Competency-Based Dynamic Curriculum for MD/ MS Unani (PRESCRIBED BY NCISM)

Semester II Applied Basics of Ilmul Jarahat (Surgery) (SUBJECT CODE : UNIPG-AB-IJ) (Applicable from 2024-25 batch, from the academic year 2024-25 onwards until further notification by NCISM)





BOARD OF UNANI, SIDDHA AND SOWA-RIGPA NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE NEW DELHI-110026

Preface

Ilmul Jaraħat (surgery) is a fundamental subject of Unani system of medicine. Initially, it focused on the study of Qurooh (wounds). Later, Ūnānī Atibbā'(Unani physicians) began to call it 'Amalīyāt Jarāḥiyyah (surgical procedures), as they treated various conditions through A'māl Jarāḥī (surgical intervention). Over time, it developed into a specialized field, which also included Ālāt Jarāḥiyyah (surgical instruments) to perform most procedures. As research and advancements in the field of Ilmul Jaraħat progressed, it led to the treatment of a wide range of diseases and complications using methods outlined by Unani physicians in their medical texts. The history of surgery is filled with the contributions of numerous scholars and practitioners from diverse cultural and geographical backgrounds. Among these, the Unani scholars like Al-Zahrawi, Ibn Sina, Ibn al-Haytham etc played a pivotal role in shaping the course of surgical history. Their groundbreaking works, innovative techniques, and meticulous documentation helped lay the foundations for modern surgery.

The field of Ilmul Jarahat (Surgery) is constantly evolving, making it essential for surgeons, particularly those in training, to stay updated on the latest advancements and proven diagnostic and management techniques. Consequently, surgical exams have undergone changes to reflect current needs and ensure that surgeons possess a comprehensive understanding of their profession, including its opportunities, challenges, and limitations. The surgeons are entrusted with the sacred responsibility of healing and caring for human life. This profession demands not only technical expertise but also a deep understanding of the ethical principles and responsibilities that guide the actions. This speciality seeks to revive the timeless principles and practices of surgery, integrating them with modern medical knowledge. By searching into the fundamental concepts, techniques, and instruments of Ilmul Jarahat, the aim is to inspire new generation of healthcare professionals and scholars. This comprehensive subject provides surgeons, surgical residents, and healthcare professionals with a thorough understanding of the fundamental principles and best surgical practices. The speciality covers a wide range of essential topics, including the ethics and responsibilities of a surgeon, operation theatre attire, instruments, sterilization, pre-anesthetic preparation, clinical examination, diagnostic tools, antibiotic management, applications of artificial intelligence, use of anesthesia techniques, diagnosis and management of surgical ailments with special emphasis on classical procedures in addition to the latest advancements in surgical techniques. Thus, this syllabus includes all the steps, starting from the initial introduction to the patient and continuing through to the final termination. A unique feature is its review of classical literature, which provides valuable insights into the historical development of surgical practices, principles, and procedures.

Developing a syllabus that meets these demands has been a challenging task. However, the Competency-Based Curriculum was created to provide a clear and logical framework for surgical training and practice. This curriculum aims to equip trainers, trainees, and examiners with a shared understanding of the fundamental skills and knowledge required for optimal, safe, and compassionate patient care through practicals and experientials, to equip students with essential knowledge on public health initiatives by integrating key National Health Programmes. The goal is to empower Unani Surgeons with the knowledge, skills, and values necessary to deliver exceptional patient care and excel in research and entrepreneurship. This subject will serve as a valuable resource for surgeons and healthcare professionals seeking to refine their skills, expand their knowledge, and uphold the highest standards of their profession.

INDEX

Summary & Credit Framework	1
Course Code and Name of Course	2
Table 1 : Course learning outcomes and mapped Program learning outcomes	2
Table 2 : Course contents (Modules- Credits and Notional Learning Hours)	3
Table 3 : Modules - Unit - Module Learning Objectives and Session Learning Objective- Notional Learning Hours-	
Domain-Level- TL Methods	15
Table 4 : Practical Training Activity	162
Table 5 : Experiential learning Activity	166
Table 6 : Assessment Summary: Assessment is subdivided in A to H points	
6 A : Number of Papers and Marks Distribution	169
6 B : Scheme of Assessment (Formative and Summative Assessment)	169
6 C : Calculation Method for Modular Grade Points (MGP)	169
6 D : Semester Evaluation Methods for Semester Grade Point Average (SGPA)	170
6 E : Question Paper Pattern	170
6 F : Distribution for summative assessment (University examination)	.171
6 G : Instruction for the paper setting & Blue Print for Summative assessment (University Examination)	.173
6 H : Distribution of Practical Exam (University Examination)	174
Reference Books/ Resources	175
Abbreviations	.177

