance of Unani concepts in modern epidemiology

Unit 1 Mana'at wa Ta'diya (Immunity and Infection) مناعت وتعدیہ

25.1.1. Manā'at and Ta'diyā مناعت وتعدیہ

25.1.2. Muta'ddi Amrāz ke Ilāj men Manā'at ki Ahmiyat Importance of Manā'at in the treatment of infectious diseases متعدی امراض کے علاج میں مناعت کی اہمیت

25.1.3. Micro-organism and host interaction

25.1.4. Amrāz-i-Muta'ddi ka Uṣul Ilāj (Principles of management of infectious disease) امراض متعدی کا اصول علاج

References: 1,2,3,4,16,17,19,23,24,27,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3	Describe the roles of Mana'at (immunity) and Tadiya (transmission) in the Unani understanding of infectious diseases.	1	Lecture	CC	Knows-how	CD,BS,BL
CO1,CO2, CO3,CO4	Demonstrate the Principles of Treatment as per Unani medicine for infectious diseases	4	Practical25.1	PSY-GUD	Shows-how	RP,D-BED,CBL,D

CO1,CO2, CO3,CO4	Analyze case studies related to *Mana'at* (immunity) and *Tadiya* (transmission) to discuss Unani-based preventive measures and community health strategies for managing epidemic diseases.	7	Experiential-Learning25.1	PSY-ADT	Does	DIS,TBL,JC,PER,SIM
CO1,CO3, CO4	Describe the origins, transmission, symptoms, and complications of Ebola, Avian Flu, and Zika, integrating Unani concepts on managing epidemic and vector-borne diseases.	2	Lecture	CC	Knows-how	BL,L&PPT ,L
CO1,CO2, CO3	Analyze the significance of Mana'at in managing and treating infectious diseases in Unani with modern therapeutic practices.	1	Lecture	CAN	Knows-how	BL,L&PPT
CO1,CO2, CO3	Discuss and Summarize the principles of infectious disease management in Unani medicine, highlighting preventive and curative approaches	1	Lecture	CC	Knows-how	L&PPT ,BL
CO1,CO2, CO3	Perform diagnostic assessments to identify infectious diseases and evaluate immunity levels in Unani and modern practices.	6	Practical25.2	PSY-GUD	Shows-how	D-BED,D,PAL,PT
CO1,CO2, CO3	Discuss patient outcomes and the effectiveness of Unani approaches in controlling disease transmission (*Tadiya*) and improving immunity through Unani medicine and diet.	6	Experiential-Learning25.2	PSY-ADT	Does	TBL,PER,DIS,RLE,CBL
CO1,CO2, CO4	Describe the origins, transmission, symptoms, and complications of Ebola, Avian Flu, and Zika, integrating Unani concepts on managing epidemic and vector-borne diseases.	2	Lecture	CC	Knows-how	L&PPT ,BL

CO1,CO2, CO4	Describe the transmission, symptoms, complications, and preventive measures for Swine Flu and COVID-19, integrating Unani perspectives for its treatment.	1	Lecture	CC	Knows-how	L&PPT ,BL

Unit 2 Naye Ubharte hue Amrāz-i-Muta'ddiya (Emerging infectious diseases) نئے ابھرتے ہوئے امراض متعدیہ

25.2.1. T'āruf Amrāz-i-Ghayr Mudawwana (Inroduction of Undescribed Diseases) تعارف امراض غیر مدونہ

25.2.2. Mutalāzima Tanaffus Hād Shadīd (Severe Acute Respiratory Syndrome) متلازمہ تنفس حاد شدید

25.2.3. Mutalāzima Tanaffus Mashriq Wuṣta (Middle East Respiratory Syndrome-MERS) متلازمہ تنفس مشرق وسطیٰ

25.2.4. Ebola اِبولا

25.2.5. Avian Flu ایوین فلو

25.2.6. Zika Virus Disease مرض زیکا ویروسی

25.2.7. Swine Flu سوائن فلو

25.2.8. COVID-19 کووڈ ۱۹

References: 5,12,13,16,17,20

3A	3B	3C	3D	3E	3F	3G
CO1,CO3, CO5	Describe the etiology, transmission, and pathophysiology of SARS and Middle East Respiratory Syndrome (MERS), focusing on respiratory complications and related Unani perspectives on epidemic management.	2	Lecture	CK	Knows-how	BL,L&PPT
CO1,CO2, CO4	Demonstrate Unani methods for enhancing *Mana'at* (immunity), through Unani medicine and dietary recommendations.	4	Practical25.3	PSY-ADT	Shows-how	PER,CBL,SY,DIS
CO1,CO2, CO4	Demonstrate infection control measures (such as PPE usage and barrier nursing) and patient assessment techniques to manage these diseases effectively while reducing transmission risks.	3	Practical25.4	CC	Shows-how	CBL,RP,D-BED

CO1,CO2, CO4	Demonstrate effective patient assessment and infection control practices (e.g., PPE usage, isolation protocols) in handling suspected cases of Swine Flu and COVID-19.	3	Practical25.5	CC	Shows-how	D
CO1,CO2, CO4	Discuss and Analyze case studies of SARS and MERS outbreaks to find-out Unani based preventive measures and community health strategies for managing epidemic diseases.	5	Experiential-Learning25.3	PSY-ADT	Does	RP,CBL,TPW,DIS,PER
CO1,CO2, CO4	Analyze and discuss outbreak case studies to explore Unani preventive strategies, immunity strengthening practices in treating and controlling the spread of Ebola, Avian Flu, and Zika.	4	Experiential-Learning25.4	PSY-ORG	Does	RLE,JC,PL,PER,DIS
CO1,CO2, CO4	Discuss the case studies on Swine Flu and COVID-19 outbreaks to find out the application of Unani preventive methods, immunity enhancement, and public health strategies in managing pandemic conditions.	4	Experiential-Learning25.5	PSY-ORG	Does	PER,FV,DIS,PL,RLE

Practical Training Activity

Practical Training 25.1 Treatment of Infectious diseases

Total Learning Hours (4)

Activity 1: Practical Demonstration of modes of treatment in Unani medicine (2 hrs)

Students work in pairs or small groups to select an infectious disease and demonstrate a Unani treatment plan based on the principles of Ilaj bil Ghiza (dietary regimen) and Ilaj bil Dawa (pharmacological regimen)

Activity 2: Clinical Case-Based Practical on Ilaj Bil Tadbeer (2 hrs)

Supervised demonstration using a real or simulated patient case (from outpatient records or simulated data), students design and demonstrate a regimenal therapy plan incorporating different methods like Hijama (cupping), Fasd (venesection)

Practical Training 25.2 Diagnostic assessments for infectious diseases
Total Learning Hours (6) Activity 1: Clinical Symptom-Based Diagnosis in Unani medicine (3 hrs) Clinical demonstration for identifying signs and symptoms of common infectious diseases using both Unani clinical parameters and modern diagnostic criteria. Activity 2: Immunity Assessment Using Unani & Modern Indicators (3 hrs) To perform immunity evaluation based on Unani *Mana'at* indicators and correlate with basic modern immune markers. Assessment of digestive strength, sleep quality,resistance to seasonal illnesses, skin infections etc. Assessment of different laboratory reports like CBC, CRP, ESR, Immunoglobulin levels etc for the evaluation of immunity.
Practical Training 25.3 Enhancing *Mana'at* (immunity)
Total Learning Hours (4) Activity 1: Identification, Preparation, and Demonstration of Immunity-Enhancing Unani Formulations (2 hrs) The teacher will give a brief introduction on the concept of Mana'at in Unani medicine, and explain the benefits of a few Unani immuno-modulators. The students will recognize and prepare classical and evidence-based Unani formulations that enhance Mana'at (immunity). Activity 2: Demonstration and Planning of Unani Immunity-Boosting Diets and Regimens (2 hrs) The teacher will give an introductory overview of immunity-related dietary principles in Unani medicine, and discuss seasonal recommendations and temperament-based diet customization. The students prepare or display immunity-supportive Unani dietary items. Students create daily/weekly plans for immune health using diet, sleep hygiene etc.
Practical Training 25.4 Infection control measures
Total Learning Hours (3) Activity 1: PPE Protocols and Barrier Nursing Simulation (1.5 hrs)

The teacher will demonstrate proper infection control measures, focusing on the use of Personal Protective Equipment (PPE) and barrier nursing techniques to prevent disease transmission. Students practice the procedure individually under supervision of the teacher. Activity 2: Patient Assessment and Triage Simulation (1.5 hrs) The teacher will demonstrate effective clinical assessment and triage while minimizing infection risk. Later the students will perform Temperature and oxygen saturation measurement, Respiratory assessment and Risk classification (mild/moderate/severe).
Practical Training 25.5 Patient Assessment and Infection Control of Swine Flu and COVID-19
Total Learning Hours (3) Activity 1: Hands-on PPE Donning and Doffing Drill (1 hr) Students learn and practice the correct sequence of donning and doffing PPE (gown, gloves, mask, face shield) in accordance with WHO/CDC guidelines under the supervision of an instructor/ teacher. The drill should also include discussion of common errors and contamination risks. Activity 2: Patient Assessment Simulation and Role Play (2 hrs) Set up a mock patient screening area with standardized patients displaying symptoms of Swine Flu and COVID-19, and then students conduct history taking, symptom checklist, temperature/O2 sat monitoring, and risk stratification. This should also include patient counseling, on the grounds of home isolation.
Experiential Learning Activity
Experiential-Learning Learning 25.1: Case studies of SARS and MERS outbreaks
Total Learning Hours (7) Activity 1: Case Study Simulation Workshop (2 hrs) Students will simulate a workshop with detailed fictional or historical case studies of epidemic outbreaks. Students shall analyze the case using Unani principles—focusing on Mana'at and Tadiya—and present their preventive and community health strategies based on Unani teachings. Activity 2: Community Health Outreach Design (4 hrs) Students may design a mock community outreach campaign focused on preventing disease transmission using Unani preventive strategies (e.g., air purification,

dietary regimens, quarantine, etc.). They create educational materials (posters, pamphlets, videos), plan community engagement activities, and simulate an awareness session for a target population. Activity 3: Seminar presentation (1 hr) Students may present on the integration of Unani and modern medical practices in managing an infectious disease, focusing on enhancing Mana'at (immunity) and controlling disease transmission (Tadiya).
Experiential-Learning Learning 25.2: Controlling disease transmission (*Tadiya*)
Total Learning Hours (6) Activity 1: Case Study and Discussion to establish Unani approach (2 hrs) The student shall have group discussion with peer on case studies of infectious diseases and relevance of Unani literature. By thought provoking discussion students should establish the effectiveness of Unani medicine and diet to improve immunity. Activity 2: Unani Medicine and Diet Outcome Survey (2 hrs) Student may get involved in Patient survey in OPD and IPD of the hospital, and get their feedback for the improvement in immunity after using Unani Medicine and Dietary recommendations. Activity 3: Presentation (2 hrs) The student may collect information from the classical Unani text books and published research papers on controlling disease transmission and present in the departmental seminar.
Experiential-Learning Learning 25.3: SARS and MERS outbreaks
Total Leraning Hours (5) Activity 1: Case Study Analysis and Expert Panel Simulation (2 hrs) Students will do case study analysis describing the outbreak, transmission, symptoms, and public health response and identify Unani strategies including regimens, diet, single drugs and compound Unani formulations that could support prevention of SARS and MERS outbreaks.

Activity 2: Comparative Strategy Design Discussion (2 hr) Students will engage in discussion to compare the outbreaks of SARS and MERS and collaboratively design a Unani pandemic preparedness plan applicable to future viral outbreaks. The plans my include immune-boosting regimens, community education, and integration with modern practices. Activity 3: Peer Teaching and preparation of chart (1 hr) Students may do peer teaching about the prevention and treamtment of SARS and MERS infection. Prepare charts for easy understanding and explaination of the stretegies required for the prevention and treatment of these outbreaks.
Experiential-Learning Learning 25.4: Prevention and treatment of Ebola, Avian Flu and Zika
Total Leraning Hours (4) Activity 1: Case Study Analysis and Expert Panel Simulation (2 hrs) Students will do case study analysis describing the outbreak, transmission, symptoms, and public health response and identify Unani strategies including regimens, diet, single drugs and compound Unani formulations that could support prevention of Ebola, Avian Flu and Zika virus infection. Activity 2: Comparative Strategy Design Discussion (1 hr) Students will engage in discussion to compare the these outbreaks and collaboratively design a Unani pandemic preparedness plan applicable to future viral outbreaks. The plans my include immune-boosting regimens, community education, and integration with modern practices. Activity 3: Peer Teaching and Chart preparation (1 hr) Students may do peer teaching about the prevention and treamtment of Ebola, Avian Flu and Zika virus infection. Prepare charts for easy understanding and explaination of the stretegies required for the prevention and treatment of these outbreaks.
Experiential-Learning Learning 25.5: Swine Flu & COVID-19
Total Learning Hours (4) Activity 1: Discuss the Unani aspect to prevent Swine Flu and COVID-19 outbreaks (1 hr) Student will discuss and debate with peer to find-out the potentials of Unani medicine in the prevention of Swine flue and COVID-19. Required modifications of Asbab-e-Sitta Zauriya and Unani drugs available in the form of single as well as compound formulations.

Activity 2: Community Health Awareness Campaign (2 hr)

Studnets will get involved in community health education to create awareness about spread of such diseases, preventive aspects and Unani and modern treatment strageties.

Activity 3: Presentation in Journal Club (1 hr)

Student will present published papers related to Swine Flu and COVID-19 to explain what advancements are going on around the world, and in the light of such papers updated their knowldge for the understanding and management strategies.

Modular Assessment

Assessment	Hour
Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per table 6 C Case-based assessment: (50 marks) Each student will be given a case or problem situation to evaluate the patient of SARS/ MERS or any other disease from the Module and formulate a treatment/ management plan. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or Direct observation of Procedure or Observed Structured Clinical Examination (OSCE). (50 Marks) • History Taking / Communication Skills (15 Marks) • Clinical Examination / Procedural Skills (15 Marks) • Clinical Reasoning / Interpretation (10 Marks)	4

- Decision-Making / Management Plan (10 Marks)

Or

Any practical in converted form can be taken for assessment. (25 Marks)

and

Any of the experiential as portfolios/ reflections/presentations can be taken as an assessment. (25 Marks)

Module 26 : Amrāz-i-Jarāsīm wa Vairūsī (Bacterial and Viral Diseases) امراض جراثیم وویروسی

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describe bacterial and viral pathogens, their modes of transmission, pathophysiology, clinical symptoms, and diagnostic methods, alongside conventional treatment strategies such as antibiotics, antivirals, and vaccines.
2. Diagnose and apply appropriate investigative techniques to accurately diagnose bacterial and viral infections, enabling targeted and effective treatment plans.
3. Recognise and utilize Unani principles and therapeutic approaches to provide holistic management and preventive strategies for bacterial and viral infections, with a focus on enhancing immune system support.
4. Evaluate the integrative role of Unani medicine within modern healthcare frameworks, combining Unani Medicine with contemporary medical advancements to ensure comprehensive and effective disease management.

Unit 1 Jarāsīmi Amrāz (Bacterial diseases) جراثیمی امراض

26.1.1. Ḥummā-i-Ḥudāriya (Rheumatic fever) حمیٰ حدار یہ

26.1.2. Ṭā'ūn (Plague) طاعون

26.1.3. Ḥummā-i-Mi'wī (Typhoid Fever /Enteric Fever) حمیٰ معوی

26.1.4. Kuzāz (Tetanus) کزاز

26.1.5. Juzām (Leprosy /Hansen Disease) جزام

26.1.6. Ātshak (Syphilis) آتشک

References: 1,2,4,5,10,11,14,16,17,19,24,26,27						
3A	**3B**	**3C**	**3D**	**3E**	**3F**	**3G**
CO1,CO2, CO3,CO6, CO7,CO8	Describe the etiology, clinical features, investigations, complications and management of Hummae Hudariya (Rheumatic fever) and Ta'oun (Plague)	2	Lecture	CC	Knows-how	BL,L&PPT
CO1,CO2, CO3,CO6, CO7,CO8	Describe the etiology, clinical features, investigations, complications and management of Hummae me'vi (Typhoid Fever /Enteric Fever) and Kuzaz (Tetanus)	2	Lecture	CC	Knows-how	L&PPT ,BL
CO1,CO2, CO3,CO6, CO7,CO8	Describe the etiology, clinical features, investigations, complications and management of Juzam(Leprosy /Hansen Disease) and Atishak (Syphilis)	1	Lecture	CC	Knows-how	L&PPT ,BL
CO1,CO2, CO3,CO6, CO7,CO8	Demonstrate the clinical assessment methods and appropriate investigations for identifying the etiology, clinical features, complications, and management of Hummae Hudariya (Rheumatic Fever), Ta'oun (Plague), Hummae me'vi (Typhoid Fever), Kuzaz (Tetanus), Juzam (Leprosy), and Atishak (Syphilis) in a clinical setting.	10	Practical26.1	PSY-GUD	Shows-how	LRI,CD,D-BED,CBL
CO1,CO2, CO3,CO6, CO7,CO8	Conduct clinical examination of bacterial infections, including Rheumatic fever, Plague, Typhoid Fever, Leprosy patients, and propose required investigations for diagnosis and advise treatment with Unani and conventional medicine.	10	Experiential-Learning26.1	PSY-GUD	Does	EDU,W,PrBL,DIS,SY

CO1,CO2, CO3,CO6, CO7,CO8	Evaluate the case studies regarding clinical presentations of different Bacterial infections including Rheumatic fever, Plague, Typhoid Fever, Leprosy etc.	3	Experiential-Learning26.2	PSY-ORG	Does	PER,CD,PrBL,CBL
CO1,CO2, CO3,CO6, CO7,CO8	Discuss the etiology, clinical features, investigations, complications and management of Warme Asl al Uzn(Mumps / Parotitis)	1	Lecture	CC	Knows-how	BL,L&PPT

Unit 2 Vairūsī Amrāz (Viral diseases) ویروسی امراض

26.2.1. Ḥummā-i-Danaj (Dengue fever) حمیٰ دنج

26.2.2. Waram Aṣl al-Udhun (Mumps / Parotitis) ورم اصل الاذن

26.2.3. Fālij-i-Atfāl (Poliomyelitis) فالج اطفال

26.2.4. Chikungunya Fever حمیٰ چکنگنیا

26.2.5. Japanese Encephalitis جاپانی ورم دماغ

26.2.6. Dā' al-Kalb (Rabies) داء الکلب

26.2.7. AIDS علت قلت مناعت مکسوبی

References: 1,2,5,9,10,11,14,17,23,24,26,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO6, CO7,CO8	Discuss the etiology, clinical features, investigations, complications and management of Hummae Danaj (Dengue fever)	1	Lecture	CC	Knows-how	BL,L&PPT

CO1,CO2, CO3,CO6, CO7,CO8	Discuss the etiology, clinical features, investigations, complications and management of Falije atfal (Poliomyelitis), and Japanese Encephalitis	1	Lecture	CC	Knows-how	BL,L&PPT
CO1,CO2, CO3,CO6, CO7,CO8	Discuss the etiology, clinical features, investigations, complications and management of Chikungunya Fever	1	Lecture	CC	Knows-how	BL,L&PPT
CO1,CO2, CO3,CO6, CO7,CO8	Describe the etiology, clinical features, investigations, complications, and management of Azzul Kalb (Rabies) and HIV / AIDS	1	Lecture	CC	Knows-how	BL,L&PPT
CO1,CO2, CO3,CO6, CO7,CO8	Demonstrate the procedures for clinical assessment and diagnostic investigations for Hummae Danaj (Dengue Fever), Warme Asl al Uzn (Mumps), Falije atfal (Poliomyelitis), Japanese Encephalitis, Chikungunya Fever, Azzul Kalb (Rabies), and HIV/AIDS, focusing on identifying clinical features, complications, and appropriate Unani management strategies.	10	Practical26.2	PSY-GUD	Shows-how	D-BED
CO1,CO2, CO3,CO6, CO7,CO8	Evaluate and conduct case studies of Hummae Danaj, Warme Asl al Uzn, Falije atfal, Japanese Encephalitis, Chikungunya Fever, Azzul Kalb, to understand the application and outcomes of Unani approaches in symptom management, complication and its prevention.	7	Experiential-Learning26.3	PSY-ORG	Does	PER,IBL,JC
CO1,CO2, CO3,CO6, CO7,CO8	Evaluate and conduct case studies of HIV/AIDS to understand the application and outcomes of Unani approaches in symptom management, complication prevention, and community health strategies.	6	Experiential-Learning26.4	PSY-ORG	Does	JC,RLE,PER

Practical Training Activity
Practical Training 26.1 Diagnosis and management of bacterial infections (Rheumatic Fever, Typhoid Fever, Tetanus, Leprosy etc.)
Total Learning Hours (10) Activity 1: Clinical Examination and Case Documentation (5 hrs) Students perform supervised clinical assessments on patients (or simulated cases) with conditions such as Hummae Hudariya (Rheumatic Fever), Ta'oun (Plague), Hummae Me'vi (Typhoid Fever), Kuzaz (Tetanus), Juzam (Leprosy), and Atishak (Syphilis). Take a detailed history focusing on exposure, symptoms, and risk factors. Perform system-based physical examinations (e.g., cardiac auscultation for rheumatic fever, neurological signs in tetanus). Activity 2: Diagnostic Investigations and Interpretation (3 hrs) Students practice selecting and interpreting key diagnostic investigations for each disease. Demonstrated detailed interpretations of ASO titer and ESR for Rheumatic Fever, Blood culture and Widal test for Typhoid Fever, Microscopy and culture for Plague and Leprosy, VDRL/RPR and TPHA for Syphilis, and finally correlate the findings of investigations with clinical findings. Activity 3: Integrated Management Planning Session (2 hrs) In small groups, students create integrated management plans for selected cases using both Unani and conventional approaches. Propose treatment regimens using Ilaj bil Dawa (Unani pharmacotherapy), Ilaj bil Ghiza (diet therapy), and Ilaj bil Tadbeer (regimenal therapy). Recommend appropriate antibiotics and supportive care from conventional medicine. Address prevention of complications and public health concerns (especially for Ta'oun and Juzam).
Practical Training 26.2 Diagnostis and Management of Viral infections
Total Learning Hours (10) Activity 1: Clinical Examination and Symptom Mapping (2 hrs) In a clinical or simulation setting, students perform guided physical examinations for simulated cases or real patients representing diseases like Hummae Danaj, Warme Asl al Uzn, Falije Atfal, Japanese Encephalitis, Chikungunya, Azzul Kalb, and HIV/AIDS. Focusing on identifying key clinical signs and documenting them with Unani literature.

Activity 2: Diagnostic Investigations and Interpretation (3 hrs) First, the teacher will demonstrate the findings of the investigation after explaining what investigations are required to diagnose such viral infections. Then, Students learn and practice interpreting common diagnostic investigations relevant to each condition of viral infections. Activity 3: Case-Based Clinical Management Simulation (5 hrs) In small groups, students are assigned specific cases from the disease list. They assess the patient, suggest investigations, and formulate a complete Unani treatment and complication-prevention plan for different viral infections, verified by the teacher/instructor.
Experiential Learning Activity
Experiential-Learning Learning 26.1: Diagnosis and management of Bacterial infections
Total Learning Hours (10) Activity 1: Clinical Rotations and Rounds in Infectious Disease Wards (3 hrs) Students shall be posted in clinics or hospital wards treating patients with bacterial infections such as Rheumatic fever, Plague, Typhoid Fever, and Leprosy. They will take histories, perform clinical examinations, and propose diagnostic investigations for atleast 2-3 different cases. Real-time documentation of all these activities in the log book for later assessment. Activity 2: Simulated Patient Encounter & Role play (3 hrs) Using trained standardized patients or detailed case simulations, students conduct full clinical assessments of bacterial infection scenarios. This activity can be performed with the help of peers also, to practice structured history-taking and physical examination techniques. Activity 3: Unani-Conventional Therapeutics Integration Workshop (4 hrs) Students get engaged in departmental workshop to design comprehensive treatment protocols for specific bacterial infections (3-4 different infectios) by combining Unani therapies with allopathic approaches. Match disease-specific Unani formulations with conventional drugs antibiotics, anti-inflammatory etc
Experiential-Learning Learning 26.2: Case studies of Bacterial infections
Total Learning Hours (3)

Activity 1: Case Study analysis (1 hr)

The students shall go through the case studies for the clinical features of bacterial infections including Rheumatic fever, Plague, Typhoid Fever, Leprosy etc. to find out the pathological changes behind the development of clinical features.

Activity 2: Debate and Peer learning activities (2 hrs)

The studets shall engage in group discussions and debates for different case studies of these bacterial diseases.

Experiential-Learning Learning 26.3: Application of Unani medicine in Hummae Hudariya, Ta'oun, Hummae me'vi, Kuzaz, Juzam, and Atishak

Total Learning Hours (7)

Activity 1: Clinical Case-Based Learning (CBL) Workshops (3 hrs)

Students are presented with real or well-developed simulated case studies of the diseases like Hummae Danaj, Warme Asl al Uzn, Falije Atfal, Japanese Encephalitis, Chikungunya Fever. Students shall analyze each case through a Unani lens, diagnose the case based on Unani principles (e.g., mizaj imbalance, sabab) and design a treatment plan involving Ilaj bil Ghiza, Ilaj bil Dawa, and Ilaj bil Tadbeer.

Activity 2: Comparative Outcome Analysis Project and Presentation (4 hrs)

Students conduct a small-scale project comparing Unani interventions versus conventional treatments (based on literature or data analysis) for selected conditions from the list. Identify case reports or documented treatment protocols, evaluate outcomes such as symptom resolution, recurrence prevention, and quality of life. And, finally present in the seminar

Experiential-Learning Learning 26.4: Management of HIV/AIDS

Total Learning Objectives (6 hrs)

Activity 1: Case Study Simulation Workshops (2 hrs)

Students will go for detailed case studies of individuals living with HIV/AIDS and will act as Unani practitioners tasked with evaluating and managing the case using Unani principles. Propose Unani interventions (Ilaj bil Ghiza, Ilaj bil Dawa, etc.), predict potential complications and preventive strategies.This activity will provide an hands-on experience with Unani medicine's holistic approach to managing infectious and, focusing on enhancing patient outcomes and community health to manage HIV/AIDS

Activity 2: Community Health Assessment Project (4 hrs)

Students visit or simulate an underserved community (real or virtually reconstructed) with high HIV/AIDS prevalence. They conduct assessments and design Unani-based public health interventions for education, prevention, and care support. Students will collaborate in teams to identify cultural and health system barriers. Develop a culturally sensitive outreach or awareness plan incorporating Unani health principles.

Therefore, Understand the role of Unani in public health and community-based HIV/AIDS management.

Modular Assessment

Assessment	Hour
Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C. Case-based evaluation: (50 Marks) Each student will be given a case history or problem situation of Enteric fever/ Dengue fever or any other disease from the module to evaluate the patient and create a treatment/ management plan with justification. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any of the experiential as portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)	4

Semester No : 4

Module 27 : Dīgar Amrāz-i-Mut'ddiya (Other infectious diseases) دیگر امراض متعدیہ

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Demonstrate a comprehensive understanding of advanced diagnostic techniques, including molecular and serological methods, culture techniques, and specific diagnostic tests, and their application in infectious disease diagnosis and management.

2. Describe the pathogenesis, clinical presentations, and diagnostic approaches for nosocomial infections and major diseases such as Kala Azar (Leishmaniasis), Da' al-Fil (Filariasis), Hydatid Disease, and Suzak (Gonorrhoea).

3. Integrate conventional and Unani methods in managing these diseases and focus on preventive measures from both Unani and conventional perspectives.

4. Develop practical skills through clinical assessments, selecting appropriate investigations, and analyzing case studies to effectively manage and mitigate infectious diseases in clinical and community health settings.

Unit 1 Buniyādi mut'allaqa Taftīshāt (Basic Related Investigations) بنیادی متعلقہ تفتیشات

27.1.1. RT PCR

27.1.2. Nested PCR

27.1.3. Immunofluorescence and ELISA

27.1.4. Monospot test

27.1.5. Malaria antigen Spot test

27.1.6. Direct Agglutination Test

27.1.7. Blood Culture

27.1.8. Bone Marrow Culture

27.1.9. Typhi dot / Typhi dot M

27.1.10. Tubex test

27.1.11. Urine Culture

27.1.12. Stool Culture 27.1.13. Lumbar Puncture **References:** 5,9,10,11,12,13,14,15,16,17,18,19,20						
3A	**3B**	**3C**	**3D**	**3E**	**3F**	**3G**
CO1,CO2, CO3,CO6, CO7,CO8	Describe the principles and applications of RT-PCR and Nested PCR in detecting viral pathogens with high specificity and sensitivity.	1	Lecture	CC	Knows-how	L&PPT ,BL
CO1,CO2, CO3,CO6, CO7,CO8	Describe the role of Immunofluorescence and ELISA in identifying antibodies or antigens in various infectious diseases.	1	Lecture	CC	Knows-how	L&PPT ,BL
CO1,CO2, CO3,CO6, CO7,CO8	Describe the Monospot test and Malaria antigen spot test, focusing on their rapid diagnostic capabilities and clinical significance.	1	Lecture	CC	Knows-how	L&PPT ,BL
CO1,CO2, CO3,CO6, CO7,CO8	Describe Direct Agglutination and Blood Culture methods, detailing their applications in identifying bacterial pathogens and assessing infections.	1	Lecture	CC	Knows-how	BL,L&PPT
CO1,CO2, CO3,CO6, CO7,CO8	Describe Typhi dot/Typhi dot M, Tubex test, and their specific applications in diagnosing enteric fever, along with the relevance of cultures (urine, stool, bone marrow) in identifying pathogens	1	Lecture	CC	Knows-how	L&PPT ,BL

CO1,CO2, CO3,CO6, CO7,CO8	Demonstrate the process of collecting and handling specimens for blood cultures and other laboratory tests, ensuring proper aseptic techniques and patient safety.	6	Practical27.1	AFT-SET	Shows-how	D,SDL,PAL,DL,SIM
CO1,CO2, CO3,CO6, CO7,CO8	Conduct diagnostic procedures such as blood sample collection for different blood-related tests and interpret their diagnostic values and significance, reliability, etc.	7	Experiential-Learning27.1	PSY-GUD	Does	LRI,PER,W,DL,PAL
CO1,CO2, CO3,CO6, CO7,CO8	Conduct throat and nasal swab collection and SCF collection on mannequins or simulated patients, or real patients in the hospital setting.	6	Experiential-Learning27.2	PSY-ORG	Does	PER,D-BED
CO1,CO2, CO3,CO6, CO7,CO8	Demonstrate the process of collecting and handling specimens like throat wab, Nasal swab, and CSF etc. ensuring proper aseptic techniques and patient safety.	4	Practical27.2	AFT-REC	Shows-how	L_VC,D-BED,D

Unit 2 Mustashfawi wa Dīgar Amrāz Muta'ddiya (Nosocomial and other infectious diseases) مستشفوی ودیگر امراض متعدیہ

27.2.1. Mustashfawī Ta'diya (Nosocomial infections) مستشفوی تعدیہ

27.2.2. Kāla Azār (Lieshminiasis) کالاازار

27.2.3. Dā' al-Fīl (Filariasis) داءالفیل

27.2.4. Hydatid Disease ہائڈیٹڈ دیسیز

27.2.5. Suzāk (Gonorrhoea) سوزاک

References: 1,2,4,8,14,16,17,21,24,26,29,30

3A	3B	3C	3D	3E	3F	3G

CO1,CO2, CO3,CO6, CO7,CO8	Describe the etiology, clinical features, investigations, complications and management of Hummae Ijamia (Malarial fever)	1	Lecture	CC	Knows-how	L&PPT ,BL
CO1,CO2, CO3,CO6, CO7,CO8	Desceibe the etiology, clinical features, investigations, complications and management of Kala Azar (Lieshminiasis)	1	Lecture	CC	Knows-how	L&PPT ,BL
CO1,CO2, CO3,CO6, CO7,CO8	Describe the etiology, clinical features, investigations, complications and management of Da' al-Fil (Filariasis) the Brain and apply evidence-based principles to guide patient care.	1	Lecture	CC	Knows-how	L&PPT ,BL
CO1,CO2, CO3,CO6, CO7,CO8	Desceibe the etiology, clinical features, investigations, complications and management of Hydatid Disease	1	Lecture	CC	Knows-how	BL,L&PPT
CO1,CO2, CO3,CO6, CO7,CO8	Describe the etiology, clinical features, investigations, complications and management of Suzak Gonorrhoea)	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO3,CO6, CO7,CO8	Demonstrate the process of clinical assessment, including identifying symptoms and selecting appropriate investigations, for Hummae Ijamia (Malarial Fever), Kala Azar (Leishmaniasis), Da' al-Fil (Filariasis), Hydatid Disease, and Suzak (Gonorrhea), focusing on accurate diagnosis and Unani management.	10	Practical27.3	AFT-REC	Know	D-BED,PL

CO1,CO2, CO3,CO6, CO7,CO8	Conduct diagnoses, management, and case studies involving Hummae Malaria, Kala Azar, Da' al-Fil, to apply evidence-based Unani principles and formulate management strategies for effective patient care.	7	Experiential-Learning27.3	PSY-ORG	Does	CD,RP,PBL,PrBL,RLE
CO1,CO2, CO3,CO6, CO7,CO8	Conduct and analyze case scenarios involving Hydatid Disease and Gonorrhoea to apply evidence-based Unani principles in evaluating patients, formulating management strategies, and guiding patient care effectively.	6	Experiential-Learning27.4	PSY-ORG	Does	PER,BL,RLE,DIS,JC

Practical Training Activity

Practical Training 27.1 Sample collecting for investigations.

Total Learning Hours (6)

Activity 1: Blood Sample Collection Simulation Lab (4 hrs)

Under supervision, students practice the step-by-step procedure for collecting blood samples for culture and other laboratory investigations using mannequins or simulated arms in a lab setting. Perform proper hand hygiene and wear appropriate personal protective equipment (PPE). Identify venipuncture site and disinfect using aseptic technique. Draw blood samples using sterile equipment and transfer into blood specific containers/ vacutainer tubes, and finally label specimens correctly and document the procedure.

Activity 2: Specimen Handling and Transport Protocol (1 hr)

Students learn the procedures for correctly storing and transporting clinical specimens (blood, urine, sputum, etc.) to the laboratory, following biohazard safety protocols. Understanding temperature and time constraints for different specimen types.

Activity 3: Aseptic Technique and Infection Control Drill (1 hr)

In a mock clinical environment, students rotate through stations demonstrating various aseptic procedures used during specimen collection and patient interaction. Students shall follow hand hygiene using WHO's 6-step technique, Donning and doffing gloves, gowns, and masks protocols

Practical Training 27.2 Throat, Nasal swab and CSF Collection

Total Learning Hours (4) Activity 1: Throat and Nasal Swab Collection Practical (2 hrs) Students perform throat and nasal swab collection on mannequins or simulated patients under supervision. This activity should focus on proper hand hygiene and use of PPE (mask, gloves), explaination of the procedure to the patient to ensure cooperation and reduce anxiety. Use of sterile swabs without contamination, and placing the swab in appropriate transport media and labelling. Activity 2: CSF Collection Observation and Handling Simulation (2 hrs) Students observe a demonstration (live or video) of lumbar puncture performed by a clinician and then practice specimen handling in a simulated setting. The practical should focus on patient positioning, preparation, and aseptic draping for CSF collection
Practical Training 27.3 Diagnosis and Management of Malarial Fever, Kala Azar, Filariasis, Hydatid Disease and Suzak (Gonorrhea).
Total Learning Hours (10) Activity 1: Clinical History Taking and Symptom Identification Practical (3 hrs) Students perform simulated or supervised clinical assessments on standardized patients or case scenarios representing the conditions: Hummae Ijamia (Malarial Fever), Kala Azar (Leishmaniasis), Da' al-Fil (Filariasis), Hydatid Disease, and Suzak (Gonorrhea). Elicit and document disease-specific symptoms (e.g., intermittent fever for malaria, weight loss and splenomegaly in Kala Azar, scrotal/limb swelling in filariasis, dysuria in gonorrhea) Activity 2: Clinical Assessment of the patient (Physical Examination) (3 hrs) Students will examine different cases in the hospital setting under the supervision to find out signs and assessment of symptoms to ascertain clinical diagnosis. Activity 3: Investigation Selection and Interpretation (2 hrs) Students recommend and interpret appropriate diagnostic investigations based on presented cases to the teacher for their correctness. Peripheral blood smear, rapid diagnostic test (RDT) for Malarial Fever; rK39 dipstick test, bone marrow or splenic aspirate for Kala Azar; Nocturnal blood smear for microfilariae for Filariasis; Ultrasound/CT and indirect hemagglutination test for Hydatid Disease. Activity 4: Integrated Unani Management Plan Development (2 hrs) Under the supervision of teacher students develop and present integrated management plans for each disease using Unani principles alongside necessary

conventional measures.Formulate treatment using Ilaj bil Dawa (herbal/compound Unani formulations), Ilaj bil Ghiza (dietary modifications), and Ilaj bil Tadbeer (regimenal therapies) and identify when conventional treatment is essential (e.g., antimalarials for malaria, antiparasitics for hydatid disease).
Experiential Learning Activity
Experiential-Learning Learning 27.1: Blood investigations and interpretations
Total Learning Hours (7) Activity 1: Blood Sample Collection Simulation Lab (3 hrs) Students practice the step-by-step procedure for collecting blood samples for culture and other laboratory investigations using mannequins or simulated arms in a lab setting. Activity 2: Laboratory invesigation interpretation worksop (2 hrs) Students should conduct a workshop in the department engaging all peers for different laboratory invesgitation interpretations. Shall have debates on the interpretation for a positive and fruitful outcome. Activity 2: Critical analysis of investigations and their significance (2 hr) Students should go through the research papers discussing credibility, reliability of different investigations, and draw some conclusions, and may present in the Journal club or departmental seminar.
Experiential-Learning Learning 27.2: Swab and CSF Collection
Total Learning Hours (6) Activity 1: Throat and Nasal Swab Collection (3 hrs) Students perform throat and nasal swab collection on mannequins or simulated patients independently. This activity should be in line as learnt during practical, and should develop the skill to use sterile swabs without contamination, and placing the swab in appropriate transport media and labelling.

Activity 2: CSF Collection and Handling Simulation (3 hrs) Students perform lumbar puncture on mannequins and then practice specimen handling in a simulated setting. The students shall excell in patient positioning, preparation, and aseptic draping for CSF collection and the whole procedure.
Experiential-Learning Learning 27.3: Diagnosis and Management of Malaria, Kala Azar, Da' al-Fil
Total Learning Hours (7) Activity 1: Case-Based Clinical Reasoning (2 hrs) Students will engage in real or simulated patient case studies of Malaria, Kala Azar, and Da' al-Fil. They analyze the clinical data to reach a diagnosis and design Unani-based treatment strategies. Work in groups to evaluate case history, symptoms, and lab reports. Develop and present a detailed management plan integrating Ilaj bil Ghiza, Ilaj bil Dawa, and Ilaj bil Tadbeer. Activity 2: Visit to Infectious Disease Centers or Primary Health Cenres (3 hrs) Students visit a local hospital, PHC, or endemic area clinic managing patients with Malaria, Kala Azar, or Filariasis to observe diagnosis, treatment, and community-based control programs. Participate in patient care practices and diagnostic protocols. Interact with healthcare providers about challenges in diagnosis, drug resistance, and patient compliance. Activity 3: Unani Therapeutics Application (2 hrs) Students engage in hands-on formulation and dispensing of Unani drugs used in treating these conditions. Identify key Unani formulations used in Malaria (e.g., Qurs-e-Humma), Kala Azar, and Da' al-Fil. Learn dosage, method of preparation, administration, and expected effects. Role-play patient counseling sessions to explain the benefits, side effects, and dietary recommendations.
Experiential-Learning Learning 27.4: Diagnosis and Management of Hydatid Disease, and Gonorrhoea
Total Learning Hours (6) Activity 1: Case-Based Group Discussion (2 hrs) Students shall conduct diagnostic and management skills discussion in a simulated patient scenario, one on Hydatid Disease and one on Gonorrhoea. Students

analyze symptoms using Unani concepts like mizaj (temperament), amraz (diseases), and asbab (causes). Students present their Unani-based diagnosis and treatment plan (e.g., Ilaj bil Ghiza, Ilaj bil Dawa, and Ilaj bil Tadbeer).

Activity 2: Clinical Simulation for Diagnosis and Evidence Mapping (2 hrs)

Conduct simulations using mannequins or standardized patients presenting signs of Hydatid Disease and Gonorrhoea. Students perform mock assessments (history, palpation, examination). After simulation,use diagnostic tools (e.g., imaging, serology) and contrast with Unani diagnostic approaches.

Activity 3: Field Visit or Clinical Observation (2 hrs)

Conduct a field visit to observe and reflect on real-time Unani clinical management at Unani clinical center or hospital for infectious diseases, including Hydatid Disease and Gonorrhoea. Maintain clinical logs and conduct a post-visit reflection session in the departmental seminar.

Modular Assessment

Assessment	Hour
Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C. Case-based evaluation: (50 Marks) Each student will be given a case study involving a bacterial or parasitic infection or any other disease from the module to evaluate the patient, select appropriate diagnostic methods, and suggest both conventional and Unani treatment/ management plans with justification. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or OSCE or Clinical Work Sampling (50 Marks)	4

- History Taking / Communication Skills (15 Marks)
- Clinical Examination / Procedural Skills (15 Marks)
- Clinical Reasoning / Interpretation (10 Marks)
- Decision-Making / Management Plan (10 Marks)

Or

Any practical in converted form can be taken for assessment. (25 Marks)

and

Any of the experiential as portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)

Module 28 : Ḥummayāt (Fevers) حمیات

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describes the general principles of febrile illnesses in Unani medicine exploring its physiological and pathological significance and the role of fever in the body's natural defence mechanisms, including the balance of the humors (Aza) and the impact of different Mizāj (temperaments)
2. Demonstrate evaluation of the patients with presenting Ḥummā ‘Ufūniyya in Unani medicine, including its causes, symptoms, and the various types of fever described in the Unani tradition.
3. Appraise the treatment guidelines for therapeutic approaches for managing fevers in Unani Medicine

Unit 1 Ḥummayāt ka Umūmi Taṣawwur (General considerations of Fevers) حمیات کا عمومی تصور

28.1.1. Ta‘rīf-i-Ḥummā (Introduction of Fever) تعریف حمیٰ

28.1.2. Ḥummā ‘Ufūniyya ka ‘Ām Uṣūle Ilāj (General Principles of treatment of infective fever) حمیٰ عفونیہ کا عام اصول علاج

28.1.3. Awāriḍ-wa-Tadāruk عوارض کا تدارک

28.1.4. Aḥkāmāt-i-Ghidhā’ احکامات غذاء

28.1.5. Ḥummā Shamsiyya (Sun Stroke) حمیٰ شمسیہ

28.1.6. Pyrexia of unknown origin

28.1.7. Ḥummā Wabā'iyya (Epidemic Fever) حمّیٰ وبائیہ

References: 1,4,8,21,23,24,26,27,28,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO6, CO7,CO8	Describe general considerations of Fevers, causes, and management strategies for Pyrexia of Unknown Origin and Hummae Wabaiya (Epidemic Fever), highlighting Unani and modern diagnostic techniques and therapeutic interventions.	1	Lecture	CC	Knows-how	L&PPT ,BL
CO1,CO2, CO3,CO6, CO7,CO8	Describe Hummiyate Ufoonia and discuss its underlying principles in Unani medicine, including common treatment approaches and therapeutic modalities.	1	Lecture	CC	Knows-how	L&PPT ,BL
CO1,CO2, CO3,CO6, CO7,CO8	Describe the concept of Awariz-wa-Tadaruk and its importance in the diagnosis and management of febrile illnesses.	1	Lecture	CC	Knows-how	BL,L&PPT
CO1,CO2, CO3,CO6, CO7,CO8	Describe and eleborate the principles of Ahkam-e-Ghiza, focusing on the dietary guidelines and nutritional considerations for patients experiencing fever.	1	Lecture	CC	Knows-how	BL,L&PPT
CO1,CO2, CO3,CO6, CO7,CO8	Describe the clinical features, etiology, and management of Humma-e-Shamsiya, emphasizing its significance in the context of Unani medicine and modern medicine.	1	Lecture	CC	Knows-how	BL,L&PPT