NCISM

(NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE) Competency-Based Dynamic Curriculum for MD/ MS Unani Applied Basics of Ilmul Jarahat (UNIPG-AB-IJ) Summary & Credit Framework Semester II

Module Number & Name	Credits	Notional Learning Hours	Maximum Marks of assessment of modules (Formative Assessment)
M 1. سرجنونغرفةالعمليات Surgeon wa Ghurfat al-'Amaliyyāt (Surgeon and Operation Theatre)	2	60	50
M 2. روداداورعمومی جسمانی معائنه، Roodaad wa Umoomi Jismani Muʻā'ina (History Taking and General Physical Examination)	2	60	50
M 3. داس، دجين اور ترين Rās, Wajh, 'Unuq aur Sadyayn (Head, Face, Neck, Thyroid Gland and Breast)	1	30	25
M 4. اورام عامة وبطنAwrām-e-'Āmma wa Baṭn (General Swellings and Abdomen)	3	90	75
M 5. نظام مقعدی۔ مستقیمی و تناکل بولیNizām-e-Maqʻadī-Mustaqīmī wa Tanāsulī Bawlī (Ano-Rectal and Genitourinary system)	2	60	50
M 6. الطرافي عروق دلمفاوية جرح دقرتAṭrāfī 'Urūq wa Lymphāwīyah wa Jarah wa Qarah (Peripheral Vessels, Lymphatic, Wounds and Ulcers)	2	60	50
M 7. جراحت میں شخیصی طریقے اوران کی تو تیح Jarāḥat meinTashkhīsī Tareeqay aur Un kī Tawzīḥ (Diagnostic Methods in Jarahat and their Interpretation)	2	60	50
M 8. جراحت کاتعارف وجائزه ومصنونی ذبانت. Adviat wa Maṣādir Kutub Jarāḥat kā Ta'āruf wa Jā'iza wa Masnoyi zehanat (Antibiotics and Introduction and Review of classical Surgical Books and Artificial Intelligence)	2	60	50
	16	480	400

Credit frame work

UNIPG-AB-IJ consists of 8 modules totaling 16 credits, which correspond to 480 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. In case of difficulty and questions regarding the curriculum, write to syllabus24uni@ncismindia.org.

Course Code and Name of Course

Course code	Name of Course		
UNIPG-AB-IJ	Applied Basics of Ilmul Jarahat (Surgery)		

Table 1 : Course learning outcomes and mapped Program learning outcomes

CO No	A1 Course learning Outcomes (CO) UNIPG-AB-IJ At the end of the course UNIPG-AB-IJ, the students should be able to	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Illustrate the تشرَّى Tashrīḥ Itlaqi wa Jarāḥī (Applied and surgical Anatomy), congenital anomalies and اسباب وماہیت المرض Asbab o mahiyat ul maraz (etiopathogenesis) of various راض Jarahi Amraz (Surgical diseases)	PO5
CO2	Demonstrate skills in managing preoperative & post-operative care including resuscitative measures in per-operative and post-operative situations.	PO1
CO3	Diagnose الى <i>ابراڭ, Jarahi Amraz</i> (surgical diseases) using pathogenesis and clinical features and plan suitable anaesthesia	PO5
CO4	Apply classical Unani and advanced diagnostic methods to establish ^{سخی} ص فارقہ <i>tashkhis fareqa</i> (differential Diagnosis) of <i>دانی امراض fareqa</i> (differential Diagnosis) of کرای	PO2,PO6
CO5	Manage الى امراض. <i>Jarahi Amraz</i> (Surgical diseases) using classical surgical / para surgical procedures and advanced techniques with Anesthesia (local, regional, general) adhering to medicolegal aspects.	PO2,PO7
CO6	Identify and manage all توارض امراض جراتی Awarize Amraze Jarahi (complications of Surgical diseases) and توارض بعداز عمل جراتی Awariz Bad az amale Jarahi (Post-operative complications of Surgical diseases) through conservative measures or surgical interventions.	PO6
C07	Perform sterilization of Operating room and effectively handle آلات <i>بر</i> احية وتخديرية Ālāt Jaraḥiyya wa Takhdiriyya (surgical and anesthetic instruments).	PO4
CO8	Demonstrate the skills as a surgeon, academician, innovative researcher, trainer, and entrepreneur using recent advances in technology, emphasizing professional integrity and ethical responsibilities.	PO4,PO6,PO8