CO1,CO2, CO3,CO6, CO7,CO8	Demonstrate the clinical assessment and management techniques for patients with Pyrexia of Unknown Origin and Hummae Wabaiya (Epidemic Fever), including the application of Unani diagnostic methods and treatment strategies to effectively address these conditions.	10	Practical28.1	AFT-REC	Shows-how	CBL,SIM,D-BED,Mnt
CO1,CO2, CO3,CO6, CO7,CO8	Conduct group discussion and debate on the General Principles of treatment of infective fever, management of complications of acute fever, and dietary recommendations.	7	Experiential-Learning28.1	PSY-ORG	Does	ML,DIS,RP,RLE,EDU
CO1,CO2, CO3,CO6, CO7,CO8	Evaluate case studies involving different scenarios of Pyrexia of Unknown origin, and analyze different management strategies for the treatment of PUO and Humma Wabaiya.	6	Experiential-Learning28.2	AFT-RES	Does	BS,DIS,JC,SDL,CD
CO1,CO2, CO3,CO6, CO7,CO8	Describe Hummae Safravi (including subtypes Ghibbe Daira, Ghibb Lazima, and Hummae Muhariqqa), its etiopathology and characteristic symptoms, differentiate it from other types of fevers, and explain Unani Usoole Ilaj (principles of treatment) and specific therapeutic approaches.	1	Lecture	CC	Knows-how	L&PPT ,BL
CO1,CO2, CO3,CO6, CO7,CO8	Describe Hummae Balghami (including Hummae Lasiqa Muwaziba), describe its etiopathology and distinctive symptoms, differentiate it from other fever types, and explain the Unani Usoole Ilaj (principles of treatment) along with specific therapeutic approaches.	1	Lecture	CC	Knows-how	BL,L&PPT

Unit 2 Ḥummā ʻUfūniyya (Infective Fever) حمیٰ عفونیہ

28.2.1. Ḥummā Damawī/ Ḥummā Muṭbiqa (Sanguineous Fever) حمیٰ دموی/حمیٰ مطبقہ

28.2.2. Ḥummā Ṣafrāwī/ Ḥummā Ghibb (Bilious Fever) حمیٰ صفراوی/ حمیٰ غب

28.2.2.1. Ḥummā Ghibb Dā'ira (Bilious intermittent Fever) حمیٰ غب دائرہ

28.2.2.2. Ḥummā Ghibb Lāzima (Bilious continuous Fever) حمیٰ غب لازمہ

28.2.2.3. Ḥummā Ghibb Muḥarriqa (High grade bilious fever) حمیٰ غب محرقہ

28.2.3. Ḥummā Balghamī (Phlegmatic Fever) حمیٰ بلغمی

28.2.3.1. Ḥummā Lathiqa (Phlegmatic continuous Fever) حمیٰ لثقہ

28.2.3.2. Ḥummā Muwāẓiba (Phlegmatic intermittent Fever) حمیٰ مواظبہ

28.2.4. Ḥummā Sawdāwī (Melancholic Fever) حمیٰ سوداوی

28.2.4.1. Ḥummā Rib' Dā'ira (Melancholic intermittent Fever) حمیٰ ربع دائرہ

28.2.4.2. Ḥummā Rib' Lāzima (Melancholic continuous Fever) حمیٰ ربع لازمہ

28.2.5. Ḥummā-i-Diqq (Tuberculous Fever/ Hectic Fever) حمیٰ دق

References: 1,2,4,8,21,22,23,24,25,26,27,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO6, CO7,CO8	Describe Hummae Damvi (including subtypes Matbaqa and Sunukhas), describe its etiopathology and primary symptoms, differentiate it from other febrile conditions, and explain Unani Usoole Ilaj (principles of treatment) and specific therapeutic approaches, and dietary guidelines."	1	Lecture	CC	Knows-how	BL,L&PPT
CO1,CO2, CO3,CO6, CO7,CO8	Describe Hummae Saudavi (including subtypes Rubae Daira and Rubae Lazima) within Unani medicine, describe its etiopathology and unique symptoms, differentiate it from other fevers, and explain its Unani Usoole Ilaj.	1	Lecture	CC	Knows-how	BL,L&PPT
CO1,CO2, CO3,CO6, CO7,CO8	Describe Humma-e-Diq, describe its etiopathology and characteristic symptoms, distinguish it from other febrile illnesses, and explain the Unani Usoole Ilaj.	1	Lecture	CC	Knows-how	L&PPT ,BL

CO1,CO2, CO3,CO6, CO7,CO8	Demonstrate the examination of patients presenting with fever to identify and record clinical features specific to different types of fevers as per Unani medicine concept (e.g., Hummae Damvi, Safravi, Balghami, Saudavi, and Diq), and apply diagnostic criteria to differentiate each based on symptoms and humor imbalances.	10	Practical28.2	AFT-SET	Shows-how	CD,SY,D-BED,SIM,D
CO1,CO2, CO3,CO6, CO7,CO8	Analyze cases of Humma Ufuniyya and Humma Diq to establish line of treatment and treatment strategies according to the concepts of Unani Medicne and Conventional medicine.	7	Experiential-Learning28.3	PSY-ADT	Does	FV,RLE,PBL,IBL,PER
CO1,CO2, CO3,CO6, CO7,CO8	Perform examination of patients suffering from Humma Ufuniyaa, analyze the clinical features critically to make a confirmed diagnosis for a specific type of Humma Ufuniyaa viz. Humma Damawi, Safrawi, Balghami or Saudawi; conduct case study for the patients suffering form Humma Diq.	6	Experiential-Learning28.4	PSY-ADT	Does	CBL,BL,PER,RLE,PAL

Practical Training Activity

Practical Training 28.1 Pyrexia of Unknown Origin and Hummae Wabaiya (Epidemic Fever)

Total Learning Hours (10)

Activity 1: Case Study-Based Clinical Simulation (4 hrs)

Demonstration of detailed clinical case scenarios of patients with prolonged fever. Include history, signs, symptoms, and lab reports. Students must assess the case using both modern diagnostic principles and Unani diagnostic techniques (like Nabz, Tal-e-Lisaan, Mizaj assessment) under the supervision of teacher.

Activity 2: Demonstration and Practice of Unani Diagnostic Tools (3 hrs)

Conduct hands-on training on Unani diagnostic methods. Students practice evaluating Nabz (pulse), examining Tal-e-Lisaan (tongue), and assessing Mizaj (temperament) of simulated and real patients under the spervison of teacher.

Activity 3: Integrated Management Plan for Humma Wabaiya (3 hrs) Students presents an integrated treatment strategy combining Unani medicine and supportive modern care for pyrexia of Unknown origin and Humma wabaiya, verified by the teacher.
Practical Training 28.2 Diagnosis and Managment of Humma Ufooniyya
Total Learning Hours (10) Activity 1: Simulated Patient Examination Workshop (3 hrs) Use standardized or simulated patients exhibiting signs of various types of fevers based on Unani classifications. Students perform physical exams, observe signs (e.g., complexion, pulse, tongue, temperament), and record clinical findings to diagnose the specific type of Humma under the supervision of teacher. Activity 2: Diagnostic Criteria Application Exercise (2 hrs) The teacher shall provide clinical data sheets of various fever cases, with symptoms like chills, sweating, thirst, tongue coating, mental state, etc. and students apply diagnostic criteria (Unani framework) to categorize each case as one of the types of the fever descrbied as Humma Ufooni and justify their reasoning. Analytical reasoning, differentiation of humoral fever types, symptom-pattern matching. Activity 3: Comparative Charting & Presentation for the management (3 hrs) Students prepare comparison charts of different types of fevers (e.g., Damvi vs. Safravi) based on management strategies and treatment plan for each Humma Ufooniya e.g. Humma Damawi, Humma Safrawi, Humma Balghami and Humma Saudawi. Activity 4: Case presentation (2 hrs) A standardized or simulated patient examination, diagnosis and management for Humma Diq. Detailed History taking, physical examination very specific to Humma Diq and planning treatment for it.
Experiential Learning Activity
Experiential-Learning Learning 28.1: General Principles of management of infective fever and thier complications

Total Learning Hours (7)

Activity 1: Debate on Treatment Approaches (2 hrs)

Use the fishbowl method where an inner circle debates Unani vs. modern approaches to managing infective fevers, while the outer circle observes and later gives feedback. Rotate students between observer and participant roles, encouraging critical listening and evidence-based argumentation.

Activity 2: Patient Counseling Simulation (2 hrs)

Students perform mock counseling sessions, advising patients on managing fever, recognizing complications, and hence providing management strategies for both fever and thier complications.

Activity 3: Poster making and Interactive Poster Walk (3 hrs)

Stuents shall create posters on different aspects of infective fever management focussing on dietary recommendations, a list of do’s and don’ts. During a "poster walk," each student presents their topic to patients and public and answers questions.

Experiential-Learning Learning 28.2: Pyrexia of Unknown Origin and Humma Wabaiya

Total Learning Hours (6)

Activity 1: Case Studies analysis (2 hrs)

Students shall find out different published papers on Pyrexia of Unknown origin and analyze their management strategies and compare with those mentioned in Unani medicine.

Activity2: Journal club for Humma wabaiya (2 hrs)

Students shall search quality research papers published for the management of epedemics and endemics, and develop corelation with classical Unani descriptions of Humma wabaiya.

Activity 3: Create and Present a PUO Management Protocol (2 hrs)

Student shall designs a clinical flowchart or protocol for managing PUO and Humma Wabaiya based on Unani and contemporary evidence, and present protocols to classmates and justify each step, and later may present in the departmental seminar.

Experiential-Learning Learning 28.3: Management of Humma Ufuniyya and Humma Diq

Total Learning Hours (7)

Activity 1: Clinical Role Play: Dual Approach Consultation (2 hrs)

Students shall simulate a clinical setting where one student plays the Unani physician and another the allopathic doctor; they collaborate to examine a case of Humma Ufuniyya or Diq, each offering a diagnosis and treatment plan based on their system. A third student acts as the patient and reflects on both approaches.

Activity 2: Diagnostic-Therapeutic Mapping Exercise (2 hrs)

Students shall go through patient profiles and map the path from symptoms to diagnosis and treatment using both Unani and conventional frameworks. This may be done by creating flowcharts or mind maps showing how each system reaches a diagnosis and proceeds with treatment

Activity 3: Field-Based Patient Interview & Comparative Analysis (3 hrs)

Students shall visit Unani clinics and hospitals to interact with recovering patients to collect real-life cases of Humma Ufuniyya and Humma Diq. They document the treatments received, and recovery timeline. Then, analyze the case using both Unani and modern criteria and propose improvements.

Experiential-Learning Learning 28.4: Humma Ufuniyya and Humma Diq

Total Learnig Hours (6)

Activity 1: Real-Patient Clinical Rotation with Diagnostic Logs (2 hrs)

students will perform clinical examination of in-patients or out-patients diagnosed with various forms of Humma Ufuniyya and shall Students maintain individual diagnostic logs, noting signs, symptoms, pulse, tongue, mizaj, and humor analysis.

Activity 2: Diagnostic Simulation with Peer Feedback (2 hrs)

Use case-based simulations with role-play (one student as patient, others as Unani physicians). Students perform examinations, make diagnostic decisions, and then receive structured feedback from peers and faculty on the accuracy and reasoning.

Activity 3: Case Study Documentation and Presentation for Humma Diq (2 hrs)

Students shall conduct a case of Humma Diq (chronic or low-grade fever) to follow or review in-depth. They document the full clinical profile, treatment given, response to therapy, and Unani rationale. Present findings to the class in a case conference format. They must justify the final diagnosis and treatment based on Unani principles and may present in seminar.

Modular Assessment	
Assessment	**Hour**
Instructions - Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C. Case-based evaluation: (50 Marks) Each student will be given a case study involving a febrile condition or problem situation of any Hummae Ufoonia to evaluate the patient, classify the type of fever, and suggest an appropriate Unani treatment/management plan integrating dietary and therapeutic principles with justification. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or OSCE or Clinical Work Sampling. (50 Marks) • History Taking / Communication Skills (15 Marks) • Clinical Examination / Procedural Skills (15 Marks) • Clinical Reasoning / Interpretation (10 Marks) • Decision-Making / Management Plan (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any of the experiential as portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)	4

Semester No : 5

Module 29 : Amrāz-i-Jild 1 (Skin Diseases -1) امراض جلد ا

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describe the diagnostic approach to skin diseases (Amrāz-i-Jild) in Unani for common conditions like eczema, psoriasis, acne, and pigmentation disorders, as well as for nail diseases like fungal infections or nail deformities.

2. Demonstrate evaluation of the patients with presenting skin diseases (Amrāz-i-Jild) and related disorders of pigmentation, nails, and hair.

3. Appraise the treatment guidelines for various Diseases and treatment approaches for common conditions like eczema, psoriasis, acne, and pigmentation disorders, as well as for nail diseases like fungal infections or nail deformities.

Unit 1 Tashkīsi Nuqta Nazar wa Uṣūl-i-Ilāj (Diagnostic approach and Principles of Treatment) تشخیصی نقطہ نظر واصول علاج

29.1.1. Jild kā Imtihān aur Amrāz Jild kā tashkhīsī Nuqta Nazar (Examination of Skin and approach to diagnose skin diseases) جلد کا امتحان اور امراض جلد کا تشخیصی نقطہ نظر

29.1.2. Amrāz Jild kā Buniyādi Uṣūl-i-Ilāj (Basic principles of treatment of skin diseases) امراض جلد کا بنیادی اصول علاج

References: 4,5,6,8,10,14,17,21,26,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO4, CO6,CO7	Discuss the examination of Skin and approach to diagnosing skin diseases	1	Lecture	PSY-ADT	Know	L
CO1,CO2, CO3,CO4, CO6,CO7	Discuss the diagnostic approach and Principles of Treatment of Amraze Jild	2	Lecture	CC	Shows-how	CBL

CO1,CO2, CO3,CO4, CO6,CO7	Discuss the Basic principle of treatment of skin diseases	2	Lecture	CC	Shows-how	CBL
CO1,CO2, CO3,CO4, CO6,CO7	Demonstrate comprehensive skin examination and identify key diagnostic features of common skin diseases, and formulate line of treatment.	10	Practical29.1	AFT-REC	Shows-how	DG,CBL,CD,D
CO1,CO2, CO3,CO4, CO6,CO7	Perform Clinical examination of patients suffering from different skin diseases to establish diagnosis and differentiate from other similar conditions.	7	Experiential-Learning29.1	PSY-ADT	Knows-how	PL,EDU,CD,TPW,PAL
CO1,CO2, CO3,CO4, CO6,CO7	Formulate a line of treatment and treatment strategies for common skin disorders, and write down prescription for specific skin diseases.	6	Experiential-Learning29.2	PSY-GUD	Shows-how	CBL,CD,PBL,PER
CO1,CO2, CO3,CO4, CO6,CO7	Discuss the examination of Skin and approach to diagnosing skin diseases	1	Lecture	CC	Knows-how	L&PPT

Unit 2 Amrāz-i-Lawn, Zufr wa Sha'r (Disorders of Pigmentations, Nails and Hairs) امراض لون، ظفر و شعر

29.2.1. Fasād-i-Lawn (Diseases of Pigmentation) فسادلون

29.2.1.1. Barṣ (Vitiligo) برص

29.2.1.2. Bahaq (Pityriasis) aur uski aqsām بہق اور اسکی اقسام

29.2.1.3. Kalaf (Melasma/Cholasma) کلف

29.2.1.4. Barsh (Freckles) برش

29.2.1.5. Namash (Nevus) aur uski aqsām نمش اور اسکی اقسام

29.2.2. Amrāz-i-Zufr (Disorders of nails) امراض ظفر

29.2.2.1. Zufra-i-Talqiya (Onychomycosis) ظفر طلقیہ

29.2.2.2. Iltihāb-i-Azfār /Dākhis (Paronychia) التہاب اظفار یا داخس

29.2.3. Amrāz-i-Sha'r (Diseases of Hair) امراض شعر

29.2.3.1. Intithār al-Sha'r (Hair Fall) انتثار شعر

29.2.3.2. Sā'fa, Sal'a (Baldness) سعفہ، سلع

29.2.3.3. Shaib (Premature Graying of Hair) شیب

29.2.3.4. Bafā (Seborrhoea of Scalp) بفاء

29.2.3.5. Qummal (Pediculosis) قمل

29.2.3.6. Piedra پیدرا

References: 4,5,6,8,10,14,16,17,18,19,21,26,27,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO4, CO6,CO7	Discuss etiology, clinical features, investigations, differential diagnosi, principle of treatments in Disorders of Pigmentations, Nails and Hair	4	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO3,CO4, CO6,CO7	Demonstrate clinical diagnosis by history taking and examination to identify and distinguish different pigmentation disorders and diseases of nails and hair.	10	Practical29.2	AFT-SET	Shows-how	SDL,CD,PBL,CBL
CO1,CO2, CO3,CO4, CO6,CO7	Perform history taking, clinical examination, and propose line of tretment and treatment for different pigmentary disorders of the skin.	7	Experiential-Learning29.3	PSY-ADT	Does	CD,PER,IBL,C_L

CO1,CO2, CO3,CO4, CO6,CO7	Conduct clinical evaluation of patients suffering from different nail and hair disorders, and propose treatment strategies.	6	Experiential-Learning29.4	PSY-GUD	Does	CBL,SDL,FV,BL

Practical Training Activity

Practical Training 29.1 Diagnostic approach and Management of Skin disorders

Total Learning Hours (10)

Activity 1: Hands-on Clinical Skin Examination Sessions (4 hrs)

Students perform supervised skin examinations on real or simulated patients to practice inspection, palpation, and documentation of skin lesions by Identifying distribution, texture, color, and patterns.

Activity 2: Patch Test and Sensitivity Assessment Demonstration (3 hrs)

Students observe or perform under supervision the procedures like patch testing or skin prick test in relevant cases. Understand allergic vs. irritant reactions and how they relate to diagnosis and treatment.

Activity 3:Case-Based Diagnostic and Treatment Planning (3 hrs)

Provide detailed case histories of patients with skin conditions. Students analyze history, match it with physical findings, make a diagnosis, and formulate treatment plans using both Unani and/or modern medicine principles and get endorsed by the teacher.

Practical Training 29.2 Diagnosis of Pigmentary Skin disorders nails and hair diseases

Total Learning Hours (10)

Activity 1: Structured Clinical Examination on Pigmentation Disorders (3 hrs)

Demonstration of physical examination of patients (or standardized patients/models) with pigmentation disorders such as vitiligo, melasma, or post-inflammatory hyperpigmentation focusing on lesion type, distribution, color, border, and progression etc.

Activity 2: Diagnostic Feature Identification Using Case Images (2 hrs) Students match conditions with names and distinguish similar-appearing conditions like vitiligo vs. tinea versicolor or alopecia areata vs. telogen effluvium. Analyze high-resolution clinical images of pigmentation and appendage disorders. Activity 3: Nail and Hair Examination Practical (3 hrs) Practice detailed examination techniques for nail disorders (e.g., onychomycosis, pitting, clubbing) and hair disorders (e.g., alopecia areata, dandruff, lice infestation) with supervised use of Hand lens, Wood's lamp, dermatoscope. Activity 4: Clinical History Taking and Documentation Drill (2 hrs) Demonstration of structured history taking focused on skin, hair, and nail symptoms — onset, progression, triggering factors, family history, and systemic symptoms by using standardized clinical history formats.
Experiential Learning Activity
Experiential-Learning Learning 29.1: Diagnostic approach to Common Skin disorders
Total Learning Hours (7) Activity 1: Real-Patient Clinical Rotations in Dermatology OPD (2 hrs) Students posted in dermatology clinics (Unani or allopathic) to Perform detailed history taking and clinical examination under supervision. Record findings, identify key features, and attempt differential diagnosis. Activity 2: Dermatology Diagnostic Challenge (Team-Based) (3 hrs) In teams, students analyze each case and decide on the most likely diagnosis and how to distinguish it from similar conditions. Create a quiz or diagnostic game among peer with progressive clues (clinical photos, symptom history, lab results) Activity 3: Patient Case Interviews (2 hrs) Students record the patient's journey by taking interview, examine their condition, and write a reflection covering diagnosis, differential considerations, and patient perspectives.
Experiential-Learning Learning 29.2: Management strategies of Common Skin disorders

Total Learnin Hours (6) Activity 1: Case-Based Treatment Planning Workshops (2 hrs) Students analyze the case, identify the diagnosis, formulate a Unani and/or conventional line of treatment, and write a complete prescription including dosage, duration, and dietary advice. Activity 2: Clinical Prescription Writing Rounds (2 hrs) After clinical discussion, students write mock prescriptions for each case they observe and get them noted in th logbook. Activity 3: Integrative Treatment Strategy Seminar Presentation (2hrs) Student prepares and presents an integrative treatment plan using both Unani and conventional approaches, justifying each element (drug, regimen, diet) and present that in the departmental seminar.
Experiential-Learning Learning 29.3: Diagnosis and Manatement of Pigmentary disorders of skin
Total Learning Hours (7) Activity 1: Community Skin Health Screening Camp (3 hrs) Students participate in outreach programs or skin camps where they screen individuals for pigmentary disorders, counsel patients, and create simplified treatment guides. Activity 2: Clinical activities in Dermatology OPD and IPD (2 hrs) Students are posted in dermatology OPD and IPD where they independently take patient history, examine cases of pigmentary disorders (e.g., vitiligo, melasma, post-inflammatory hyperpigmentation), and discuss their provisional diagnosis and treatment plans with peers and note all in logbook. Activity 3: Integrated Case Study Presentation (2 hrs) Student shall prepare a presentation for a pigmentary disorder (e.g., tinea versicolor, albinism, freckles) and must present a full case including history, examination findings, differential diagnosis, and an integrative treatment plan (Unani + modern) in the departmental seminar.
Experiential-Learning Learning 29.4: Diagnosis and Management of nail and hair disorders

Total Learning Hours (6)

Activity 1: Clinical Case Evaluation in IPD or Specialty Clinics (3 hrs)

Students attend dermatology IPD or Specialty clinics where they can evaluate the patients with nail (e.g., onychomycosis, brittle nails) and hair disorders (e.g., alopecia areata, seborrheic dermatitis) by detailed history taking, physical examination.

Activity 2: Field Survey and Documentation of Hair/Nail Disorders (3 hrs)

Students conduct a community-based survey (e.g., in schools, hostels, or rural areas) to identify common nail and hair disorders. Document all findings, propose treatment/referral, and prepare a brief report or presentation.

Modular Assessment

Assessment	Hour
Instructions-Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C. Case-based evaluation: (50 Marks) Each student will be given a case study or problem situation involving a skin, nail, or hair disease to evaluate the patient and create a treatment/management plan with justification. Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or DOPS (Direct Observation of Procedural Skills) or Case-Writing Skills (CWS). (50 Marks) • History Taking / Communication Skills (15 Marks)	4

• Clinical Examination / Procedural Skills (15 Marks) • Clinical Reasoning / Interpretation (10 Marks) • Decision-Making / Management Plan (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any of the experiential as portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)	

Module 30 : Amrāz-i-Jild 2 (Skin Diseases -2) امراض جلد ۲

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describe the classification and diagnosis of common skin conditions through comprehensive clinical examination and diagnostic tests.

2. Demonstrate evaluation of the patients (history, physical examination, and investigations) presenting with dermatological conditions and aesthetic concerns and appearance.

3. Appraise the treatment guidelines for various Diseases as per Unani Principles and Incorporate both conventional dermatological therapies and cosmetic procedures to address skin health while considering safety, ethics, and patient preferences.

Unit 1 Amrāz-i-Jild (Skin Disorders) امراض جلد

30.1.1. Qūba (Dermatophytosis /ring worm) aur uski Aqsām قوبااوراسکی اقسام

30.1.2. Dā-us-Ṣadaf (Psoriasis) داءالصدف

30.1.3. Nār Fārsi (Eczema) نارفارسی

30.1.4. Jarb (Scabies) aur uski Aqsām جرب اوراسکی اقسام

30.1.5. Buthūr-i-Labniyā (Acne) بثورلبنیہ

30.1.6. Thālīl (Warts) ثالیل

30.1.7. Sal'āt (Tumors) سلعات

30.1.8. Saraṭān-i-Jild aur uski Aqsām (Melanoma, Basal Cell Carcinoma, Squamous cell carcinoma) سرطان جلد اور اسکی اقسام

30.1.9. Nizāmi Amrāz ki Jildi 'Alamāt (Skin manifetations in systemic diseases) نظامی امراض کی جلدی علامات

30.1.10. Namlā aur uski Aqsām (Herpes and its types) نملہ اور اسکی اقسام

30.1.11. Diqq al-Jild (Tuberculosis of Skin) دق الجلد

30.1.12. Jildi Kālazār (Cutaneous Leishmaniasis) جلدی کالازار

30.1.13. Syslemic Lupus Erythematosus (SLE) سسٹمک لیوپس ایریتھرومائٹوسس

References: 4,5,6,8,10,14,16,17,19,21,26,27,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO4, CO6,CO7	Discuss etiological factors, clinical features, investigations, differential diagnosis, principle of treatment in different skin disorders	5	Lecture	CC	Knows-how	L&PPT ,BL
CO1,CO2, CO3,CO4, CO6,CO7	Demonstrate Clinical Diagnosis and Management of prevalent itchy skin diseases (Fungal infection, Psoriasis, Eczema and Scabies etc.) and eruptive disorders (Acne, warts, herpes etc).	10	Practical30.1	AFT-SET	Shows-how	LRI,SDL,D-BED,CBL,CD
CO1,CO2, CO3,CO4, CO6,CO7	Conduct clinical examination for the diagnosis of itchy skin disorders (Fungal infection, Psoriasis, Scabies etc.) and formulate the line treatment and write prescription	7	Experiential-Learning30.1	PSY-ADT	Does	RLE,PER
CO1,CO2, CO3,CO4, CO6,CO7	Evaluate the cases of eruptive skin disorders viz. Acne, Warts, Herpes etc., for their diagnosis and management wih Unani as well as conventional medicine	6	Experiential-Learning30.2	PSY-ADT	Does	RLE,PER,CD,CBL

Unit 2 Tazīniyāt (Cosmetology) تزینیات

30.2.1. Tazīniyāt ka Umūmi Bayān (Introduction of Cosmetology) تزینیات کا عمومی بیان

30.2.2. Jild kā Taghziyā wa Taḥaffuz (Nutrition and Care of Skin Health) جلد کا تغزیہ و تحفظ

30.2.3. Chehrā aur Zīnat-i-Jild ke liye Umūmi Tadābīr چہرہ اور زینت جلد کے لئے عمومی تدابیر

30.2.4. Bālon ki Zīnat se Muta'lliq Tadābīr بالوں کی زینت سے متعلق تدابیر

References: 4,5,6,8,10,14,16,17,21,26,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO4, CO6,CO7	Discuss treatment protocol for Tazeeniyat (Unani cosmetology)	5	Lecture	CC	Knows-how	L&PPT ,BL
CO1,CO2, CO3,CO4, CO6,CO7	Demonstrate Nutrition and Care of Skin and Hair Health and different regimens	10	Practical30.2	AFT-RES	Shows-how	D-M,D-BED,PBL,DA,CD
CO1,CO2, CO3,CO4, CO6,CO7	Analyze individual skin conditions in patients and develop personalized care plans for healthy and beautiful skin	7	Experiential-Learning30.3	PSY-ADT	Does	RLE,PBL,PL,RP,PER
CO1,CO2, CO3,CO4, CO6,CO7	Evaluate the condition of the hair of patients and develop personalized care plans for healthy, long, and beautiful hair.	6	Experiential-Learning30.4	PSY-ADT	Does	PBL,PER,RLE,RP,IBL

Practical Training Activity

Practical Training 30.1 Diagnosis and management of prevalent itchy skin diseases (Fungal infection, Psoriasis, Eczema and Scabies etc.) and eruptive disorders (Acne, warts, herpes etc).
Total Learning Hours (10) Activity 1: Demontration of Clinical Case Examination and Diagnosis of itching conditions (3 hrs) Under the supervision of teacher, students perform physical examination of patients in OPD/ward presenting with common skin diseases such as tinea infections, psoriasis plaques, eczema lesions, or scabies. Activity 2: Differential Diagnosis Practice Using Clinical Images and Scenarios (2 hrs) Present students with image-based or written case scenarios of common skin diseases with overlapping features (e.g., psoriasis vs. eczema, fungal vs. allergic dermatitis). Identify the condition and justify their differential diagnosis to the teacher. Activity 3: Microscopic Examination and Lab Investigations (3 hrs) Under the supervision of the teacher, students collect and examine skin scrapings under a microscope for fungal elements (KOH preparation), or scabies mites from skin scrapings. Activity 4: Clinical case demonstration of Eruptive skin disorders (acne, warts, herpes etc.) (1 hr) Clinical diagnosis of Acne, warts and herpes under the supervision of teacher with utmost care as herpes is a highly infectious disease. Activity 5: Prescription Writing and Treatment Planning (1 hr) Students write sample prescriptions for common skin diseases, including both Unani and conventional treatment modalities. The teacher will scruitinize the prescriptions for the selection of drugs, dosage, route, duration, and relevant dietary or lifestyle advice.
Practical Training 30.2 Facial and general skin care and care of hairs
Total Learning Hours (10) Activity 1: Daily Routine Planning for Skin/Hair Health (2 hrs) Under the supervision of teacher design a daily and weekly regimen (Unani + modern) for maintaining healthy skin and hair, incorporating aspects like hydration, sleep, stress management, cleansing routines, and seasonal care.

Activity 2: Hair and Scalp Examination with Care Recommendations (2 hrs)

Students conduct scalp and hair texture analysis, identify issues such as dandruff, dryness, or breakage, and recommend personalized care regimens (e.g., oiling, washing, dietary advice) and confirming the same with the teacher.

Activity 3: Preparation and Application of Natural Skin/Hair Care Products (2 hrs)

Hands-on preparation of Unani-based or herbal formulations like Ubtaan (face packs), Roghan (oils), and Shampoo (Safoof-based) mixtures.

Activity 4: Demonstration of Unani Regimens (Tadbeer) (2 hrs)

Practical demonstration of regimens like Hammam (steam bath), Dalak (massage), Hijama (cupping), and Ghiza-e-Mufida (nutritional therapy). Application of Unani therapeutic techniques for maintaining skin and hair health, with emphasis on prevention.

Activity 5: Diet Planning for Skin and Hair Health (2 hrs)

Students prepare individualized diet charts for different skin and hair conditions (e.g., acne, hair fall, dry skin), integrating Unani concepts with modern nutritional principles.

Experiential Learning Activity

Experiential-Learning Learning 30.1: Diagnosis and Management of itchy skin disorders (Fungal infection, Psoriasis, Scabies etc.)

Total Learning Hours (7)

Activity 1: Patient Evaluation in Dermatology Clinics (4 hrs)

Students examine patients presenting with pruritic (itchy) skin conditions in OPD settings. Take detailed history, conduct focused skin examination, identify the condition (e.g., tinea, scabies, eczema), and propose treatment plans including writing prescriptions. Noting down all in the logbook.

Activity 2: Problem-Based Learning (PBL) Case Discussions (3 hrs)

Examine complex itchy skin disorder cases (e.g., a child with scabies, a diabetic patient with fungal infection). Discuss the clinical findings, create a differential diagnosis list, justify the chosen treatment strategy, and present the case in the departmental seminar.

Experiential-Learning Learning 30.2: Diagnosis and Management of eurptive skin disorders viz. Acne, Warts, Herpes etc.

Total Learning Hours (6)

Activity 1: Integrated Case-Based Learning (CBL) Sessions (2 hrs)

Students shall evaluate detailed patient case studies featuring eruptive skin disorders (e.g., acne vulgaris, viral warts, or herpes simplex). Analyze symptoms, identify the diagnosis, and formulate a comprehensive treatment plan combining Unani principles.

Activity 2: Posting with and Case Evaluation (2 hrs)

During dermatology OPD rotations and indoor postings, students evaluate real patients presenting with eruptive skin lesions. Take clinical history, perform physical examination, propose diagnosis, and draft a treatment plan under faculty supervision using both Unani and allopathic guidelines.

Activity 3: Case preentation in departmental Seminar (2 hrs)

Atypical cases of such diseases should be recorded carefully and presented in the departmental seminar for critical analysys by peer and teachers.

Experiential-Learning Learning 30.3: Holistic Approach to Skin health and care

Total Learning Hours (7)

Activity 1: Patient Skin Health Assessment and Counseling Sessions (3 hrs)

Students perform direct skin analysis on patients or volunteers, documenting factors like skin type, hydration level, texture, and presence of lesions or pigmentation. Based on their findings, students develop and present a personalized care plan, including skincare routine, dietary suggestions, and lifestyle changes.

Activity 2: Case Study Development and Presentation (2 hrs)

Students shall takeup real or hypothetical cases with varied skin concerns (e.g., acne-prone skin, dryness, sun damage). They shall analyze the condition and prepare a full report including diagnosis, contributing factors, and a detailed care plan (Unani + modern approach). Present findings to peers or present in seminar.

Activity 3: Simulated Client Consultation Role-Plays (2 hrs)

Students role-play as skin care consultants and patients. The "consultant" must analyze the “patient’s” skin condition and suggest a customized regimen (cleansing, moisturizing, exfoliation, Unani regimens like dalak or ubtan).

Experiential-Learning Learning 30.4: Holistic Approach to Hair Care	
Total Learning Hours (6) Activity 1: Hands-On Hair Assessment Workshops (2 hrs) Students practice evaluating scalp and hair health on patients or volunteers using diagnostic tools (e.g., magnifying lamps, scalp analyzers). Ativity 2: Client Case Study Simulations (2 hrs) Students shall evaluate cases, with detailed client profiles including hair type, medical history, lifestyle, and photos. Assess the hair condition and design a personalized hair care plan. Activity 3: Product Formulation specifications (2 hrs) Based on identified hair conditions (dry, oily, damaged), students formulate or recommend specific treatment products using safe and effective ingredients.	
Modular Assessment	
Assessment	**Hour**
Instructions-- Conduct a structured Modular assessment. Assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for thesemester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C. Case-based evaluation: (50 Marks) Each student will be given a case or problem situation of Skin disease or Cosmetic problem to evaluate the patient and create a treatment/management plan with justification. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or DOPS (Direct Observation of Procedural Skills) or Case-Writing Skills (CWS). (50 Marks)	4

- History Taking / Communication Skills (15 Marks)
- Clinical Examination / Procedural Skills (15 Marks)
- Clinical Reasoning / Interpretation (10 Marks)
- Decision-Making / Management Plan (10 Marks)

Or

Any practical in converted form can be taken for assessment. (25 Marks)

and

Any of the experiential as portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)

Semester No : 6

Module 31 : Amrāz-i-Mafāṣil (Diseases of Joints) امراض مفاصل

Module Learning Objectives

(At the end of the module, the students should be able to)

1. Describe Common Musculoskeletal Diseases and Joint Problems.

2. Conduct History taking and Physical Examination for different Musculoskeletal and Joint Disorders.

3. Develop a Comprehensive Management Plan for different Musculoskeletal and Joint Disorders with both conventional and Unani approaches.

Unit 1 Amrāz-i-Mafāsil ka Tashkīsi Nuqta Nazar (Diagnostic Approach for Amraze Mafasil) امراض مفاصل کا تشخیصی نقطہ نظر

31.1.1. Iṭlāqi Tashrīh, Manāfi‘ al-A‘ḍā’ wa Taftīshāt (Applied Anatomy, Physiology and Investigations) اطلاقی تشریح، منافع الاعضاء و تفتیشات

31.1.2. Nizām ‘Aḍalāti wa Haikali kā Ṭibbi Imtiḥān (Clinical examination of musculoskeletal system) نظام عضلاتی و ہیکلی کا طبی امتحان

31.1.3. Amrāz ‘Aḍalāti wa Haikali kā Usūl-i-Ilāj (Principles of management of musculoskeletal disorders) امراض عضلاتی و ہیکلی کا اصول علاج

31.1.4. Amrāz ‘Aḍalāti wa Haikali ke Zawāhir Kabīra (Major manifestations of musculoskeletal diseases) امراض عضلاتی و ہیکلی کے ظواہر کبیرہ

References: 4,5,8,10,14,16,17,21,26,27,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO4, CO6,CO7	Describe the systematic approach to the clinical examination of the musculoskeletal system, identifying key assessment techniques and interpreting findings to evaluate musculoskeletal function	1	Lecture	CC	Knows-how	L&PPT
CO1,CO2, CO3,CO4, CO6,CO7	Describe the principles of management for musculoskeletal disorders, discussing conservative and surgical treatment options, rehabilitation strategies, and the role of multidisciplinary care in improving patient outcomes.	1	Lecture	CC	Knows-how	BL
CO1,CO2, CO3,CO4, CO6,CO7	Identify and describe the major clinical manifestations of common musculoskeletal diseases, including pain, inflammation, and functional impairment, and discuss their implications for diagnosis and treatment.	1	Lecture	CC	Shows-how	L&PPT
CO1,CO2, CO3,CO4, CO6,CO7	Discuss the purpose and methodology of various diagnostic investigations related to musculoskeletal disorders, including DXA scans, synovial biopsy, CT, MRI, and isotopic scanning, and discuss how these investigations inform clinical decision-making.	2	Lecture	CC	Knows-how	L&PPT ,BL,DIS
CO1,CO2, CO3,CO4, CO6,CO7	Demonstrate local clinical examination for different musculoskeletal diseases, and General management strategies according to the principles of Unani medicine	10	Practical31.1	AFT-SET	Shows-how	CD,D-BED
CO1,CO2, CO3,CO4, CO6,CO7	Perform history taking and clinical examination of patients of Musculoskeletal disorders	7	Experiential-Learning31.1	PSY-ADT	Does	RP,RLE,SDL

CO1,CO2, CO3,CO4, CO6,CO7	Develop comprehensive management plans for patients with musculoskeletal disorders, considering medical, regimenal and rehabilitation strategies	6	Experiential-Learning31.2	PSY-ADT	Does	PBL,RLE,PER,C_L,PAL

Unit 2 Amrāz-i-'Azlāti wa Haikali (Musculoskeletal Diseases) امراض عضلاتی وہیکلی

31.2.1. Niqris (Gout) نقرس

31.2.2. Awrām-i-Mafāṣil (Arthritis - Osteoarthritis, Rheumatoid Arthritis, Infective Arthritis, Psoriatic Arthritis) اورام مفاصل

31.2.3. Taḥajjur al-Mafāṣil (Stiffness of joints) تحجر مفاصل

31.2.4. Waja' al-Ẓahr (Backache) وجع الظہر/Waja' al-Khāṣira (Low Backache) وجع الخاصرہ/Waja' al-Quṭn (Lumbago) وجع القطن

31.2.5. Taḥajjur al-Mafāṣil al-Fiqāriyya (Ankylosing spondylosis) تحجر المفاصل الفقاریہ

31.2.6. Ḥadaba wa Riyāḥul Afrasā (Gibbus) حدبہ ورياح الافرسہ

31.2.7. Muta'laqa Taftīshat wa Tashkīsi 'Amaliyāt (Related Investigations and Diagnostic procedures) متعلقہ تفتیشات وتشخیصی عملیات

31.2.7.1. DEXA scans ڈیکسا اسکین

31.2.7.2. Synovial biopsy سائنوویل بایوپسی

31.2.7.3. CT and MRI سی ٹی اور ایم آر آئی

31.2.7.4 Isotopic and Other Advanced diagnostic scanning آیسوٹوپک و دیگر جدید تشخیصی اسکیننگ

31.2.7.5. Rheumatoid factor and Anti CCP روٗمیٹوئید فیکٹر اور اینٹی سی سی پی

31.2.7.6. Antinuclear Antibodies (ANA) اینٹی نیوکلیر اینٹی باڈیز

References: 4,5,8,10,14,16,17,21,26,27,29,30

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO4, CO6,CO7	Define and describe the etiology and pathophysiology, identify the clinical features, and explain the investigative methods for diagnosing Niqris (Gout), Warme-Mafasil (various types of arthritis), Tahajjur Mafasil (joint fixation), Waja'ul Zahar (backache),	4	Lecture	CC	Knows-how	L&PPT ,BL,DIS

	Waja'ul Khasra (low backache), Waja'ul Qutn (lumbago), and Ankylosing spondylosis, and will discuss the Unani line of treatment options for these conditions.					
CO1,CO2, CO3,CO4, CO6,CO7	Describe the significance of rheumatoid factor and antinuclear antibodies in the diagnosis and management of autoimmune diseases, describing their mechanisms of action, clinical implications, and the interpretation of laboratory results in the context of rheumatological disorders	1	Lecture	CC	Knows-how	L&PPT ,BL,DIS
CO1,CO2, CO3,CO4, CO6,CO7	Demonstrate clinical examination of patients of Gout and Arthritis (Bachache, LBA, Cervical Spondylitis), interpret investigation, and discuss the line of treatment and treatment plan.	10	Practical31.2	AFT-SET	Shows-how	L&PPT ,BL,LRI,W,CD
CO1,CO2, CO3,CO4, CO6,CO7	Conduct history taking and clinical examination for the diagnosis of musculoskeletal diseases viz. Gout, Backache, Cervical Spondylitis etc.	7	Experiential-Learning31.3	PSY-ADT	Does	PAL,CD,RP,PER,TPW
CO1,CO2, CO3,CO4, CO6,CO7	Analyze the significance of rheumatoid factor and ANA in diagnosing autoimmune diseases; imaging viz. X-ray, DEXA scans, CT, and MRI results for decision-making and formulate treatment for musculoskeletal diseases.	6	Experiential-Learning31.4	PSY-ADT	Does	PAL,RLE,W,PER,LRI
Practical Training Activity						
Practical Training 31.1 Clinical Examination, Diagnosis and Management of Musculoskeletal diseases						
Total Learning Hours (10)						

Activity 1: Musculoskeletal System Examination Practial (3 hrs) Under the supervision of teacher students perform local clinical examinations (inspection, palpation, range of motion, etc.) on peers or simulated patients presenting symptoms of conditions like arthritis, sciatica, or back pain. Activity 2: Diagnosis through Mizaj (Temperament) and Structure Assessment (2 hrs) Students evaluate patients' temperament and body constitution according to the core concepts of Unani medicine to understand predisposition to musculoskeletal diseases. Activity 3: Case-Based Discussions (CBD) on Unani Management (2 hrs) Demonstrate real or simulated cases of musculoskeletal conditions (e.g., Waja-ul-Mafasil – joint pain), and guide students to plan general management strategies including Ilaj bil Tadbeer (regimental therapy), Ilaj bil Ghiza (dietotherapy), and Ilaj bil Dawa (pharmacotherapy). Activity 4: Demonstration and Practice of Regimental Therapies (Ilaj bil Tadbeer) (3 hrs) Hands-on training in Unani regimens such as Hijama (cupping), Dalak (massage), Hammam (steam bath), and Riyazat (exercise) for managing different musculoskeletal conditions.
Practical Training 31.2 Diagnosis and Management of common musculoskeletal diseases viz. Gout, Arthritis etc.
Total Learning Hours (10) Activity 1: Clinical Examination OSCE (Objective Structured Clinical Examination) (2 hrs) Under the supervision of teacher, students perform focused musculoskeletal examinations on patients presenting with symptoms of gout, LBA, or cervical spondylitis. Assess ability to elicit relevant signs (joint swelling, tenderness, range of motion) and perform systematic clinical evaluations. Activity 2: Interpretation of Diagnostic Investigations (2 hrs) Students review and interpret lab reports (e.g., serum uric acid, RA factor, ESR/CRP) and imaging (X-rays, MRI of spine/joints) and correlate clinical findings with lab/imaging data to arrive at a diagnosis and stage the condition. Activity 3: Supervised Bedside Clinical Case Presentation (4 hrs) Students present actual patients from orthopedic or rheumatology wards, covering history, clinical findings, investigations, and management plans.