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

	2B Module & units		Notional Learning Hours				
2A Module Number		2C Number of Credits	2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total	
	M-1 سرجن وغر فةالعمليات Surgeon wa Ghurfat al-'Amaliyyāt (Surgeon and Operation Theatre)						
	The module 'Surgeon and Operation Theatre' covers essential components of ethics in and outside the Operation Theatre, the qualities and responsibilities of surgeons. It also emphasises maintaining the surgical room attire and preparation of the patient for the operation. The module also highlights the process of sterilisation, maintenance of the sterilised instruments and preparation of different sets of surgical instruments for different procedures. The module also explains the advancement of surgical instruments and their uses.						
	 M1.U1 אריטט גע גע גע שע איז איז איז איז איז איז איז איז איז איז						
1	1.1.2: پیشہ ورانہ صلاحیت Pesha-warāna Salāhiyat (Professionalism)	2	10	20	30	60	
	1.1.3: مریض اور سرجن کا تعلق Marīz aur Surgeon ka Talluq (Patient-Surgeon Relationship)						
	1.1.4: اخلاقی مساکل Akhlaqī Masā'il (Ethical Issues)						
	 M1.U2 فرفة العمليات كالباس: مقصداورمناسب لباس كارتاء Ghurfat al-'Amaliyyāt ka Libās: Maqsad aur Munāsib Libās ke Ajzā (Surgical Room Attire: Purpose & Components of appropriate attire) 						
	ا باتھوں کی صفاق Hāthon ki Safā'ī (Surgical Hand Hygiene)						

© NCISM - UNIPG-AB-IJ - Sem 2 -3 of 181

1.2.2: گاؤن اور دستانے پہنچ کے طریقے Gown aur Dastānay Pehnne ke Tareeqay (Gowning and گاؤن اور دستانے پہنچ کے طریقے Gloving)					
عمل تطبیر اور اس کے طریقے :Amal-e-Taṭhīr aur is ke Tareeqe (Sterilization & its Methods)					
• M1.U3 قبل از جراحت تیاریاں Qabl az Jrahat Tayārīyan (Pre-operative preparation)					
Mu'ā'ina Qabl az Jarāḥat (Pre-operative assessment) معائنه قبل از جراحت :1.3.1					
1.3.2: جلد کی تیاری Jild ki Tayyari (Skin Preparation)					
 M1.U4 آلت Ālāt (Instruments) 					
1.4.1: قديم جراى آلات مح جديد ترقيات Qadīm Jarāḥī Ālāt ma'a Jadīd Taraqqiyāt (Ancient Surgical instrument with recent advancement)					
عقدۃ جراحیۃ ,مواد خیاطت اور خیاطت کے طریقے 1.4.2 Uqda Jarāḥiyya, Mawādd-e- Khayyātat aur Khayyātat ke Tareeqe (Surgical knots, suture materials with suturing techniques)					
1.4.3: أنبوب نكاتى Unbūb-e-Nikāsī (Drainage Tube)					
1.4.4: مواد ضاد وطرق تضميد Mawādd-e- Zamād wa turuq-e-Tazmīd (Dressing materials and bandaging techniques)					
عمل کَ و جدید ترقیات :Amal-e- Kayy wa Jadīd Taraqqiyāt (Cauterization and recent advancement)					
ألات تنظير بطن :Ālāt-e-Tanẓīr-e-Baṭn (Laparoscopic Equipment)					
آلات تنظير داخلي :Ālāt-e-Tanẓīr-e-Dākhilī (Endoscopic Instrument) آلات تنظير داخلي					
M-2 روداداورعمومی جسمانی معائنه Roodaad wa Umoomi Jismani Mu'ā'ina (History Taking and General Physical Examination)	2	10	20	30	60

2

The module 'History Taking & General Physical Examination' focuses on recording every component of general history on a case sheet and identifying the typical surgical signs and symptoms mentioned in both contemporary and classical literature. Alongside, it also guides to learn and record the General Physical examination of a patient and evaluate the same. It emphasises the initial assessment of a patient by a learner, maintaining the record of the history and compiling the general findings.			
 M2.U1 روداد Roodaad (History Taking) 			
مریض کی تفصیلات، موجودہ بیاری کی روداد،ماضی کی روداد ، دواکی روداد، الرجی اور عمل تلقیح کی روداد ، ذاتی :2.1.1 اور خاندانی روداد			
Mareez ki Tafseelat, Maujoodah Bimari ki Roodaad , Maazi ki Roodaad , Dawa ki Roodaad, Allergy wa Amal-e-Talqeeh ki Roodad			
(Particulars of the patient, History of present illness,Past History, Drug History, History of Allergy & Immunization, Personal & Family History)			
• M2.U2 تشخيص امراض جراحيه مين معاون علامات اورنشانيان Tashkhīs-e-Amraz-e-Jarhiya mein muawin Alāmāt w nishaniyan (Symptoms and signs helpful in diagnosis of surgical diseases)			
ون، ہے، اوردہ عاہرہ، ودمة عارہ، سوء عراق کی علامات، علیہ الطلط کی علامات، طرل الصال کی علامات 2.2.1. Waja, Qai, Awrida Zāhira, Wazamah Ghā'ira, Sū'-e Mizāj kīʿAlāmāt, Ghalba Akhlāṭ kī			
Alamat aur Tafarruq-e-IttiṢalkī Alamat (Pain, Vomiting, Visible veins and Pitting oedema)			
• M2.U3 جائنہ Jarahat Mein Umoomi Jismani Muʿāʾina (General physical جراحت میں عمومی جسمانی معائنہ examination in Surgery)			
عومي جائزه :Umūmī Jā'iza (General survey)			
معائنه مقامی :Maqāmī Muʻā'ina (Local Examination)			
2.3.3: معائنہ عمومی Umūmī Muʻā'ina (General Examination)			

M-3 راك، ومجتن اور تدنين Rās, Wajh, 'Unuq aur Sadyayn (Head, Face, Neck, Thyroid Gland and Breast)					
The module 'Head, Face, Neck, Thyroid Gland and Breast' emphasises the importance of recording the history of congenital and acquired lesions of Head, Face, Neck, Thyroid Gland and Breast. It also explains the examination (Inspection, Palpation, Percussion and Auscultation) and other specific methods of diagnosis. The learner, after compiling the findings from the examination, can make a provisional diagnosis and advise the specific investigations for confirming the diagnosis.					
 M3.U1 دان ودجه Rās wa Wajh (Head and Face) 					
3.1.1: ^{خلق} ى آفات Khllqī Āfāt (Congenital Lesions),					
3.1.2: خرباتي آفات Zarbātī Āfāt (Traumatic Lesions)					
3.1.3: التهابي آفات Iltiḥābī Āfāt (Inflammatory Lesions)					
قروح، سلعات اور اکیاس :3.1.4 قروح، سلعات اور اکیاس :Qurūḥ, Salaʿāt aur Akyaas (Ulcers, Tumors and Cysts	1	5	10	15	30
3.1.5: خاص چرے Khās Chehre (Characteristic Facies)					
• M3.U2 عنق وغد ددر قيه Unuq wa Ghudad Daraqiyyah (Neck and Thyroid Gland)					
3.2.1: عنق Unuq (Neck)					
3.2.2: روداد History					
Jismani Mu'ā'ina (Physical Examination) جسمانی معائنہ 3.2.3:					
3.2.4: تفتيشاتِ مخصوصة Tafṭīshāt-e Makhṣūṣah (Specific Investigations)					
تشخيص فارقہ :3.2.5 متشخیص فارقہ :Taškhīṣ fāriqah (Differential diagnosis)					
3.2.6: غده درقيه Ghuddah Daraqiyyah (Thyroid gland):					

3

	3.2.7: روداد History					
	Jismani Mu'ā'ina (Physical Examination) جسماني معائنه 3.2.8:					
	3.2.9: تفتيشاتِ مخصوصه Tafṭīshāt-e Makhṣūṣah (Specific Investigations)					
	تشخص فارقہ :Taškhٍīṣ fāriqah (Differential diagnosis)					
	 M3.U3 ثَرُبَين Sadyayn (Breast) 					
	3.3.1: روداد History					
	Jismani Mu'ā'ina (Physical Examination) جسماني معائنه 3.3.2:					
	3.3.3: تفتيشاتِ مخصوصه Tafṭīshāt-e Makhṣūṣah (Specific Investigations)					
	تشخيص فارقه :Taškhīṣ fāriqah (Differential diagnosis)					
	M-4 اورام عامة وبطن Awrām-e-'Āmma wa Baṭn (General Swellings and Abdomen)					
	The module 'General Swellings and Abdomen' covers essential topics like General Lump, abdominal lump, acute abdomen, chronic abdominal conditions and all Hernias including Umbilical, Epigastric, Inguinal and Femoral including Inguinoscrotal Swellings. It emphasises recording the history and examination findings and making provisional diagnoses based on history and examination. It also explains the specific investigations required to confirm the diagnosis of the surgical condition.					
4	 M4.U1 وسلعات اورام Awram wa Sal'at (General Swellings) 	3	15	30	45	90
	فرام عامة وكتلة :Awrām-e-'Āmma wa Kutla (General Swelling and Lump):					
	4.1.2: روداد History					
	4.1.3: جسماني معائنه Jismani Mu'ā'ina (Physical Examination)					
	4.1.4: ^{تف} تيثات TafṭĪshāt-e Makhṣūṣah (Specific Investigations)					