Activity 4: Therapeutic Planning Workshop (2 hrs) Students work in pairs or groups to design and justify a comprehensive treatment regimen (drug therapy, dietary advice, physical modalities, follow-up plans) for each condition.
Experiential Learning Activity
Experiential-Learning Learning 31.1: Diagnosis of Musculoskeletal disorders
Total Learning Hours (7) Activity 1: Clinical Rotations in Orthopedic or Unani Clinics (2 hrs) Students observe and assist clinicians in real outpatient settings, gradually progressing to independently taking patient history and performing relevant examinations under supervision. Activity 2: Problem-Based Learning (PBL) Sessions (2 hrs) Students shall work through musculoskeletal case scenarios, identifying key history questions and clinical signs, then role-play or demonstrate the examination techniques. Activity 3: Simulated Patient Encounters (3 hrs) Conduct simulated patient scenario with peers as standardized patients presenting with musculoskeletal complaints (e.g., joint pain, stiffness, muscle weakness). Students perform history taking and clinical exams in a structured environment.
Experiential-Learning Learning 31.2: Management and Treatment for Musculoskeletal Disorders
Total Learning Hours (6) Activity 1: Problem-Based Learning (PBL) Case Discussion (2 hrs) Students shall work through complex musculoskeletal case scenarios with minimal guidance, requiring them to research and propose a complete management plans incorporating medicine, regimens (diet/exercise), and rehabilitation.

Activity 2: Clinical Case Simulations with Standardized Patients (2 hrs) Students interact with trained peers simulating various musculoskeletal conditions (e.g., osteoarthritis, low back pain, post-fracture rehabilitation), and formulate an integrated management plan, including pharmacologic treatment, physical therapy, and lifestyle modifications. Activity 3: Clinical Rotations in Orthopedic and Rehab Clinics (2 hrs) Hands-on participation in real-life patient care under supervision in orthopedic or physiotherapy units. There the students shall apply theoretical knowledge to actual cases and observe how comprehensive plans are implemented and adjusted in clinical practice.
Experiential-Learning Learning 31.3: Clinical Diagnosis of Common musculoskeletal disease viz. Gout, Backache, Cervical Sponylitis etc.
Total Learning Hours (7) Activity 1: Bedside Clinical Practice with Patients of musculoskeletal diseases (3 hrs) Students conduct history taking and clinical examination of patients with musculoskeletal conditions during ward rounds or outpatient clinics. The practice shall focus region-specific physical examinations. Activity 2: Symptom Mapping and Pain Localization Workshop (2 hrs) Interactive sessions using patient stories, body charts, and pain drawings to understand symptom patterns and correlate with underlying pathology. Activity 3: Clinical Case Role-Play in Peer Groups (2 hrs) Students take turns playing the roles of patient, clinician, and observer within small groups using structured case scenarios. Develop communication and examination skills, empathy, and peer-based feedback mechanisms.
Experiential-Learning Learning 31.4: Investigations and Treatment of musculoskeletal disorders.
Total Learning Hours (6) Activity 1: Diagnostic Interpretation Workshop (2 hrs) Students will work in small groups to analyze real or simulated lab reports (RF, ANA, ESR, CRP) and imaging results (X-rays, DEXA, CT, MRI) from case studies of patients with autoimmune or musculoskeletal diseases.

Activity 2: Case-Based Learning (CBL) with Structured Reflection (2 hrs)

Students are presented with progressive case scenarios where lab and imaging data are revealed step-by-step. After each stage, they make diagnostic and treatment decisions, followed by faculty-guided reflection.

Activity 3: Prescription Writing and Rational Therapy Workshop (2 hrs)

Students will practice writing treatment plans and prescriptions based on both Unani (herbal, regimenal) and conventional pharmacologic approaches. Build competence in rational, safe, and effective formulation of integrative treatment regimens.

Modular Assessment

Assessment	**Hour**
Instructions— Conduct a structured Modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C. Case-based evaluation: (50 Marks) Each student will be given a case or problem situation related to the Musculoskeletal system to evaluate the patient and create a treatment/ management plan with justification. • Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or DOPS (Direct Observation of Procedural Skills) or Case-Writing Skills (CWS). (50 Marks) • History Taking / Communication Skills (15 Marks) • Clinical Examination / Procedural Skills (15 Marks) • Clinical Reasoning / Interpretation (10 Marks)	4

- Decision-Making / Management Plan (10 Marks)

Or

Any practical in converted form can be taken for assessment. (25 Marks)

and

Any of the experiential as portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)

Module 32 : Hangāmi wa Hād Ṣūrat mien Ṭib Unani (Unani medicine in emergency and acute conditions) ہنگامی وحاد صورت میں طب یونانی

Module Learning Objectives

(At the end of the module, the students should be able to)

Diagnose acute conditions such as hyperpyrexia, abdominal colic, and diarrhea from a Unani perspective, using both traditional diagnostic methods and modern approaches.

1. Apply Unani treatment strategies, including herbal remedies, dietary modifications, and lifestyle interventions, to manage these conditions.

2. Integrate Unani and conventional medical approaches to provide holistic and effective care for patients experiencing acute conditions.

Unit 1 Hād Hālāt-1 (Acute conditions-1) حاد حالات ا

32.1.1. Ḥarānīṭus (Sarsām Ḥār) (Acute Severe Meningitis) فرانیطس (سرسام حار)

32.1.2. Tashannuj Istamrārī (Persistent Spasm) تشنج استمراری

32.1.3. Iḍṭrāb-i-Nafsānī Shadīd (Severe Anxiety) اضطراب نفسانی شدید

32.1.4. Ikhtināq al-Raḥim (Hysteria) اختناق الرحم

32.1.5. Sahar Mufraṭ (Insomnia) سہر مفرط

32.1.6. Ḍīq al-Nafas Shadīd/ Intiṣab al-Nafas (Severe Bronchospasm/ Status Asthmaticus) ضیق النفس شدید/ انتصاب النفس

32.1.7. Zaghtuddam Qawī Shadīd (Malignant Hypertension) ضغط الدم قوی شدید

References: 5,10,11,12,13,16,17

3A	3B	3C	3D	3E	3F	3G

CO1,CO2, CO3,CO4, CO5,CO6, CO7	Describe the initial assessment of patients in emergency situations, including the application of the ABCDE (Airway, Breathing, Circulation, Disability, Exposure) approach, and implement appropriate Mamoolate Matab wa Tadabeer and emergencuy protocol for Faranitas/Sarsame har, Tashannuje Istamrary, Iztrabe Nafsani shadeed, Ikhtanaq-ur-Reham, Sahar mufrat, Zeequnnafas Shadeed, Intisab al-Nafas, and Zaghtud Dam Shadeed.	5	Lecture	CAP	Knows-how	L&PPT ,BL
CO1,CO2, CO3,CO4, CO5,CO6, CO7	Demonstrate the management of Acute conditions viz. Meningitis, Persistent Spasm, Severe Anxiety, Hysteria, Status Asthmaticus, Malignant Hypertension	10	Practical32.1	AFT-RES	Shows-how	PAL,W,D-BED,CD,SIM
CO1,CO2, CO3,CO4, CO5,CO6, CO7	Engage in simulated emergency scenarios related to CNS to apply the ABCDE approach for patient assessment, and collaborate with peers to design and execute Unani management protocols for Acute Meningitis, Persistent Spasm, Severe Anxiety, Hysteria etc.	7	Experiential-Learning32.1	PSY-ORG	Does	PER,RLE,CD,PSM,PAL
CO1,CO2, CO3,CO4, CO5,CO6, CO7	Evaluate and Engage emergency scenarios related to Respiratory and CVS to apply the ABCDE approach for patient assessment, and collaborate with peers to design and execute Unani management protocols for Status Asthmaticus, Respiratory distress, Malignant Hypertension, Angina/ Myocardial infarction etc.	6	Experiential-Learning32.2	PSY-ORG	Does	JC,SIM,PrBL,PAL,PER

Unit 2 Hād Hālāt-2 (Acute conditions-2) حادحالات۲

32.2.1. Qai Shadīd (Severe Vomiting) قے شدید

32.2.2. Fawāq Shadīd (Severe Hiccupss) فواق شدید

32.2.3. Waja'ul me'da Shadīd (Severe Pain in Abdomen) وجع المعدہ شدید

32.2.4. Qaiuddam Shadīd(Severe Haemoptysis) قےالدم شدید

32.2.5. Ishāl Shadīd (Severe Diarrhoea) اسہال شدید

32.2.6. Zahire Hād (Severe Dysentry) زحیر حاد

32.2.7. Hummae Muharriqa (High Grade Fever) حمی محرقہ

32.2.8. Waja'ul Mafāsil Shadīd (Severe Arthralgia) وجع المفاصل شدید

32.2.9. Bohrān aur uski Tadabīr بحران اور اسکی تدابیر

References: 5,10,11,12,13,16,17

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO4, CO6,CO7	Engage in simulated emergency scenarios related to the Gastrointestinal system to apply the ABCDE approach for patient assessment, and collaborate with peers to design and execute Unani management protocols for excessive vomiting, uncontrolled haematemesis, uncontrolled loose motions etc.	7	Experiential-Learning32.3	PSY-ADT	Shows-how	PER,RLE,PAL,PL,PSM
CO1,CO2, CO3,CO4, CO6,CO7	Evaluate, analyze and manage emergencies related to high-grade fever and Severe painful conditions	6	Experiential-Learning32.4	PSY-ADT	Shows-how	PL,RLE,PER,CD,W
CO1,CO2, CO3,CO4, CO5,CO6, CO7	Discuss the principles of management and mamoolate matab wa tadabeer in Unani medicine and describe their significance in the management of Qai Shadeed (Severe Vomiting), Fawaq Shadeed (Severe Hiccupss), Waja'ul me'da Shadeed (Severe Pain in Abdomen), Qaiuddam Shadeed (Severe Haemoptysis), Ishal Shadeed (Severe Diarrhoea), Zahire Haad (Severe Dysentry), Hummae Muharriqa (High Grade Fever), Waja'ul Mafasil Shadeed (Severe Arthralgia), and Bohran.	5	Lecture	CAP	Knows-how	L&PPT

CO1,CO2, CO3,CO4, CO5,CO6, CO7	Demonstrate Diagnosis and management of emergencies related to Gastrointetinal and other system viz. Excessive vomiting, uncontrolled hiccup, excessive haematemesis and uncontrolled loose motions etc.	10	Practical32.2	AFT-RES	Shows-how	RP,D,CBL,D-BED,PAL
Practical Training Activity						
Practical Training 32.1 Management of Acute conditions viz. Meningitis, Persistent Spasm, Severe Anxiety, Hysteria, Status Asthmaticus, Malignant Hypertension						
Total Learning Hours (10) Activity 1: Case-Based Group Discussions (3 hrs) Under the supervison of teaher students will be given real or hypothetical cases involving one of the acute conditions viz. Case of a young adult presenting with signs of acute bacterial meningitis or Elderly patient presenting with persistent muscle spasm post-stroke etc. to decice treatment steps. Activity 2: Simulation-Based Emergency Response Scenarios (4 hrs) Students will participate in simulated emergency scenarios to manage one or more acute conditions like patient in status asthmaticus with respiratory distress or malignant hypertension with dangerously high blood pressure. Stepe shall involve ABC management, drug administration, communication. Activity 3: Role-Playing and Behavioral Simulations (3 hrs) Role-playing with peers to handle psychiatric emergencies. Managing a patient experiencing severe anxiety or an acute hysterical episode by counseling and medicines.						
Practical Training 32.2 Management of emergency conditions of Gastrointetinal and other system						
Total Learning Hours (10)						

Activity 1: Case-Based Discussions (CBD) on GI Emergencies (3 hrs) Under supervison of teacher structured discussion using real or hypothetical cases. e.g., A case of acute gastroenteritis with uncontrolled diarrhea and dehydration, invloving diagnosis, differential diagnosis, prioritization of investigations (e.g., electrolytes), and step-wise treatment planning. Activity 2: Unani Approach to Acute GI Conditions (2 hrs) Students develop and present Unani management protocols for emergencies like Qay shadid (excessive vomiting), Ishaal shadid (acute diarrhea), qai-ud Dam (haematemesis) and get endorsed by the teacher. Activity 3: Simulation of GI Emergency Scenarios (3 hrs) Students participate in simulated clinical scenarios of patients presenting with excessive haematemesis or Uncontrolled vomiting for diagnosis and ABC management protocol. Activity 4: Drug Administration and Fluid Management Practice (2 hrs) Under supervision of teacher, hands-on training on Preparing and administering antiemetics, proton pump inhibitors, oral rehydration solution (ORS), and IV fluids.
Experiential Learning Activity
Experiential-Learning Learning 32.1: Management of emergency conditions of CNS
Total Learning Hours (7) Activity 1: Simulation of CNS Emergencies (3 hrs) Students will participate in a high-fidelity simulation lab where mannequins or standardized patients present with CNS emergencies like acute meningitis or status epilepticus. Apply the ABCDE approach in real-time for proper management. Activity 2: Case Study Workshops with Unani Protocol Development (2 hrs) Students will work in groups to research and present CNS emergency cases (e.g., Hysteria, Severe Anxiety) and integrating Unani concepts (mizaj, asbab, ilaj). Develop Unani management protocols and present them in the departmental seminar.

Activity 3: Interdisciplinary Role-Play and Debriefing Sessions (2 hrs) Students role-play healthcare team members (Unani physician, nurse, emergency responder) during a simulated CNS emergency (e.g., Persistent Spasm) in order to practice collaborative decision-making using both modern emergency protocols and Unani interventions.
Experiential-Learning Learning 32.2: Management of emergency conditions of Respiratory and Cardiovascular systems
Total Learning Hours (6) Activity 1: Simulation-Based Emergency Drill with ABCDE Assessment (2 hrs) Students will participate in simulation-based scenarios mimicking Respiratory Distress, Status Asthmaticus, or MI using mannequins or standardized patients to practice the ABCDE (Airway, Breathing, Circulation, Disability, Exposure) approach in acute respiratory/CVS emergencies. Activity 2: Peer-Assisted Case Presentation & Management Role Play (2 hrs) Students will present real or simulated cases (e.g., a patient with chest pain suggestive of MI) and role-play a multidisciplinary team responding using both allopathic emergency care and Unani follow-up or supportive therapy. Activity 3: Reflective Learning from Clinical/Community Exposure (2 hrs) Students will observe or assist in respiratory/CVS emergency cases during hospital postings or clinical visits, then reflect via journal club or seminar presentations.
Experiential-Learning Learning 32.3: Management of emergency conditions of Gastrointestinal system
Total Learning Hours (7) Activity 1: Simulation-Based GI Emergency Scenario (3 hrs) Students take part in simulation of a patient presenting with Uncontrolled haematemesis or Severe vomiting and dehydration Activity 2: Collaborative Unani Protocol Design Workshop (2 hrs) In peer groups, students develop Unani management protocols for Qay Shadid (excessive vomiting), Ishaal Shadid (acute diarrhea), Qai-ud dam (haematemesis) by Integrating Unani concepts (e.g., mizaj, asbab, ilaaj) into emergency planning

Activity 3: Interdisciplinary Role-Play and Peer Feedback (2 hrs) Role-play scenarios where students act as physicians, nurses, and caregivers managing GI emergencies, like managing a case of acute gastroenteritis with shock (combined use of ABCDE and Unani approaches), followed by peer debriefing, feedback and presentation.
Experiential-Learning Learning 32.4: Management of Emergencies related to High Grade Fever and Severe painful conditions
Total Learning Hours (6) Activity 1: Simulation-Based Emergency Case Management (2 hrs) Students will participate in simulated scenarios involving a patient with high-grade fever with rigors (e.g., suspected enteric fever or malaria) or a case of acute monoarthritis or severe joint swelling (e.g., gout, septic arthritis). Apply clinical reasoning to evaluate symptoms, use the ABCDE approach if required, and initiate emergency management. Activity 2: Case-Based Collaborative Discussion (CBD) with Peer Review (2 hrs) Students shall analyze and present real or hypothetical cases involving High-grade fever with altered sensorium, Joint pain with systemic features (e.g., suspected rheumatic fever or autoimmune flare). Discuss differential diagnoses, investigations, and management, including Unani perspectives. Activity 3: Unani Protocol Development Workshop (2 hrs) Students shall design Unani management protocols for Humma Haar (high-grade fever), Waram Mafasil (joint inflammation). Apply Unani principles (mizaj, asbab, ilaaj) to emergency symptoms and present practical treatment protocols.
Modular Assessment

Assessment	**Hour**
Instructions— Conduct a structured Modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment methods in each module for the semester. Keep a record of the structured pattern used for assessment. Calculate the Modular grade point as per Table 6 C.	4

Case-based evaluation: (50 Marks) Each student will be given a case or problem situation related to Acute conditions from this module to evaluate the patient and create a treatment/ management plan with justification. Case Analysis and Problem Identification (15 Marks) • Interpretation of Clinical Data and Diagnostic Reasoning (15 Marks) • Formulation of Differential Diagnosis (10 Marks) • Development of Management Plan and Justification (10 Marks) Or DOPS (Direct Observation of Procedural Skills) or Case-Writing Skills (CWS). (50 Marks) • History Taking / Communication Skills (15 Marks) • Clinical Examination / Procedural Skills (15 Marks) • Clinical Reasoning / Interpretation (10 Marks) • Decision-Making / Management Plan (10 Marks) Or Any practical in converted form can be taken for assessment. (25 Marks) and Any of the experiential as portfolio/ reflections/ presentations can be taken as an assessment. (25 Marks)	

Table 4 : Practical Training Activity

(*Refer table 3 of similar activity number)

Practical No*	Practical name	Hours
1.1	Histopathology of Neuroanatomical Structures	5
1.2	Classical Unani Concepts related to Neurology (Neurology – Modern vs. Classical Unani Concepts)	5
1.3	Comprehensive neurological examination and differential clinical diagnosis	5
1.4	Mental State Examination focuses on multiple domains.	5
2.1	Neurological Examination for Headache Differentiation	5
2.2	Neurological Examination for Vertigo in Special Situations	5
2.3	Facial Palsy	5
2.4	Special Senses Disorders Smell/Taste/Hearing or Vision Disorder.	5
3.1	Comprehensive Evaluation and Management of Infectious and Inflammatory Neurological Disorders	5
3.2	Diagnostic Approach to Suspected Brain Infections Using Lab and Imaging Tools	5
3.3	Clinical Evaluation and Diagnosis of Brain Abscess and Tabes Dorsalis	5
3.4	Diagnostic Evaluation of Metabolic Encephalopathy:	5
4.1	Comprehensive Clinical Evaluation and Diagnosis of Stroke.	3
4.2	Clinical Assessment and Management of Hemiplegia (Falij)	4
4.3	Assessment and Management of Coma and Syncope.	3
4.4	Differential Diagnosis and Unani Management of Sakta, Isterkha, and Jumood o Shakhoos	3
4.5	Neurological Assessment and EEG in Seizure Diagnosis and Management	4
4.6	Comprehensive Neurological Assessment and Immediate Management of Ra'asha (Tremors), Da ul Raqs, and Tics	3
5.1	Targeted Neurological Assessment and Management of Sciatica and Trigeminal Neuralgia	5

5.2	Holistic Unani Therapeutics for Chronic Neurological Disorders.	5
5.3	Neurological assessment and management of brain tumours	5
5.4	Integrated Clinical Management of Meningocele and Hydrocephalus	5
6.1	Subat aur uske aqsam (Narcolepsy)	4
6.2	Aetiology and Manangement of Sahr (Insomnia)	4
6.3	Sleep disoerders in view of Polysomography report	4
6.4	Diagnosis of Sun Stroke and Neurogeriatrics related problems	4
6.5	Assessment and Management of Tal'een e Dimagh	4
7.1	Diagnosis and Treatment of Malencholia	5
7.2	Treatment of Mania and Schizophrenia.	5
7.3	Junoon and Raunat o Humaq	5
7.4	Treatment plans for Ikhtenaq-ur-rahem and Ishq	5
8.1	Diagnosis and Managemnt of Acromegaly and Dwarfism	5
8.2	Diagnosis of Endocrine disorders	5
8.3	Diagnosis and management of Thyroid disorders	5
8.4	Diagnosis of Para thyroid disorders	5
9.1	Clinical Diagnosis and Management of Ḍīq al-Nafas (Bronchial Asthma)	2
9.2	Diagnosis and Management of Acute anc Chronic Bronchitis	2
9.3	Diagnosis and Management of Waram-e-Shobat-ur-Riyah.	2
9.4	Diagnosis and Management of Bronchiectasis	2
9.5	Clinical Evaluation and Management of Emphysema	2
9.6	Clinical diagnosis and Management of Pulmonary and Cystic Fibrosis	3
9.7	Diagnostic Evaluation of Occupational Lung Diseases	3

9.8	Integrated Clinical Assessment and Advances in Lung Cancer	1
9.9	Clinical Approach to Bronchial Carcinoma	1
9.10	Diagnosis and management of Sarcoidosis, Mesothelioma, Pulmonary Hamartoma	2
10.1	Clinical Examination and Management of Dhat al-Ria (Pneumonia).	3
10.2	Clinical Examination and Management of Pulmonary Tuberculosis	3
10.3	Clinical Diagnosis and Management of Lung Abscess	2
10.4	Clinical Diagnosis and Management of Pleurisy	2
10.5	Clinical Evaluation and Management of Pleural Effusion	5
10.6	Diagnosis and Management of Empyema Thoracis	2
10.7	Clinical Evaluation and Management of Bronchopulmonary Aspergillosis	3
11.1	Clinical Examination and Management of Tracheitis and other Tracheal Disorders	4
11.2	Clinical Approach and Unani Management of Bohtus Saut (Hoarseness of Voice).	4
11.3	Clinical Assessment and Management of COVID-19 and Post-COVID Complications	4
11.4	Clinical Evaluation and Management of Haemoptysis	4
11.5	Comprehensive Clinical Approach to Sual (Cough)	4
12.1	Clinical Evaluation and Management of Haemothorax	3
12.2	Clinical Evaluation and Management of Pneumothorax.	3
12.3	Clinical Evaluation and Management of Pulmonary Hypertension.	2
12.4	Clinical Evaluation and Management of Saqoote Ria (Atelectasis).	4
12.5	Clinical Assessment and Management of Pulmonary Oedema	4
12.6	Clinical evaluation of Pulmonary hypertension.	2
12.7	Clinical Assessment and Management of Acute Respiratory Distress Syndrome (ARDS).	2
13.1	Sui Mizaj Qalb.	2