© NCISM - UNIPG-AB-IJ - Sem 2 -7 of 181

	4.1.5: سخيص فارقہ Taškhīṣ fāriqah (Differential diagnosis)			
•	M4.U2) تتديطن (Kutla Baṭn) Abdominal Lump			
	4.2.1: تتلة بطن (Kutla Baṭn) Abdominal Lump			
	4.2.2: روداد History			
	4.2.3: جسماني معائنه Jismani Muʿāʾina (Physical Examination)			
	TaftِĪshāt-e Makhṣūṣah (Specific Investigations) تفتيشات مخصوصه 4.2.4			
	4.2.5: تشخيص فارقه Taškhīṣ fāriqah (Differential diagnosis)			
•	M4.U3 ^{بط} ن Batn (Abdomen)			
	4.3.1: ^{بط} ن Batn (Abdomen)			
	4.3.2: روداد History			
	4.3.3: ایم شکایات Aham Shikāyāt (Chief complaints)			
	4.3.4: جسماني Jismani Muʻā'ina (Physical Examination)			
	4.3.5: تفتيشات كخصوصه Taftِīshāt-e Makhṣūṣah (Specific Investigations)			
	4.3.6: تشخيص فارقه Taškhīṣ fāriqah (Differential diagnosis)			
•	M4.U4 نَتْ Fatq (Hernia):			
	4.4.1: فتق كل اقسام Fatq kī Aqsām (Types of Hernia)			
	4.4.2: روداد History			
	4.4.3: جسمانی معائنه Jismani Mu'ā'ina (Physical Examination)			

	4.4.4: ^{سخي} ص فارقہ Taškhīṣ fāriqah (Differential diagnosis)					
	• M4.U5 درم أربي-صفنى يافخذى Waram-e-Urbī-Ṣafnī ya Fakhazī (Inguino-scrotal or Groin Swelling)					
	ورم أربی-صفنی یا فخذی :Waram-e-Urbī-Ṣafnī ya Fakhazī (Inguino-scrotal or Groin Swelling)					
	4.5.2: روداد History					
	جسمانی معائنہ :Jismani Mu'ā'ina (Physical Examination)					
	تشخيص فارقہ :Taškhౖīṣ fāriqah (Differential diagnosis)					
	M-5 نظام مقعدی۔ مستعیمی و تناعل پول Genitourinary system)					
	The module 'Ano-Rectal and Genitourinary system' emphasises recording the history and examination findings and making provisional diagnoses of surgical conditions of the Ano-Rectal and Genitourinary system. It also describes the specific investigations required to confirm the diagnosis of these surgical conditions.					
	 M5.U مقعدومعاء متنقيم Maq'ad wa Ma'ā' Mustaqīm (Ano-Rectal Case) 					
	5.1.1: مقعد و معاء متنقيم Maq'ad wa Ma'ā' Mustaqīm (Ano-Rectal Case)					
5	5.1.2: روداد History	2	10	20	30	60
	5.1.3: مقعد و معاء متتقيم كا معائنه Mu'ā'ina <i>Maq'ad wa</i> Ma'ā' Mustaqīm (Ano-rectal Examination)					
	5.1.4: تفتيشات TafṭĪshāt-e Makhṣūṣah (Specific Investigations)					
	تشخيص فارقہ :Taškʰlīṣ fāriqah (Differential diagnosis)					
	• Māsūr Nāfizah wa Ghayr Nāfizah (Sinus and Fistula)					
	5.2.1: ناصور نافذة وغير نافذة Nāsūr Nāfizah wa Ghayr Nāfizah (Sinus and Fistula)					

© NCISM - UNIPG-AB-IJ - Sem 2 -9 of 181

5.2.2: بوداد History	
Jismani Muʻa'ina (Physical Examination) جسمالی معائند Jismani Muʻa'ina (Physical Examination)	
5.2.4: تفتيشاتِ مخصوصه Tafṭīshāt-e Makhṣūṣah (Specific Investigations)	
5.2.5: تشخيص فارقه Taškhīṣ fāriqah (Differential diagnosis)	
• M5.U3 اعضاء تناسليه ظاہر يه A'zā' Tanāslīyah Żāhirīyah (External Genitalia) ^{صف} ن وقضيب (Ṣafan wa Qazīb) Scrotum and Penis	
5.3.1: اعضاء تناسليه ظاهريه A'zā' Tanāslīyah Żāhirīyah (External Genitalia) ^{صف} ن وقضيب (Ṣafan wa Qazīb) Scrotum and Penis	
5.3.2: روداد History	
5.3.3: جسماني معائنه Jismani Mu'ā'ina (Physical Examination)	
5.3.4: تغتيشات كمصوصة TafṭĪshāt-e Makhṣūṣah (Specific Investigations)	
5.3.5: تشخيص فارقه Taškhīṣ fāriqah (Differential diagnosis)	
 M5.U4 نظام بوليه Nizam-e- Bawliya (Urinary system) 	
5.4.1: نظامِ بوليه Nizam-e- Bawliya (Urinary system)	
5.4.2: روداد History	
5.4.3: جسمانی معائنه Jismani Mu'ā'ina (Physical Examination)	
5.4.4: تفتيثات كمصوصة TaftIshāt-e Makhṣūṣah (Specific Investigations)	
5.4.5: تشخيص فارقه Taškhīṣ fāriqah (Differential diagnosis)	

M-6 اطراڨ ۶ دق ولمفاوية جرح وقرت Aṭrāfī 'Urūq wa Lymphāwīyah wa Jarah wa Qarah (Peripheral Vessels, Lymphatic, Wounds and Ulcers)					
The module 'Peripheral Vessels and Lymphatic, Wound and Ulcers' emphasises recording the history and examination findings and making provisional diagnoses of different surgical conditions of Peripheral Vessels, Lymphatic, and different wounds and Ulcers. It also explains the specific investigations required to confirm the diagnosis of these surgical conditions.					
• Mizam-e-Shiryani (Arterial system)					
6.1.1: روداد History					
fismani Muʿāʾina (Physical Examination) جسمانی معائنه .6.1.2					
6.1.3: ^{تف} تيثات TafṭĪshāt-e Makhṣūṣah (Specific Investigations)					
6.1.4: معائنه غانغرانه و اقسام غانغرانه 6.1.4 معائنه غانغرانه و اقسام غانغرانه Examination of Gangrene and its types)	2	10	20	30	60
6.1.5: معائنه أنيورزم Muʻā'ina Aneurysm (Physical Examination of Aneurysm)					
 M6.U2 نظام وريد Nizam-Vareed (Venous system) 					
6.2.1: يوداد History					
6.2.2: معائنه أوردة دوالي Mu'ā'ina Awrida Dawālī (Physical Examination of Varicose veins)					
6.2.3: معائينه سده وريديه Muʻā'ina Suddah Varīdīyah (Physical Examination of Venous thrombosis)					
6.2.4: تفتيشاتِ مخصوصة Tafṭīshāt-e Makhṣūṣah (Specific Investigations)					
 M6.U3 لمفادية نظام Nizam-e-Lymphawiya (Lymphatics system) 					
6.3.1: جسمانی معائنہ Jismani Mu'ā'ina (Physical Examination)					

6

	6.3.2: تَغْتَيْتَاتِ تَخْصُومَه TafṭĪshāt-e Makhṣūṣah (Specific Investigations)					
	6.3.3: تشخيص فارقه Taškhīṣ fāriqah (Differential diagnosis)					
	• M6.U4 مرتر Jarḥ wa Qarḥ (wound & Ulcer)					
	6.4.1: اقسام قروت Aqsam-e-Quruh (Classification of ulcers)					
	6.4.2: روداد History					
	6.4.3: جسماني معائنه Jismani Mu'ā'ina (Physical Examination)					
	6.4.4: تفتيثات مخصوصه Tafṭīshāt-e Makhṣūṣah (Specific Investigations)					
	6.4.5: تشخيص فارقه Taškhīṣ fāriqah (Differential diagnosis)					
	M-7 تراست على محقول مسلح المعن المعني المرابي					
7	• Marazi Gozārishāt ki aur Khurd-Ḥayaītiyatī reports ki Tawzīḥ (Interpretation of Pathological & Microbiological reports)	2	10	20	30	60
	مرضی گزارشات اور خرد حیاتیاتی رپورٹس کی توضیح :Marazi Gozārishāt ki aur Khurd-Ḥayalīyalī reports ki Tawzlīḥ (Interpretation of Pathological & Microbiological reports)					
	• M7.U2 احياتى <i>کيميانی رپورٹس کی نثر ت</i> Hayatī Kīmiya َ آ Reports kī Tashrīḥ (Interpretation of Biochemical reports)					
	7.2.1: حیاتی کیمیانی رپورٹس کی تشریک Hayaītī Kīmiya آ Reports kī Tashrīḥ (Interpretation of Biochemical reports)					

	 M7.U3 تصويرطبي Taṣwīr –e-țibbī (Imaging) 					
	7.3.1: شناد تصويري تشخيص shu'ā'ī taṣwīr kashī / taẓād taṣwīrī taškẖīṣ (Radiography/Contrast Imaging)					
	كمپيوڑائزڈ طبقى تصوير كشى :7.3.2 Kampyūṭarāyzḍ tabaqī taṣwīr kashī (Computerized Tomography)					
	Ultrasonography الٹراسونو گرافی :7.3.3					
	Al-taṣwīr bil-ranīn al-maqnāṭīsī (Magnetic Resonance Imaging) التصوير بالرنين المقناطيسي :7.3.4					
	• M7.U4 تنظیر داخلی Tanzir-Dakhli (Endoscopy)					
	7.4.1: انثارات Isharat (Indications)					
	عمل کے اساس اصول : Amal ke Asaīsī Usul (Basic principles of working)					
	Tarīqah Kar (Procedure) طريقہ کار Tarīqah Kar					
	تشرت ۲ashriḥ (Interpretation)					
8	M-8 التي تش الدويات ومعادر كتب جراحت كاتعارف دجائز ودمعنون ذابت العارف وجائز ودمعنون ذابت العارف المعادي المعا	2	10	20	30	60