13.2	Ḍu‘f-i-Qalb	2
13.3	Khafqān	2
13.4	Warm Ghilaafe qalb (Pericarditis) and Warm Azlate qalb (Myocarditis)	4
13.5	Rheumatic heart disease	4
13.6	Ghashī (Syncope)	2
13.7	Myocardial Infarction	2
13.8	Suqūṭ-i-Qalb (Heart Failure)	2
14.1	Cardiomyopathy	2
14.2	Diagnosis of Hypertension	2
14.3	Diagnosis and Management of Shock	2
14.4	ECG changes in cardiac Arrhythmias.	2
14.5	CPR and Automated External Defibrillation (AED)	4
14.6	Pericardiocentesis	2
14.7	Waram Udhun al-Qalb, Ḍagḥt al-Qalb, Taqashshur al-Qalb, Qadhf al-Qalb, Iḥtiwā, Iḥtiwā’ al-Rụtūba ‘ala’l, Jadhb al-Qalb	6
15.1	Treatment of Tasalube sharayeen	4
15.2	Arterial brachial index (ABI) in patients of Peripheral Arterial Disease	2
15.3	Diagnosis of Buerger's disease and Raynaud’s disease	2
15.4	Diagnosis and Management of Thrombophlebitis	2
15.5	Diagnosis of Deep vein thrombosis	2
15.6	Diagnosis and Management of Pulmonary Embolism	2
15.7	Diganosis of Lymphoedemas	2
15.8	Diagnosis of Lymphadenopathy	4

16.1	Clinical diagnosis and management of Anaemia	2
16.2	Clinical diagnosis and management of Abyazuddam (Leukemia)	2
16.3	Clinical diagnosis and management of Thalassemia	2
16.4	Diagnosis of Haemophilia	2
16.5	Diagnosis of Thrombocytopenia	2
16.6	Diagnosis of Disseminated intravascular Coagulation (DIC)	2
16.7	Diagnosis of Mitral stenosis and Mitral regurgitation	2
16.8	Diagnosis of Aortic stenosis and regurgitation	2
16.9	Diagnosis of Pulmonary and Tricuspid valve disease	4
17.1	Clinical Diagnosis of upper GI diseases	3
17.2	Investigations and Principles of treatment for upper GI diseases	3
17.3	Clinical Diagnosis of Diseases of the Mouth	3
17.4	Investigations and Principles of treatment for diseases of Mouth	3
17.5	Clinical Diagnosis for Diseases of Oesophagus	4
17.6	Investigations and Principles of treatment for diseases of Oesophagus	4
18.1	Clinical Diagnosis of diseases of stomach	3
18.2	Investigations and Treatment for diseases of stomach	3
18.3	Clinical Diagnosis of diseases of stomach	3
18.4	Investigations and Principles of treatment for diseases of stomach	3
18.5	Clinical Diagnosis of diseases of small intestine	4
18.6	Investigations and Treatment for diseases of small intestine	4
19.1	Clinical Diagnosis for diseases of infection, infestation and ischaemic injury of the intestine	3
19.2	Investigations and Treatment for infections, infestations, and ischaemic injury of intestine	3

19.3	Clinical Diagnosis of inflammatory and obstructive diseases of lower gastrointestinal tract	3
19.4	Investigations and treatment for inflammatory and obstructive diseases of lower gastrointestinal tract	3
19.5	Clinical diagnosis of diseases of lower gastrointestinal tract	4
19.6	Investigations and treatment for diseases of lower gastrointestinal tract	4
20.1	Clinical Diagnosis for diseases of Liver, Biliary System, and Gallbladder Disease	3
20.2	Investigations and treatment for diseases of the Liver and Biliary System	3
20.3	Clinical Diagnosis for Hepatitis and Hyperbilirubinemia	3
20.4	Principles of treatment for Hepatitis and Hyperbilirubinemia	3
20.5	Clinical Diagnosis for Inherited Diseases, Cirrhosis, Tumors, and Diseases of Vessels of The Liver	4
20.6	Investigations and Principles of treatment: for Inherited Diseases, Cirrhosis, Tumors, and vascular disease of the Liver	4
21.1	Clinical diagnosis of Cholestasis and billiary disorders	3
21.2	Investigations and Treatment of intrahepatic and extrahepatic biliary diseases	3
21.3	Clinical diagnosis of tumors of gall bladder, bile duct, and other biliary diseases.	3
21.4	Investigations and treatment of tumours of the gall bladder.	3
21.5	Clinical Diagnosis of Pracreatic and Splenic disorders	3
21.6	Investigation for diseases of the pancreas and spleen	3
21.7	Treatment of pancreatic and splenic diseases	2
22.1	Clinical Diagnosis of Kidney diseases	4
22.2	Investigations and Treatment for Kidney diseases	4
22.3	Acute and chronic renal failure diagnosis	4
22.4	Investigations and treatment of glomerular diseases	4
22.5	Diagnosis and differential diagnosis of Glomerulonephritis	4

23.1	Clinical Diagnosis of Renal artery stenosis and acute renal infarction	3
23.2	Management of Cystic renal diseases and renal vascular diseases	3
23.3	Clinical Diagnosis of Congenital kidney diseases	3
23.4	Management of congenital abnormalities, obstructions, retroperitoneal fibrosis etc.	3
23.5	Clinical approach to evaluating Hisatul Kuliya wa Masana (urinary tract stones), Warme Masana (Har wa Sulb) (bl, benign prostatic enlargement, and prostatitis. Discuss the use of imaging (e.g., ultrasound, CT), lab tests, and Unani principles in diagnosing and managing these conditions	4
23.6	Indications, contraindications, and interpretation of diagnostic tests for conditions such as urinary stones, prostatic enlargement, Zufe Masana, Warme Qazeeb, urethral stricture, and tumors.	4
24.1	Clinical Diagnosis for the diseases of Reproductive system and metabolism.	3
24.2	Investigations for metabolic diseases	4
24.3	Treatment of diseases of Reproductive system and Metabolic disorders	4
24.4	Clinical diagnosis of Zof-e-Baah (erectile dysfunction) and Sur'at-e-Inzal (premature ejaculation)	3
24.5	Investigations for Kasrat-e-Ehtalam (excessive nocturnal emissions) and sterility.	3
24.6	Diagnosis of metabolic disorders	3
25.1	Treatment of Infectious diseases	4
25.2	Diagnostic assessments for infectious diseases	6
25.3	Enhancing Mana’at (immunity)	4
25.4	Infection control measures	3
25.5	Patient Assessment and Infection Control of Swine Flu and COVID-19	3
26.1	Diagnosis and management of bacterial infections (Rheumatic Fever, Typhoid Fever, Tetanus, Leprosy etc.)	10
26.2	Diagnostis and Management of Viral infections	10
27.1	Sample collecting for investigations.	6

27.2	Throat, Nasal swab and CSF Collection	4
27.3	Diagnosis and Management of Malarial Fever, Kala Azar, Filariasis, Hydatid Disease and Suzak (Gonorrhea).	10
28.1	Pyrexia of Unknown Origin and Hummae Wabaiya (Epidemic Fever)	10
28.2	Diagnosis and Managment of Humma Ufooniyya	10
29.1	Diagnostic approach and Management of Skin disorders	10
29.2	Diagnosis of Pigmentary Skin disorders nails and hair diseases	10
30.1	Diagnosis and management of prevalent itchy skin diseases (Fungal infection, Psoriasis, Eczema and Scabies etc.) and eruptive disorders (Acne, warts, herpes etc).	10
30.2	Facial and general skin care and care of hairs	10
31.1	Clinical Examination, Diagnosis and Management of Musculoskeletal diseases	10
31.2	Diagnosis and Management of common musculoskeletal diseases viz. Gout, Arthritis etc.	10
32.1	Management of Acute conditions viz. Meningitis, Persistent Spasm, Severe Anxiety, Hysteria, Status Asthmaticus, Malignant Hypertension	10
32.2	Management of emergency conditions of Gastrointetinal and other system	10

Table 5 : Experiential learning Activity

(*Refer table 3 of similar activity number)

Experiential learning No*	Experiential name	Hours
1.1	Neurophysiology Concepts & Clinical Relevance	4
1.2	Neuroanatomy & Neurological Disorders	5
1.3	Structural Brain Variations & Functional Impact.	4
1.4	Diagnostic accuracy, structured clinical reasoning and effective case documentation.	5
1.5	Ethics, Integration, and Insight in Neurology	4
1.6	Special investigations/reports such as Polysomnography, Video EEG monitoring, EEG-ToTelemetry, autonomic function tests	4
2.1	Headache Diagnosis & Management	4
2.2	Clinical Evaluation and Neurodiagnostic Assessment of Sidr-o-Dawar (vertigo)	3
2.3	Mastering Immediate Management of BPPV and Ménière's Disease	4
2.4	Diagnosis of headaches, vertigo, facial palsy, and disorders of special senses case	4
2.5	Facial Palsy (infectious, traumatic, neurologic, neoplastic)	4
2.6	Acute Pharmacologic and non pharmacologic protocols	4
2.7	Acute Management Protocols for Special Sense Disorders	3
3.1	Case-Based Strategies and Communication in Neuroinfections	5
3.2	Differential diagnosis of various types of Meningitis	5
3.3	Acute Management Protocols for Neuroinfectious and Inflammatory Emergencies	3
3.4	Communicating Complex Neurological Diagnoses to Patients and Training Junior Colleagues	5
3.5	Differential diagnosis of Metabolic Encephalopathies	5

3.6	Acute management protocols for life-threatening neurological conditions such as brain abscess and metabolic encephalopathy.	3
4.1	Applied Clinical Skills in Cerebrovascular Diseases through Simulation-Based Learning.	4
4.2	Empathic Communication & History-Taking in Cerebrovascular Care.	4
4.3	Enhancing rapid stroke recognition and emergency response skills under time constraints	4
4.4	Empathy-driven strategies for sakta diagnosis and treatment compliance	3
4.5	Diagnostic confirmation and treatment planning for Isterkha and Jumood-o-Shakhoos	3
4.6	Diagnoses and Treatments of Sakta, Isterkha, and Jumood o Shakhoos	2
4.7	Enhancing Understanding of Epilepsy Through Neurophysiology Experiments	2
4.8	Empathetic Neurodiagnostic Interactions	2
4.9	Management & Rehabilitation Integration in Movement Disorders (like Tashannuj, Dystonia-Myoclonus, and Torticollis,)	2
5.1	Patient-Centred Unani Management: Teaching Self-Care and Enhancing Adherence in Irq al-Nasa and Isaba.	5
5.2	Integrative diagnostic interpretation in neurodegenerative disorders: bridging Unani and modern modalities	4
5.3	Empathetic, patient-centred communication strategies for multiple sclerosis and neurofibromatosis.	4
5.4	Empathetic Communication in Brain Tumour Care and Integrating Unani Principles	4
5.5	Empathetic, personalised care for meningocele and hydrocephalus management.	5
5.6	Management strategies for Tazazae Dimagh	4
6.1	Cause and Management of Sahar	5
6.2	Management of Sleep disorders	5
6.3	Immediate treatment of Sun-Stroke	6

6.4	Long term treatment for Tal’een e Dimagh	5
6.5	Age related disorders	5
7.1	Treatment of Melancholia and Schizophrenia	6
7.2	Diagnosis and management of Anxiety disorders	5
7.3	Counselling options for Psychiatry disorders	5
7.4	Mental retardation and learning disorders	5
7.5	psychiatric crisis	5
8.1	Management of Endocrine Disorders	3
8.2	Diagnosis of Sul'ate Nukhamia	3
8.3	Management of Endocrine Disorders	5
8.4	Self care techniques of Endocrine disorders	5
8.5	Managing emotional demands in endocrine disorders	5
8.6	Assessment of Endocrine disorders	5
9.1	Diagnosis and Management of Bronchial Asthma	3
9.2	Integrated Therapeutic Strategies for Bronchitis	4
9.3	Diagnosis and Management of Bronchiectasis	2
9.4	Clinical Diagnosis and Management of Emphysema	4
9.5	Diagnosis and Management of Pulmonary and Cystic Fibrosis.	2
9.6	Integrated Case Management of Pneumoconiosis Disorders	2
9.7	Approach to the diagnosis and treatment of Silicosis.	3
9.8	Clinical Evaluation and Integrative Clinical Management of Lung Carcinoma	2
9.9	Clinical Evaluation and Management of Bronchial Carcinoma	2
9.10	Clinical approach to Sarcoidosis, Mesothelioma, Pulmonary Hamartoma	2

10.1	Clinical Diagnosis and Management of Pulmonary Tuberculosis	5
10.2	Clinical Diagnosis and Management of Pneumonia	4
10.3	Clinical Diagnosis and Management of Lung Abscess	3
10.4	Clinical Evaluation and Management of Pleurisy	3
10.5	Clinical Approach and Management of Pleural Effusion	4
10.6	Clinical Diagnosis and Management of Bronchopulmonary Aspergillosis	4
10.7	Clinical Examination and Thoracentesis Procedure in Empyema Thoracis	3
11.1	Presentations and Management of Tracheal Disorders.	6
11.2	Integrated Case-Based Management of COVID-19 in Unani and Modern Medicine	6
11.3	Integrated Clinical and Literary Exploration of Haemoptysis	6
11.4	Integrated Clinical and Pedagogical Approach to Sual (Cough)	4
11.5	Clinical Assessment and Peer-Led Teaching of Bohtus Saut (Hoarseness of Voice)	4
12.1	Clinical Approach and Procedure-Based Learning in Hemothorax.	4
12.2	Integrated Clinical Management of Pneumothorax	5
12.3	Integrated Clinical Approach to Saqoote Ria (Atelectasis)	4
12.4	Integrated Clinical Approach to Pulmonary Oedema.	4
12.5	Clinical Evaluation and Management in Respiratory Failure.	3
12.6	Clinical Approach to Acute respiratory Distress Syndrome	3
12.7	Unani Approach to Pulmonary Hypertension	3
13.1	Sū-i Mizāj Qalb	2
13.2	Ḍu‘f-i-Qalb	2
13.3	Khafqān	3
13.4	Warm Ghilaafe qalb (Pericarditis) and Warm Azlate qalb (Myocarditis)	4

13.5	Rheumatic heart disease	6
13.6	Ghashī (Syncope)	3
13.7	Myocardial Infarction	3
13.8	Suqūṭ-i-Qalb (Heart Failure)	3
14.1	Cardiomyopathy	3
14.2	Hypertension	3
14.3	Shock	3
14.4	ECG changes in Cardiac Arrhythmias.	3
14.5	CPR and Automated External Defibrillation (AED)	4
14.6	Pericardiocentesis	3
14.7	Waram Udhun al-Qalb, Ḍagḥt al-Qalb, Taqashshur al-Qalb, Qadhf al-Qalb, Iḥtiwā, Iḥtiwā' al-Rụtūba 'ala'l, Jadhb al-Qalb	7
15.1	Exploration of Tasalube sharayeen	4
15.2	Peripheral Arterial Disease (PAD) in Unani medicine	3
15.3	Management of Buerger's disese and Raynaud's disease	3
15.4	Treatment of Thrombophlebitis	3
15.5	Management of Deep vein thrombosis	3
15.6	Management of Pulmonary Embolism	3
15.7	Diagnosis of Lymphoedemas	3
15.8	Diagnosis of Lymphadenopathy	4
16.1	Diagnosis of Anemia	3
16.2	Diagnosis and Management of Abyazuddam (Leukemia)	2
16.3	Diagnosis and Managemet of Thalasaemia	3

16.4	Diagnosis of Haemophilia	2
16.5	Diagnosis and Management of Thrombocytopenia	3
16.6	Diagnosis and Management of Disseminated Intravascular Coagulation (DIC)	3
16.7	Diagnosis and Management of Mitral stenosis and Regurgitation	3
16.8	Diagnosis and Management of Aortic stenosis and Regurgitation	3
16.9	Diagnosis and Management of Pulmonary and tricuspid valve disease	4
17.1	Clinical Diagnosis, investigations, and Principles of treatment for Gastrointestinal diseases	3
17.2	Management of Gastrointestnial diseases and Patient Education	2
17.3	Treatment plan for GI diseases	3
17.4	Evaluation and Management of patient for diseases of Mouth	3
17.5	Prevention and management of oral diseases and patient education	3
17.6	Treatment plan for diseases of Mouth	3
17.7	Evaluation of patients with diseases of the Oesophagus	3
17.8	Principles of treatment and Patient Education for Diseases of Oesophagus	3
17.9	Treatment plan for Oesophageal diseases	3
18.1	Clinical Diagnosis, investigations and treatment of diseases of stomach	3
18.2	Treatment of stomach diseases	3
18.3	Treatment and Patient education for diseases of stomach	2
18.4	Clinical Diagnosis, investigatios and Principles of treatment for diseases of stomach	3
18.5	Principles of Treatment for stomach diseases	3
18.6	Treatment and Patient Education for diseases of Stomach	3
18.7	Diagnosis and Management of diseases of small intestine	3
18.8	Treatment plan and Education of the patient for diseases of Small Intestine	3

18.9	Principles of Treatment for diseases Small Intestine	3
19.1	Clinical Diagnosis and Management of intestinal infections, infestation, and ischaemic injury	3
19.2	Treatment of diseases of infection, infestation and ischaemic injury of intestine	3
19.3	Treatment and Patient Education for intestinal infection and infestation and ischaemic injury	3
19.4	Clinical Diagnosis and treatment for intestinal diseases	3
19.5	Principles of Treatment for Intestinal diseases	3
19.6	Treatment and Patient education for intestinal diseases	3
19.7	Clinical diagnosis, investigations and management of lower gastrointestinal diseases	3
19.8	Treatment and Patient Education for diseases of stomach	2
19.9	Treatment of diseases of lower gastrointestinal tract	3
20.1	Diagnosis and Management of Diseases of the Liver and Gallbladder	3
20.2	Principles of Treatment of the Liver and Gallbladder diseases	3
20.3	Personalized treatment plan and Patient Education for diseases of the Liver and Gallbladder	3
20.4	Clinical Diagnosis and Management of Hepatitis and Hyperbilirubinemia	3
20.5	Principles of Treatment in Hepatitis and Hyperbilirubinemia	3
20.6	Management and Prevention of Hepatitis and Hyperbilirubinemia	3
20.7	Clinical Diagnosis and Management of Inherited diseases, Cirrhosis, Tumors, and Diseases of the Vessels of The Liver	3
20.8	Principles of Treatment for Inherited Diseases, Cirrhosis, Tumors, and Diseases of the Vessels of the Liver	3
20.9	Treatment plan for Inherited Diseases, Cirrhosis, Tumors, and Diseases of the Vessels of the Liver	2
21.1	Tumor of gall bladder.	3
21.2	Treatment plan of Biliary diseases	3

21.3	Diseases of Biliriary system	2
21.4	Diagnosis and Management of disease of bile duct	2
21.5	Treatment of diseases of Gall bladder and bile duct	2
21.6	Patient Education for Biliary diseases and tumors of gall bladder	3
21.7	Clinical Diagnosis of Diseases of the Spleen and Pancreas	3
21.8	Management of Diseases of pancreas and spleen.	3
21.9	Dietary implications in the diseases of the pancreas and spleen.	2
21.10	Su-e-Mizaj-e-Tihal, Izm-e-Tihal and Sudda Tihal	3
22.1	Diagnosis and Management of Kidney diseases	3
22.2	Personalized treatment and counseling of kidney diseases	4
22.3	Diagnosis and Management of Glomerular Diseases.	3
22.4	Treatment for glomerular kidney diseases	3
22.5	Diet chart for Chronic kidney diseases	1
22.6	Treament of Glomerulonephritis	3
22.7	Diagnosis and Management of Glomerulonephritis	3
22.8	Patient education and counseling for Acute and Chronic interstitial nephritis, reflux nephropathy, and renal papillary necrosis	3
22.9	glomerulonephritis and other inherited glomerular diseases	3
23.1	Clinical Diagnosis and Management of Cystic diseases and renal vascular diseases.	3
23.2	Treatment plan for Renal Artery Stenosis, Acute Renal Infarction	3
23.3	Patient Education for Polycystic ikdney disease and renal vascular diseases	3
23.4	Clinical Diagnosis of Chronic pyelonephritis	3
23.5	Treatment of Drug-induced renal disease, diabetic nephropathy, and chronic pyelonephritis	3

23.6	Dietary management of Drug-induced renal disease, diabetic nephropathy, and chronic pyelonephritis	3
23.7	Patient counseling for Kidney stone, prostate and urethral tumours.	2
23.8	Clinical Diagnosis of Single kidney, ureterocele, Warme Masana, Zufe Masana, benign prostatic enlargement, prostatitis), Suddae Majarae Qazeeb, and tumors.	4
23.9	Management of Urothelial tumors, renal adenocarcinoma, prostate cancer, testicular tumors, Warme Qazeeb, Zufe Masana, and Hisatul Kuliyawa Masana.	2
24.1	Clinical Diagnosis and Management of Sexual disorders	3
24.2	Treatment plan in Sexual disorder	3
24.3	Ethical issues in Reproductive and sexual disorders.	3
24.4	Diagnosis and Management of Sexual disorder and diseases of reproductive system.	5
24.5	Personalized treatment and follow up of Sexual disorders and reproductive diseases.	4
24.6	Diagnosis and Management of Metabolic disorders	4
24.7	Personalized treatment for Metabolic disorders	4
25.1	Case studies of SARS and MERS outbreaks	7
25.2	Controlling disease transmission (Tadiya)	6
25.3	SARS and MERS outbreaks	5
25.4	Prevention and treatment of Ebola, Avian Flu and Zika	4
25.5	Swine Flu & COVID-19	4
26.1	Diagnosis and management of Bacterial infections	10
26.2	Case studies of Bacterial infections	3
26.3	Application of Unani medicine in Hummae Hudariya, Ta'oun, Hummae me'vi, Kuzaz, Juzam, and Atishak	7
26.4	Management of HIV/AIDS	6

27.1	Blood investigations and interpretations	7
27.2	Swab and CSF Collection	6
27.3	Diagnosis and Management of Malaria, Kala Azar, Da' al-Fil	7
27.4	Diagnosis and Management of Hydatid Disease, and Gonorrhoea	6
28.1	General Principles of management of infective fever and thier complications	7
28.2	Pyrexia of Unknown Origin and Humma Wabaiya	6
28.3	Management of Humma Ufuniyya and Humma Diq	7
28.4	Humma Ufuniyya and Humma Diq	6
29.1	Diagnostic approach to Common Skin disorders	7
29.2	Management strategies of Common Skin disorders	6
29.3	Diagnosis and Manatement of Pigmentary disorders of skin	7
29.4	Diagnosis and Management of nail and hair disorders	6
30.1	Diagnosis and Management of itchy skin disorders (Fungal infection, Psoriasis, Scabies etc.)	7
30.2	Diagnosis and Management of eurptive skin disorders viz. Acne, Warts, Herpes etc.	6
30.3	Holistic Approach to Skin health and care	7
30.4	Holistic Approach to Hair Care	6
31.1	Diagnosis of Musculoskeletal disorders	7
31.2	Management and Treatment for Musculoskeletal Disorders	6
31.3	Clinical Diagnosis of Common musculoskeletal disease viz. Gout, Backache, Cervical Sponylitis etc.	7
31.4	Investigations and Treatment of musculoskeletal disorders.	6
32.1	Management of emergency conditions of CNS	7
32.2	Management of emergency conditions of Respiratory and Cardiovascular systems	6

32.3	Management of emergency conditions of Gastrointestinal system	7
32.4	Management of Emergencies related to High Grade Fever and Severe painful conditions	6

Table 6 : Assessment Summary: Assessment is subdivided in A to H points

6 A : Number of Papers and Marks Distribution

Subject Code	Paper	Theory	Practical	Total
UNIPG-MOA	4	100 x 4 Papers = 400	400	800

6 B : Scheme of Assessment (Formative and Summative Assessment)

Credit frame work

UNIPG-MOA consists of 32 modules totaling 64 credits, which correspond to 1920 Notional Learning Hours. Each credit comprises 30 Hours of learner engagement, distributed across teaching, practical, and experiential learning in the ratio of 1:2:3. Accordingly, one credit includes 5 hours of teaching, 10 hours of practical training, 13 hours of experiential learning, and 2 hours allocated for modular assessment, which carries 25 marks.