	8.1.1: عمومي ملاحظات Umūmī Mulāḥizāt (General Considerations)			
	8.1.2: اشارات، موانع استعال، اور خوراک Ishārāt, Mawāni'-e-Isti'māl, aur Khurāk (Indications, Contraindications, & dosage of:			
	8.1.2.1: سلفوناما تدرّ: Sulphonamides,			
	8.1.2.2: کوٹر یکوکسازول Cotrimaxazole			
	8.1.2.3: كوتنولونز Quinolones			
	Beta-Lactum Antibiotics بيٹا ليکٹم اينٹی بائيونکس :8.1.2.4			
	Aminoglycosides امينو گليكوسائيژز :8.1.2.5			
	8.1.2.6: اینٹی امیسی Antiamoebic			
	Other Antiprotozoal Drugs د میگر اینٹی پروٹوزو ئیل ادویات:8.1.2.7			
•	Maṣādir Kutub Jarāḥat kā Taʿāruf wa Jā'iza (Introduction مصادركتب جراحت كالعارف وجائزه Maṣādir Kutub Jarāḥat kā and Review of classical Unani Books)			
	8.2.1: علم الجراحت کے مختلف بنیادی مصادر Ilm ul-Jarāḥat ke Mukhtalif Bunyādī Masādir (Various classical sources of Ilmul Jarahat)			
	8.2.2: جراحت میں یونانی سر جنز کی خدمات, Jarāḥat mein Unānī Surgeons kī Khidmat (Unani surgeons and their contributions in Surgery)			
	8.2.3: علان کے تصورات اور اصول Ilāj ke Tasawwurāt aur Uṣūl (Concepts and principles of علان کے تصورات اور اصول treatment)			
•	Masnūʻī Zihānatمصنوگىزېانت:(Masnūʻī Zihānat			
	8.3.1: جراحت کی مثق میں مصنوعی ذھانت. Jarahat kī Mashq mein Masnū'ī Zihānat (Artificial intelligence in surgical simulation)			

8.3.2: يوناني سر جنز نے لیے مصنوعی ذہانت کے مضمرات Unānī Surgeons ke liye Masnū'ī Zihānat ke Muḍmirāt (Implications for Unani Surgeons) 8.3.3: طبی تشخیص میں مصنوعی ذہانت Diagnostics)					
	16	80	160	240	480

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

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical/experiential) learning session, the students should be able to)	3C Notional Learning Hours	3D Lecture/ Practical/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/ Shows how/ Knows how/ Know)	3G Teaching Learning Methods		
لعمليات : Module 1	Surgeon wa Ghurfat al-'Amaliyyāt (Surgeon and Operation Theatre) برجن دغر ثط							
Module Learning (At the end of the	Module Learning Objectives (At the end of the module, the students should be able to)							
1. Describe the i	mportance of Ethics & Responsibilities, Surgical room attire, hand hygiene, and Pre-operati	ve preparation o	of patients.					
2. Discuss the st	erilisation methods of OT, instruments, and assembling of instrument trays for different proc	edures.						
3. Demonstrate I	hand hygiene, sterilisation methods, and advancements in instruments and their use.							
4. Differentiate the sterilised and unsterilized items, and their maintenance and arrangement of different sets of surgical instruments for various procedures.								
5. Sensitise the e	ethics and responsibilities of a surgeon and the methods of surgical room attire.							
1								

6. Facilitate the arrangement of different sets of surgical instruments for various procedures

Unit 1 سرجن کی ذمہ داریال اور اخلاقیات Surgeon ki Zimmedāriyān aur Akhlaqiyāt. (Responsibilities and Ethics of a Surgeon).