Formative Assessment : Module wise Assessment:will be done at the end of each module. Evaluation includes learners active participation to get Credits and Marks. Each Module may contain one or more credits.

Summative Assessment: Summative Assessment (University examination) will be carried out at the end of Semester VI.

6 C : Calculation Method for Modular Grade Points (MGP)

Module Number & Name (a)	Credits (b)	Actual No. of Notional Learning Hours (c)	Attended Number of notional Learning hours (d)	Maximum Marks of assessment of modules (e)	Obtained Marks per module (f)	MGP =d*f/c*e*100
Semester No : 3						
Paper No : 1 (Moalajat (Medicine) Paper I)						
M 1 Ilmul A'sab se Muta'lliq Buniyādi Science (Basic Sciences Related to Neurology) علم الاعصاب سے متعلق بنیادی سائنس	2	60		50		
M 2 Ṣudā', Duwār, Laqwa, wa Amrāz Hawās-i-Makhsūsa (Headaches, Vertigo, Facial Palsy, and Disorders of Special Senses) صداع، دوار، لقوہ و امراض حواس مخصوصہ	2	60		50		
Paper No : 2 (Moalajat (Medicine) Paper II)						
M 9 Amrāz-i Nizām-i-Tanaffus 01 (Diseases of Respiratory system-01) امراض تنفس ۱	2	60		50		
M 10 Amrāz-i Nizāme Tanaffus 02 (Diseases of Respiratory system-02) امراض نظام تنفس ۲	2	60		50		
Paper No : 3 (Moalajat (Medicine) Paper III)						
M 17 Amrāz-i-Nizām-i-Hazm Bālāyi (Diseases of The Upper Gastrointestinal System) امراض نظام ہضم بالائی	2	60		50		
M 18 Amrāz-i-Mi'da wa Am'ā' (Diseases of Stomach and Intestine) امراض معدہ و امعاء	2	60		50		
Paper No : 4 (Moalajat (Medicine) Paper IV)						
M 25 Amrāz-i-Mut'diyah (Infectious diseases) امراض متعدیہ	2	60		50		
M 26 Amrāz-i-Jarāsīm wa Vairūsī (Bacterial and Viral Diseases) امراض جراثیم و ویروسی	2	60		50		
	16	480		400		
Semester No : 4						

Paper No : 1 (Moalajat (Medicine) Paper I)						
M 3 Nizāme A'sab ke Muta'addi aur Iltihābi Amrāz (Infective and Inflammatory Disorders of Nervous System) نظام اعصاب کے متعدی اور التہابی امراض	2	60		50		
M 4 Amrāz Urūqi Dimāghi, Sakta, Ṣara', wa Tashannuji Daure (Cerebrovascular Diseases, Coma, Epilepsy and Seizures) امراض عروقی دماغی، قوما، صرع و تشنجی دورے	2	60		50		
Paper No : 2 (Moalajat (Medicine) Paper II)						
M 11 Amrāz-i Nizām-i-Tanaffus 03 (Diseases of Respiratory system-03) امراض نظام تنفس ۳	2	60		50		
M 12 Amrāz-i-Nizām-i-Tanaffus 04 (Diseases of Respiratory system-04) امراض نظام تنفس ۴	2	60		50		
Paper No : 3 (Moalajat (Medicine) Paper III)						
M 19 Amrāz-i-Nizām-i-Mi'da wa Am'ā' Zerīn (Diseases of Lower Gastrointestinal System) امراض نظام معدہ وامعاء زیریں	2	60		50		
M 20 Amrāz-i-Kabid (Diseases of Liver) امراض کبد	2	60		50		
Paper No : 4 (Moalajat (Medicine) Paper IV)						
M 27 Dīgar Amrāz-i-Mut'ddiya (Other infectious diseases) دیگر امراض متعدیہ	2	60		50		
M 28 Ḥummayāt (Fevers) حمیات	2	60		50		
	16	480		400		
Semester No : 5						
Paper No : 1 (Moalajat (Medicine) Paper I)						
M 5 'Asbi 'Azlāti 'Awāriz wa Sal'āt Dimāghi (Neuromuscular Disorders and Brain Tumours) عصبی عضلاتی عوارض و سلعات دماغی	2	60		50		
M 6 'Awāriz-i-Nawm wa Amrāz 'Asbi Shaykhūkhi (Sleep Disorders and Neurogeriatrics) عوارض نوم و امراض عصبی شیخوخی	2	60		50		
Paper No : 2 (Moalajat (Medicine) Paper II)						

M 13 Amrāz-i-Qalb wa Daurāne Khūn-01 (Diseases of Cardiovascular system-01) امراض قلب ودوران خون ۱	2	60		50		
M 14 Amrāz-i-Qalb wa Daurāne Khūn-02 (Diseases of Cardiovascular system-02) امراض قلب ودوران خون ۲	2	60		50		
Paper No : 3 (Moalajat (Medicine) Paper III)						
M 21 Amrāz-i-Qanāt-i-Ṣafrā, Banqrās wa Ṭiḥāl (Diseases of the Biliary Tract, Pancreas and Spleen) امراض قناۃ صفراء، بانقراس وطحال	2	60		50		
M 22 Amrāz-i-Kulya (Diseases of The Kidney) امراض کلیہ	2	60		50		
Paper No : 4 (Moalajat (Medicine) Paper IV)						
M 29 Amrāz-i-Jild 1 (Skin Diseases -1) امراض جلد ۱	2	60		50		
M 30 Amrāz-i-Jild 2 (Skin Diseases -2) امراض جلد ۲	2	60		50		
	16	480		400		
Semester No : 6						
Paper No : 1 (Moalajat (Medicine) Paper I)						
M 7 Amrāz-i-Nafsāniyya aur Iski Darjābandi (Psychiatric disorders and its Classification) امراض نفسانیہ اور اسکی درجہ بندی	2	60		50		
M 8 ‘Awāriz Ghudad-i-Laqanāti (Endocrine Disorders) عوارض غدد لاقناتی	2	60		50		
Paper No : 2 (Moalajat (Medicine) Paper II)						
M 15 Amrāz-i-Shiryān wa, Awrida wa Lymphāwiya (Diseases of Arteries, Veins and Disorders of Lymphatic system) امراض شریان، اوردہ ولمفاویہ	2	60		50		
M 16 Amrāz-i-Tawlīd Dam wa Amrāz-i-Ṣamāmāt-i-Qalb (Diseases of Haemopoietic system and Valvular Heart Disease) امراض تولید دم وامراض صمامات قلب	2	60		50		
Paper No : 3 (Moalajat (Medicine) Paper III)						
M 23 Amrāz-i-Kulya wa Majārī-i-Bawl (Diseases ofthe Kidney and Urinary Tract) امراض کلیہ ومجری بول	2	60		50		

M 24 Amrāz-i-Nizām-i-Tawlīd wa Istiḥāla (Diseases of The Reproductive System and Metabolism) امراض نظام تولید وا استحالہ	2	60		50		
Paper No : 4 (Moalajat (Medicine) Paper IV)						
M 31 Amrāz-i-Mafāṣil (Diseases of Joints) امراض مفاصل	2	60		50		
M 32 Hangāmi wa Hād Ṣūrat mien Ṭib Unani (Unani medicine in emergency and acute conditions) ہنگامی وحاد صورت میں طب یونانی	2	60		50		
	16	480		400		
MGP = ((Number of Notional learning hours attended in a module) X (Marks obtained in the modular assessment) / (Total number of Notional learning hours in the module) X (Maximum marks of the module)) X 100						

6 D : Semester Evaluation Methods for Semester Grade Point Average (SGPA)

SGPA will be calculated at the end of the semester as an average of all Module MGPs. Average of MGPS of the Semester For becoming eligible for Summative assessment of the semester, student should get minimum of 60% of SGPA

SGPA = Average of MGP of all modules of all papers = add all MGPs in the semester/ no. of modules in the semester Evaluation Methods for Modular Assessment

Semester No : 3		
Paper No : 1 Moalajat (Medicine) Paper I		
A **S.No**	**B** **Module number and Name**	**C** **MGP**
1	M1.Ilmul A'sab se Muta'lliq Buniyādi Science (Basic Sciences Related to Neurology) علم الاعصاب سے متعلق بنیادی سائنس	C 1
2	M2.Ṣudā', Duwār, Laqwa, wa Amrāz Hawās-i-Makhsūsa (Headaches, Vertigo, Facial Palsy, and Disorders of Special Senses) صداع، دوار، لقوہ وامراض حواس مخصوصہ	C 2
Paper No : 2 Moalajat (Medicine) Paper II		
A **S.No**	**B** **Module number and Name**	**C** **MGP**
3	M9.Amrāz-i Nizām-i-Tanaffus 01 (Diseases of Respiratory system-01) امراض تنفس ۱	C 3
4	M10.Amrāz-i Nizāme Tanaffus 02 (Diseases of Respiratory system-02) امراض نظام تنفس ۲	C 4
Paper No : 3 Moalajat (Medicine) Paper III		
A **S.No**	**B** **Module number and Name**	**C** **MGP**
5	M17.Amrāz-i-Nizām-i-Hazm Bālāyi (Diseases of The Upper Gastrointestinal System) امراض نظام ہضم بالائی	C 5

6	M18.Amrāz-i-Mi'da wa Am'ā' (Diseases of Stomach and Intestine) امراض معدہ وامعاء	C 6
Paper No : 4 Moalajat (Medicine) Paper IV		
A S.No	B Module number and Name	C MGP
7	M25.Amrāz-i-Mut'diyah (Infectious diseases) امراض متعدیہ	C 7
8	M26.Amrāz-i-Jarāsīm wa Vairūsī (Bacterial and Viral Diseases) امراض جراثیم وویروسی	C 8
	Semester Grade point Average (SGPA)	(C1+C2+C3+C4+C5+C6+C7+C8) / Number of modules(8)
Semester No : 4		
Paper No : 1 Moalajat (Medicine) Paper I		
A S.No	B Module number and Name	C MGP
1	M3.Nizāme A'sab ke Muta'addi aur Iltihābi Amrāz (Infective and Inflammatory Disorders of Nervous System) نظام اعصاب کے متعدی اور التہابی امراض	C 1
2	M4.Amrāz Urūqi Dimāghi, Sakta, Ṣara', wa Tashannuji Daure (Cerebrovascular Diseases, Coma, Epilepsy and Seizures) امراض عروقی دماغی، قوما، صرع وتشنجی دورے	C 2
Paper No : 2 Moalajat (Medicine) Paper II		
A S.No	B Module number and Name	C MGP
3	M11.Amrāz-i Nizām-i-Tanaffus 03 (Diseases of Respiratory system-03) امراض نظام تنفس ۳	C 3
4	M12.Amrāz-i-Nizām-i-Tanaffus 04 (Diseases of Respiratory system-04) امراض نظام تنفس ۴	C 4

Paper No : 3 Moalajat (Medicine) Paper III		
A **S.No**	**B** **Module number and Name**	**C** **MGP**
5	M19.Amrāz-i-Nizām-i-Mi‘da wa Am‘ā’ Zerīn (Diseases of Lower Gastrointestinal System) امراض نظام معدہ وامعاء زیریں	C 5
6	M20.Amrāz-i-Kabid (Diseases of Liver) امراض کبد	C 6
Paper No : 4 Moalajat (Medicine) Paper IV		
A **S.No**	**B** **Module number and Name**	**C** **MGP**
7	M27.Dīgar Amrāz-i-Mut‘ddiya (Other infectious diseases) دیگر امراض متعدیہ	C 7
8	M28.Ḥummayāt (Fevers) حمیات	C 8
	Semester Grade point Average (SGPA)	(C1+C2+C3+C4+C5+C6+C7+C8) / Number of modules(8)
Semester No : 5		
Paper No : 1 Moalajat (Medicine) Paper I		
A **S.No**	**B** **Module number and Name**	**C** **MGP**
1	M5.‘Asbi ‘Azlāti ‘Awāriz wa Sal‘āt Dimāghi (Neuromuscular Disorders and Brain Tumours) عصبی عضلاتی عوارض وسلعات دماغی	C 1
2	M6.‘Awāriz-i-Nawm wa Amrāz ‘Asbi Shaykhūkhi (Sleep Disorders and Neurogeriatrics) عوارض نوم وامراض عصبی شیخوخی	C 2
Paper No : 2 Moalajat (Medicine) Paper II		
A **S.No**	**B** **Module number and Name**	**C** **MGP**

3	M13.Amrāz-i-Qalb wa Daurāne Khūn-01 (Diseases of Cardiovascular system-01) امراض قلب ودوران خون ۱	C 3
4	M14.Amrāz-i-Qalb wa Daurāne Khūn-02 (Diseases of Cardiovascular system-02) امراض قلب ودوران خون ۲	C 4
Paper No : 3 Moalajat (Medicine) Paper III		
A **S.No**	**B** **Module number and Name**	**C** **MGP**
5	M21.Amrāz-i-Qanāt-i-Ṣafrā, Banqrās wa Ṭiḥāl (Diseases of the Biliary Tract, Pancreas and Spleen) امراض قناۃ صفراء، بانقراس وطحال	C 5
6	M22.Amrāz-i-Kulya (Diseases of The Kidney) امراض کلیہ	C 6
Paper No : 4 Moalajat (Medicine) Paper IV		
A **S.No**	**B** **Module number and Name**	**C** **MGP**
7	M29.Amrāz-i-Jild 1 (Skin Diseases -1) امراض جلد ۱	C 7
8	M30.Amrāz-i-Jild 2 (Skin Diseases -2) امراض جلد ۲	C 8
	Semester Grade point Average (SGPA)	(C1+C2+C3+C4+C5+C6+C7+C8) / Number of modules(8)
Semester No : 6		
Paper No : 1 Moalajat (Medicine) Paper I		
A **S.No**	**B** **Module number and Name**	**C** **MGP**
1	M7.Amrāz-i-Nafsāniyya aur Iski Darjābandi (Psychiatric disorders and its Classification) امراض نفسانیہ اور اسکی درجہ بندی	C 1
2	M8.'Awāriz Ghudad-i-Laqanāti (Endocrine Disorders) عوارض غدد لاقتی	C 2
Paper No : 2 Moalajat (Medicine) Paper II		

A S.No	B Module number and Name	C MGP
3	M15.Amrāz-i-Shiryān wa, Awrida wa Lymphāwiya (Diseases of Arteries, Veins and Disorders of Lymphatic system) امراض شریان،اوردہ و لمفاویہ	C 3
4	M16.Amrāz-i-Tawlīd Dam wa Amrāz-i-Ṣamāmāt-i-Qalb (Diseases of Haemopoietic system and Valvular Heart Disease) امراض تولید دم وامراض صمامات قلب	C 4
Paper No : 3 Moalajat (Medicine) Paper III		
A S.No	B Module number and Name	C MGP
5	M23.Amrāz-i-Kulya wa Majārī-i-Bawl (Diseases ofthe Kidney and Urinary Tract) امراض کلیہ ومجری بول	C 5
6	M24.Amrāz-i-Nizām-i-Tawlīd wa Istiḥāla (Diseases of The Reproductive System and Metabolism) امراض نظام تولید واستحالہ	C 6
Paper No : 4 Moalajat (Medicine) Paper IV		
A S.No	B Module number and Name	C MGP
7	M31.Amrāz-i-Mafāṣil (Diseases of Joints) امراض مفاصل	C 7
8	M32.Hangāmi wa Hād Ṣūrat mien Ṭib Unani (Unani medicine in emergency and acute conditions) ہنگامی وحاد صورت میں طب یونانی	C 8
	Semester Grade point Average (SGPA)	(C1+C2+C3+C4+C5+C6+C7+C8) / Number of modules(8)

S. No	Evaluation Methods
1.	Method explained in the Assessment of the module or similar to the objectives of the module.

6 E : Question Paper Pattern

MD/MS Unani Examination

UNIPG-MOA

Sem VI

Time: 3 Hours ,**Maximum Marks:** 100

INSTRUCTIONS: All questions compulsory

		Number of Questions	Marks per question	Total Marks
Q 1	Application-based Questions (ABQ)	1	20	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Analytical based structured Long answer question (LAQ)	4	10	40
				100

6 F : Distribution for summative assessment (University examination)

S.No	List of Module/Unit	ABQ	SAQ	LAQ
Paper No : 1 (Moalajat (Medicine) Paper I)				
(M-1) Ilmul A'sab se Muta'lliq Buniyādi Science (Basic Sciences Related to Neurology) علم الاعصاب سے متعلق بنیادی سائنس (Marks: Range 5-20)				
1	**(U-1)** Nizāme A'sāb ki Fi'li Tashrīḥ (Functional Anatomy of Nervous system) نظام اعصاب کی فعلی تشریح	No	Yes	Yes
2	**(U-2)** Clinical Neurology & Diagnostics مطبی علم الاعصاب اور ذرائع تشخیص	Yes	Yes	Yes
(M-2)Ṣudā', Duwār, Laqwa, wa Amrāz Hawās-i-Makhsūsa (Headaches, Vertigo, Facial Palsy, and Disorders of Special Senses) صداع، دوار، لقوہ و امراض حواس مخصوصہ (Marks: Range 5-20)				
1	**(U-1)** Ṣudā' aur Duwār (Headaches and Vertigo) صداع اور دوار	No	Yes	Yes
2	**(U-2)** Laqwa wa Hawāsi Makhsūsa ke Amrāz (Facial Palsy and disorders of Special Senses) لقوہ و حواس مخصوصہ کے امراض	Yes	Yes	Yes
(M-3) Nizāme A'sab ke Muta'addi aur Iltihābi Amrāz (Infective and Inflammatory Disorders of Nervous System) نظام اعصاب کے متعدی اور التہابی امراض (Marks: Range 5-20)				
1	**(U-1)** Dimāgh aur Nizām-i-A'sāb ke Muta'addi aur Iltihābi Amrāz (Infective and Inflammatory Diseases of the Brain and Nervous System) دماغ اور نظام اعصاب کے متعدی اور التہابی امراض	Yes	Yes	Yes
2	**(U-2)** Khurāj-i-Dimāgh aur Istiḥāli A'telāl Dimāghi (Brain Abscess and Metabolic Encephalopathy) خراج دماغ اور استحالی اعتلال دماغ	Yes	Yes	Yes
(M-4) Amrāz Urūqi Dimāghi, Sakta, Ṣara', wa Tashannuji Daure (Cerebrovascular Diseases, Coma, Epilepsy and Seizures) امراض عروقی دماغی، قوما، صرع و تشنجی دورے (Marks: Range 5-20)				
1	**(U-1)** Amrāz Urūqi Dimāghi wa Sakta (Cerebrovascular Diseases and Stroke) امراض عروقی دماغی و سکتہ	Yes	Yes	Yes
2	**(U-2)** Coma aur Muta'allaqa 'Awāriz (Coma and Related Disorders) کوما اور متعلقہ عوارض	Yes	Yes	Yes

3	**(U-3)** Ṣara' aur Daure ke ‘Awāriz (Epilepsy and Seizure Disorders) صرع اوردورے کے عوارض	Yes	Yes	Yes
(M-5)‘Asbi ‘Azlāti ‘Awāriz wa Sal‘āt Dimāghi (Neuromuscular Disorders and Brain Tumours) عصبی عضلاتی عوارض وسلعات دماغی (Marks: Range 5-20)				
1	**(U-1)** ‘Asbi ‘Azlāti ‘Awāriz Ḥirki wa Dīgar Amrāz (Neuromuscular Disorders/Movement Disorders and Neuroimmunopathies) عصبی عضلاتی عوارض حرکی ودیگرامراض،	Yes	Yes	Yes
2	**(U-2)** Sal‘āt Dimāgh wa Amrāz Nash-o-Numa (Brain Tumours/ Developmental Disorders) سلعات دماغ/امراض نشوونما	Yes	Yes	Yes
(M-6)‘Awāriz-i-Nawm wa Amrāz ‘Asbi Shaykhūkhi (Sleep Disorders and Neurogeriatrics) عوارض نوم وامراض عصبی شیخوخی (Marks: Range 5-15)				
1	**(U-1)** ‘Awāriz-i-Nawm (Sleep Disorders) عوارضِ نوم	No	Yes	Yes
2	**(U-2)** Amrāz-i-Dimagh Inḥiṭaṭi (Neurodegenerative Disorders) امراضِ دماغ انحطاطی	No	Yes	Yes
(M-7) Amrāz-i-Nafsāniyya aur Iski Darjābandi (Psychiatric disorders and its Classification) امراض نفسانیہ اوراسکی درجہ بندی (Marks: Range 5-15)				
1	**(U-1)** Amrāz-i-Nafsāniyya ki Darjābandi (Comprehensive Classification of Psychiatric Disorders) امراض نفسانیہ کی درجہ بندی	No	Yes	Yes
2	**(U-2)** Shakhṣiyāti Amrāz (Personality Disorders) شخصیاتی امراض	No	Yes	Yes
(M-8)‘Awāriz Ghudad-i-Laqanāti (Endocrine Disorders) عوارض غدد لاقناتی (Marks: Range 5-20)				
1	**(U-1)** Amrāz Ghudda Tahat-Al Mahād wa Ghudda Nukhamiya (Disorders of Hypothalamus and Pituitary) امراض غدہ تحت المہاد وغدہ نخامیہ	No	Yes	Yes
2	**(U-2)** Amrāz-i-Darqiya (Thyroid Disorders) امراض درقیہ	Yes	Yes	Yes
3	**(U-3)** Amrāz-i-Ghudda Fawqul Kulya wa Tanāsuli (Adrenal glands Pancreatic and Gonadic Disorders) امراض غدہ فوق الکلیہ وتناسلی	No	Yes	Yes
S.No	**List of Module/Unit**	**ABQ**	**SAQ**	**LAQ**

Paper No : 2 (Moalajat (Medicine) Paper II)				
(M-9) Amrāz-i Nizām-i-Tanaffus 01 (Diseases of Respiratory system-01)امراض تنفس۱ (Marks: Range 5-20)				
1	**(U-1)** Amrāz-i-Riya Suddiya wa Mahniyya (Obstructive & Occupational Lung diseases) امراض ریہ سدیہ ومہنیہ	Yes	Yes	Yes
2	**(U-2)** Amrāz-i-Riya Muqayyad wa Khalāli (Restrictive and Interstitial Lung Diseases) امراض ریہ مقید وخلالی	No	Yes	Yes
3	**(U-3)** Amrāz-i-Riya Sarṭaniyya (Neoplastic lung diseases) امراض ریہ سرطانیہ	No	Yes	Yes
(M-10) Amrāz-i Nizāme Tanaffus 02 (Diseases of Respiratory system-02) امراض نظام تنفس۲ (Marks: Range 5-20)				
1	**(U-1)** Amrāz-Muta'ddi Nizām-i-Tanaffus-01 (Infectious Diseases of the Respiratory System 01) امراض متعدی نظام تنفس۱	Yes	Yes	Yes
2	**(U-2)** Amrāz-Muta'ddi Nizām-i-Tanaffus-02 (Infectious Diseases of the Respiratory System 02) امراض متعدی نظام تنفس۲	Yes	Yes	Yes
3	**(U-3)** Amrāz-Muta'ddi Nizām-i-Tanaffus-03 (Infectious Diseases of the Respiratory System 03) امراض متعدی نظام تنفس۳	Yes	Yes	Yes
(M-11) Amrāz-i Nizām-i-Tanaffus 03 (Diseases of Respiratory system-03) امراض نظام تنفس۳ (Marks: Range 5-15)				
1	**(U-1)** Amrāz-Muta'ddi Nizām-i-Tanaffus-04 (Infectious Diseases of the Respiratory System 04) امراض متعدی نظام تنفس۴	No	Yes	Yes
2	**(U-2)** Amrāz-Muta'ddi Nizām-i-Tanaffus-05 (Infectious Diseases of the Respiratory System 05) امراض متعدی نظام تنفس۵	No	Yes	Yes
3	**(U-3)** Amrāz Mutafarriqa Nizām-i-Tanaffus-01 (Miscellaneous diseases of the respiratory system 01) امراض متفرقہ نظام تنفس۱	No	Yes	Yes
(M-12) Amrāz-i-Nizām-i-Tanaffus 04 (Diseases of Respiratory system-04) امراض نظام تنفس۴ (Marks: Range 5-15)				
1	**(U-1)** Amrāz Mutafarriqa Nizām-i-Tanaffus-02 (Miscellaneous diseases of the respiratory system 02) امراض متفرقہ نظام تنفس۲	No	Yes	Yes
2	**(U-2)** Amrāz Mutafarriqa Nizām-i-Tanaffus-03 (Miscellaneous diseases of the respiratory system 03) امراض متفرقہ نظام تنفس۳	No	Yes	Yes

3	**(U-3)** Amrāz Mutafarriqa Nizām-i-Tanaffus-04 (Miscellaneous diseases of the respiratory system 04) امراض متفرقہ نظام تنفس ۴	No	Yes	Yes
(M-13) Amrāz-i-Qalb wa Daurāne Khūn-01 (Diseases of Cardiovascular system-01) امراض قلب ودوران خون ۱ (Marks: Range 5-20)				
1	**(U-1)** Sū-i Mizāj Qalb, Ḍu'f-i-Qalb, Khafqān سوء مزاج قلب، ضعف قلب، خفقان	No	Yes	Yes
2	**(U-2)** Iltihābi wa 'Ufūni Amrāz-i-Qalb (Inflammatory and Infective Cardiac Disorder) التہابی وعفونی امراض قلب	Yes	Yes	Yes
3	**(U-3)** Ghashī, Iflās-i-Qalb, Suqūṭ-i-Qalb, Corpulmonale, غشی، افلاس القلب، سقوط قلب وسقوط قلب ریوی	Yes	Yes	Yes
(M-14) Amrāz-i-Qalb wa Daurāne Khūn-02 (Diseases of Cardiovascular system-02) امراض قلب ودوران خون ۲ (Marks: Range 5-20)				
1	**(U-1)** Maraz-i-Qalb 'Azli, Zaghṭuddam Qawī, Suqūṭ-i Daurān-i-Khūn Saṭḥī (Cardiomyopathy, Hypertension, Peripheral Circulatory Failure) مرض قلب عضلی، ضغط الدم قوی، سقوط دوران خون سطحی	Yes	Yes	Yes
2	**(U-2)** Ikhtilāj-i-Qalb, Khilqī Amrāz-i-Qalb, Tawaqqaf al-Qalb, Istisqa al-Qalb (Arrhythmias, Congenital Heart diseases, Cardiac Arrest, Cardiac tamponade) اختلاج قلب، خلقی امراض قلب، توقف القلب، استسقاء القلب	No	Yes	Yes
3	**(U-3)** Waram Udhun al-Qalb, Ḍaghṭ al-Qalb, Taqashshur al-Qalb, Qadhf al-Qalb, Iḥtiwā' al-Rụtūba 'ala'l Qalb, Jadhb al-Qalb ورم اذن القلب، ضغط القلب، تقشر القلب، قصف القلب، احتواء الرطوبۃ علی القلب، جذب القلب	No	Yes	Yes
(M-15) Amrāz-i-Shiryān wa, Awrida wa Lymphāwiya (Diseases of Arteries, Veins and Disorders of Lymphatic system) امراض شریان، اوردہ ولمفاویہ (Marks: Range 5-15)				
1	**(U-1)** Amrāz-i-Sharāyīn (Diseases of Arteries) امراض شرائین	No	Yes	Yes
2	**(U-2)** Amrāz-i-Awrida (Diseases of Veins) امراض اوردۃ	No	Yes	Yes
3	**(U-3)** Amrāz-i-Lymphāwiya (Diseases of Lymphatic system) امراض لمفاویہ	No	Yes	Yes
(M-16) Amrāz-i-Tawlīd Dam wa Amrāz-i-Ṣamāmāt-i-Qalb (Diseases of Haemopoietic system and Valvular Heart Disease) امراض تولید دم وامراض صمامات قلب (Marks: Range 5-20)				

1	**(U-1)** Amrāz-i-Tawlīd Dam (Diseases of Haemopoietic system) امراض تولید دم	No	Yes	Yes
2	**(U-2)** Amrāz-i-Injamāduddam (Coaugulation Disorders) امراض انجماد الدم	No	Yes	Yes
3	**(U-3)** Amrāz-i-Ṣamāmāt-i-Qalb (Valvular Heart Disease) امراض صمامات قلب	Yes	Yes	Yes
S.No	**List of Module/Unit**	**ABQ**	**SAQ**	**LAQ**
Paper No : 3 (Moalajat (Medicine) Paper III)				
(M-17) Amrāz-i-Nizām-i-Hazm Bālāyi (Diseases of The Upper Gastrointestinal System) امراض نظام ہضم بالائی (Marks: Range 5-20)				
1	**(U-1)** Amrāz-i-Hazm ke Marīz se rujū‘ ka Zābta (Approach to the patient with gastrointestinal disease) امراض ہضم کے مریض سے رجوع کا ضابطہ	Yes	Yes	Yes
2	**(U-2)** Amrāz-i-Fam (Diseases of Mouth) امراض فم	No	Yes	Yes
3	**(U-3)** Amrāz-i-Marī (Diseases of Oesophagus) امراض مری	No	Yes	Yes
(M-18) Amrāz-i-Mi‘da wa Am‘ā’ (Diseases of Stomach and Intestine) امراض معدہ و امعاء (Marks: Range 5-15)				
1	**(U-1)** Amrāz-i-Mi‘da-01 (Diseases of Stomach-01) امراض معدہ ۱	No	Yes	Yes
2	**(U-2)** Amrāz-i-Mi‘da-02 (Diseases of Stomach-02) امراض معدہ ۲	No	Yes	Yes
3	**(U-3)** Amrāz-i-Am‘ā’ Daqīq (Diseases of small intestines) امراض امعاء دقیق	No	Yes	Yes
(M-19) Amrāz-i-Nizām-i-Mi‘da wa Am‘ā’ Zerīn (Diseases of Lower Gastrointestinal System) امراض نظام معدہ و امعاء زیریں (Marks: Range 5-20)				
1	**(U-1)** Amrāz-i-Ta‘diya wa al'iisabat bialdīdān wa Jurūḥ Iflās al-Dam (Diseases of infections, infestation, and ischaemic injury) امراض تعدیہ و الایصابات بالدیدان و جروح الافلاس الدم	Yes	Yes	Yes
2	**(U-2)** Amrāz-i-Iltihab, Tasaddud wa Nafsiyati Amrāz (Diseases of inflammation, obstruction, and functional disorders امراض التہاب، تسدد و نفسیاتی امراض	Yes	Yes	Yes
3	**(U-3)** Amrāz-i-Maq‘ad, Zāyad A‘or wa Bāritūn (Diseases of Anorectum, Appendix and Peritoneum) امراض مقعد، زائد اعور و باریطون	Yes	Yes	Yes

(M-20) Amrāz-i-Kabid (Diseases of Liver) امراض کبد (Marks: Range 5-20)				
1	**(U-1)** Amrāz-i-Kabid wa Marāra ke Marīz se rujū‘ ka Zābta (Approach to The Patient with Liver, Biliary System, and Gallbladder Disease امراض کبد و مرارہ کے مریض سے رجوع کا ضابطہ	Yes	Yes	Yes
2	**(U-2)** Waram-i-Kabid wa Yarqān Damwi (Hepatitis and Hyperbilirubinemia) ورم کبد و یرقان دموی	Yes	Yes	Yes
3	**(U-3)** Amrāz-i-Mawrūsi, Talayyif, Sal‘āt wa Urūq-i-Kabid (Inherited Diseases, Cirrhosis, Tumors, and Diseases of Vessels of The Liver) امراض موروثی، تلیف، سلعات و عروق کبد	Yes	Yes	Yes
(M-21) Amrāz-i-Qanāt-i-Ṣafrā, Banqrās wa Ṭiḥāl (Diseases of the Biliary Tract, Pancreas and Spleen) امراض قناۃ صفراء، بانقراس و طحال (Marks: Range 5-20)				
1	**(U-1)** Jumūd al-Ṣafrā wa Amrāz-i-Ṣafrāwiyya (Cholestatic and Biliary Disease) جمود الصفراء و امراض صفراویہ	Yes	Yes	Yes
2	**(U-2)** Sal‘āt Marara wa Qanāt-i-Ṣafrā wa Digar Amrāz-i-Ṣafrāwiyya (Tumors of the Gallbladder and Bile Duct and Other Biliary Diseases) سلعات مرارہ و قناۃ صفراء و دیگر امراض صفراویہ	Yes	Yes	Yes
3	**(U-3)** Amrāz-i-Banqrās wa Ṭiḥāl (Diseases of the Pancreas and Spleen) امراض بانقراس و طحال	Yes	Yes	Yes
(M-22) Amrāz-i-Kulya (Diseases of The Kidney) امراض کلیہ (Marks: Range 5-15)				
1	**(U-1)** Amrāz-i-Kulya wa Nizam-i-Bawl ke Marīz se rujū‘ ka Zābta (Approach to the patient with Diseases of the Kidney and Urinary System) امراض کلیہ و نظام بول کے مریض سے رجوع کا ضابطہ	No	Yes	Yes
2	**(U-2)** Amrāz-i-Kulya-01:Glomerular Amrāz (Diseases of Kidney-01:Glomerular Diseases) امراض کلیہ ۱: گلومیرولر امراض	No	Yes	Yes
3	**(U-3)** Amrāz-i-Kulya-02:Glomerular Amrāz (Diseases of Kidney-02:Glomerular Diseases) امراض کلیہ ۲: گلومیرولر امراض	No	Yes	Yes
(M-23) Amrāz-i-Kulya wa Majārī-i-Bawl (Diseases ofthe Kidney and Urinary Tract) امراض کلیہ و مجری بول (Marks: Range 5-15)				

1	**(U-1)** Cystic disease wa Amraz Kulya Uruqi (Cystic diseases and Renal Vascular Diseases) سسٹک ڈزیز وامراض کلیہ عروقی	No	Yes	Yes
2	**(U-2)** Amrāz Nizām Tajmī‘ wa Ta‘diya Majra-i-Bawl (Diseases of the Collecting System and Urinary Tract Infection) امراض نظام تجمیع وتعدیہ مجری بول	No	Yes	Yes
3	**(U-3)** Hisāt Kulya wa Amrāz Ghudda-i-Mazī w Majra-i-Bawl wa Sal‘āt (Renal Calculi and Diseases of the Prostate and Urethra and Tumours حصاۃ کلیہ وامراض غدہ مذی ومجری بول وسلعات	No	Yes	Yes
(M-24) Amrāz-i-Nizām-i-Tawlīd wa Istiḥāla (Diseases of The Reproductive System and Metabolism) امراض نظام تولید واستحالہ (Marks: Range 5-15)				
1	**(U-1)** Amrāz-i-Bāh wa Nizām Taulīd ke Marīz se rujū‘ ka Zābta (Approach to the patient with Diseases of the Reproductive System and Sexual Disorders) امراض باہ ونظام تولید کے مریض سے رجوع کا ضابطہ	No	Yes	Yes
2	**(U-2)** Amrāz-i-Bāh wa Amrāz Nizām Taulīd (Sexual Disorder and Diseases of the Reproductive System) امراض باہ وامراض نظام تولید	No	Yes	Yes
3	**(U-3)** Amrāz-i-Istiḥala (Diseases of Metabolism) امراض استحالہ	No	Yes	Yes
S.No	**List of Module/Unit**	**ABQ**	**SAQ**	**LAQ**
Paper No : 4 (Moalajat (Medicine) Paper IV)				
(M-25) Amrāz-i-Mut‘diyah (Infectious diseases) امراض متعدیہ (Marks: Range 5-20)				
1	**(U-1)** Mana‘at wa Ta‘diya (Immunity and Infection) مناعت وتعدیہ	Yes	Yes	Yes
2	**(U-2)** Naye Ubharte hue Amrāz-i-Muta‘ddiya (Emerging infectious diseases) نئے ابھرتے ہوئے امراض متعدیہ	Yes	Yes	Yes
(M-26) Amrāz-i-Jarāsīm wa Vairūsī (Bacterial and Viral Diseases) امراض جراثیم وویروسی (Marks: Range 5-15)				
1	**(U-1)** Jarāsīmi Amrāz (Bacterial diseases) جراثیمی امراض	No	Yes	Yes
2	**(U-2)** Vairūsī Amrāz (Viral diseases) ویروسی امراض	No	Yes	Yes
(M-27)Dīgar Amrāz-i-Mut‘ddiya (Other infectious diseases) دیگر امراض متعدیہ (Marks: Range 5-15)				

1	**(U-1)** Buniyādi mut'allaqa Taftīshāt (Basic Related Investigations) بنیادی متعلقہ تفتیشات	No	Yes	Yes
2	**(U-2)** Mustashfawi wa Dīgar Amrāz Muta'ddiya (Nosocomial and other infectious diseases) مستشفوی ودیگر امراض متعدیہ	No	Yes	Yes
(M-28)Ḥummayāt (Fevers) حمیات (Marks: Range 5-15)				
1	**(U-1)** Ḥummayāt ka Umūmi Taṣawwur (General considerations of Fevers) حمیات کا عمومی تصور	No	Yes	Yes
2	**(U-2)** Ḥummā 'Ufūniyya (Infective Fever) حمی عفونیہ	No	Yes	Yes
(M-29) Amrāz-i-Jild 1 (Skin Diseases -1) امراض جلد ۱ (Marks: Range 5-15)				
1	**(U-1)** Tashkīsi Nuqta Nazar wa Uṣūl-i-Ilāj (Diagnostic approach and Principles of Treatment) تشخیصی نقطہ نظر واصول علاج	No	Yes	Yes
2	**(U-2)** Amrāz-i-Lawn, Zufr wa Sha'r (Disorders of Pigmentations, Nails and Hairs) امراض لون، ظفر وشعر	No	Yes	Yes
(M-30) Amrāz-i-Jild 2 (Skin Diseases -2) امراض جلد ۲ (Marks: Range 5-15)				
1	**(U-1)** Amrāz-i-Jild (Skin Disorders) امراض جلد	No	Yes	Yes
2	**(U-2)** Tazīniyāt (Cosmetology) تزینیات	No	Yes	Yes
(M-31) Amrāz-i-Mafāṣil (Diseases of Joints) امراض مفاصل (Marks: Range 5-20)				
1	**(U-1)** Amrāz-i-Mafāsil ka Tashkīsi Nuqta Nazar (Diagnostic Approach for Amraze Mafasil) امراض مفاصل کا تشخیصی نقطہ نظر	Yes	Yes	Yes
2	**(U-2)** Amrāz-i-'Azlāti wa Haikali (Musculoskeletal Diseases) امراض عضلاتی و ہیکلی	Yes	Yes	Yes
(M-32) Hangāmi wa Hād Ṣūrat mien Ṭib Unani (Unani medicine in emergency and acute conditions) ہنگامی وحاد صورت میں طب یونانی (Marks: Range 5-15)				
1	**(U-1)** Hād Hālāt-1 (Acute conditions-1) حاد حالات ۱	No	Yes	Yes
2	**(U-2)** Hād Hālāt-2 (Acute conditions-2) حاد حالات ۲	No	Yes	Yes

6 G : Instruction for the paper setting & Blue Print for Summative assessment (University Examination)

Instructions for the paper setting.

1. University examination shall have 4 papers of 100 marks.

Each 100 marks question paper shall contain:-

• Application Based Question: 1 No (carries 20 marks)

• Short Answer Questions: 8 Nos (each question carries 05 marks)

• Long Answer Questions: 4 Nos (each question carries 10 marks)

2. Questions should be drawn based on the table 6F.

3. Marks assigned for the module in 6F should be considered as the maximum marks. No question shall be asked beyond the maximum marks.

4. Refer table 6F before setting the questions. Questions should not be framed on the particular unit if indicated “NO”.

5. There will be a single application-based question (ABQ) worth 20 marks. No other questions should be asked from the same module where the ABQ is framed.

6. Except the module on which ABQ is framed, at least one Short Answer Question should be framed from each module.

7. Long Answer Question should be analytical based structured questions assessing the higher cognitive ability.

8. Create Blueprint based on instructions 1 to 7.

6 H : Distribution of Practical Exam (University Examination)

S.No	Heads	Marks
1	Long Case: A Complete Case Record including History taking (20 Marks), General Physical Examination (20 Marks), Systemic Examination/ Specific Examination (30 Marks), Required investigations (10 Marks) and Line of Treatment and Treatment (20 Marks)	100
2	Short Case: Directly Observed Clinical Examination--any one of the following 1. Palpation of Abdomen 2. Evaluation of Ascites 3. Auscultation of Chest and explanation of findings 4. Auscultation of Heart sounds and explanation of findings 5. Evaluation of Patient of Sciatica 6. Evaluation of Patient of Arthritis 7. Evaluation of Patient of Facial Palsy 8. Evaluation of any Cranial Nerve 9. Assessment of Unconscious patient … Any similar condition	50
3	Spotting: 5 Spotters of different nature among the following 1. X-rays to interpret 2. ECG to interpret the findings 3. Haematologica/ Biochemical/ Other Lab Reports to interpret a. CBC b. LFT c. KFT d. TFT e. Arthritis Profile etc. 4. Prescription writing for a given diagnosis … Any similar report/ condition/ situation etc	50
4	Assessing teaching ability	25
5	Assessing presentation skills	25

6	Viva (4 examiners: 25 Marks/ each examiner)#	100
7	Logbook (Activity record)	25
8	Practical/Clinical Record: There should be a minimum of one practical from each module.	25
Total Marks		**400**

No separate marks for dissertation viva.

Reference Books/ Resources

S.No	References
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Abbreviations

Domain		T L Method		Level	
CK	Cognitive/Knowledge	L	Lecture	K	Know
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does
CS	Cognitive/Synthesis	REC	Recitation		
CE	Cognitive/Evaluation	SY	Symposium		
PSY-SET	Psychomotor/Set	TUT	Tutorial		
PSY-GUD	Psychomotor/Guided response	DIS	Discussions		
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming		
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning		
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning		
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning		
AFT-RES	Affective/Responding	PrBL	Project-Based Learning		
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning		
AFT-SET	Affective/Organization	TPW	Team Project Work		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom		
		BL	Blended Learning		
		EDU	Edutainment		
		ML	Mobile Learning		
		ECE	Early Clinical Exposure		
		SIM	Simulation		
		RP	Role Plays		
		SDL	Self-directed learning		

		PSM	Problem-Solving Method		
		KL	Kinaesthetic Learning		
		W	Workshops		
		GBL	Game-Based Learning		
		LS	Library Session		
		PL	Peer Learning		
		RLE	Real-Life Experience		
		PER	Presentations		
		D-M	Demonstration on Model		
		PT	Practical		
		X-Ray	X-ray Identification		
		CD	Case Diagnosis		
		LRI	Lab Report Interpretation		
		DA	Drug Analysis		
		D	Demonstration		
		D-BED	Demonstration Bedside		
		DL	Demonstration Lab		
		DG	Demonstration Garden		
		FV	Field Visit		
		JC	Journal Club		
		Mnt	Mentoring		
		PAL	Peer Assisted Learning		
		C_L	Co Learning		