1.1.1: وجدان جراح Vijdān-e Jarāhī (Surgical Conscience)

1.1.2: پیشہ ورانہ صلاحیت Pesha-warāna Salāhiyat (Professionalism)

مریض اور سرجن کا تعلق :1.1.3 Marīz aur Surgeon ka Talluq (Patient-Surgeon Relationship)

اخلاقی مسائل :Akhlaqī Masā'il (Ethical Issues)

References: 1,2,3,4,13,25,30

3A	3B	3C	3D	3E	3F	3G
CO2,CO7,CO8	Discuss the ethics, responsibilities, professionalism, and surgical conscience in surgery, emphasizing the surgeon-patient relationship and moral obligations.	1	Lecture	CE	Knows- how	L&GD,L& PPT ,L_VC
CO2,CO7,CO8	Demonstrate ethical responsibility, surgical conscience, professionalism, and a respectful surgeon-patient relationship in practical surgical settings	2	Practical1.1	AFT-VAL	Shows- how	D,DIS,Mn t
CO2,CO7,CO8	Recite and adapt the ethical responsibilities, surgical conscience, professionalism, and surgeon-patient relationship in real-world clinical practice.	3	Experiential - Learning1. 1	AFT-CHR	Does	PER,REC ,RP,TBL
CO2,CO7,CO8	Critically analyze the qualities, responsibilities, and ethical principles of a surgeon or physician as described in Classical Unani literature, and evaluate their relevance and alignment with the standards and practices of the modern medical system.	1	Lecture	CE	Knows- how	L&GD,L& PPT
CO2,CO7,CO8	Demonstrate a sincere understanding and respect for the values, responsibilities, and ethics of a Unani physician, and apply these values with commitment in your own medical practice, in line with modern medical standards	2	Practical1.2	CAN	Shows- how	D,EDU,M nt,PER,R P

CO2,CO7,CO8	Evaluate the qualities, responsibilities, and ethics of a Unani physician through practical experience, and compare them with modern medical practices to develop a thoughtful and balanced approach to patient care.	2	Experiential - Learning1.2	CS	Does	PER,RP				
Unit 2 عز فتالعمليات كالباس:مقصد اورمناسب لباس كالتراء Ghurfat al-'Amaliyyāt ka Libās: Maqsad aur Munāsib Libās ke Ajzā (Surgical Room Attire: Purpose & Components of appropriate attire)										
فوں کی صفائ ۔ 1.2.1	1.2.1: پاتھوں کی صفاق Hāthon ki Safā'ī (Surgical Hand Hygiene)									
پہننے کے طریقے :1.2.2	قاؤن اور دستان ِ Gown aur Dastānay Pehnne ke Tareeqay (Gowning and Gloving) كاؤن اور دستان									
اس کے طریقے :1.2.3	عمل تطبير اور Amal-e-Taṭhīr aur is ke Tareeqe (Sterilization & its Methods)									
References: 5,6,3	References: 5,6,30									
3A	3B	3C	3D	3E	3F	3G				
CO2,CO7,CO8	Rationalise the purpose and elements of surgical room attire and surgical hand hygiene.	1	Lecture	СК	Knows- how	FC,L&PP T ,L_VC,LS				
CO2,CO7,CO8	Design the elements of surgical room attire, surgical hand washing, and scrubbing techniques.	2	Practical1.3	PSY-ORG	Shows- how	DL,D-M				
CO2,CO7,CO8	Practice with the OT attire and surgical hand scrub.	2	Experiential - Learning1.3	PSY-SET	Does	C_L,PT,R LE,TBL				
CO2,CO7,CO8	Discuss the basics and different methods of sterilization.	1	Lecture	сс	Knows- how	BL,L&PP T ,L_VC,LS				
CO2,CO7,CO8	Demonstrate the process of sterilization.	2	Practical1.4	PSY-GUD	Shows- how	DL,PT,TU T,W				
CO2,CO7,CO8	Demonstrate the Sterilisation process	3	Experiential - Learning1.4	PSY-MEC	Does	C_L,DL,R LE				

Unit 3 علی از جراحت تیاریاں Qabl az Jrahat Tayārīyan (Pre-operative preparation)

العائنة قبل از جراحت :1.3.1 معائنة قبل از جراحت :1.3.1 معائنة قبل از جراحت :1.3.1

1.3.2: جلد کی تیاری Jild ki Tayyari (Skin Preparation)

References: 5,6,7

3A	3B	3C	3D	3E	3F	3G			
CO2,CO7,CO8	Illustrate the pre-operative assessments	1	Lecture	CAN	Knows- how	FC,L&PP T ,L_VC			
CO2,CO7,CO8	Demonstrate the process of preoperative assessment.	2	Practical1.5	PSY-GUD	Shows- how	D-BED,D- M			
CO2,CO7,CO8	Design preoperative assessment techniques.	3	Experiential - Learning1.5	PSY-SET	Does	CBL,C_L, SIM,TBL			
CO2,CO7,CO8	Facilitate the process of skin preparation and marking the surgical site on patients.	3	Experiential - Learning1.6	PSY-SET	Does	CBL,C_L, SIM,TBL			
CO2,CO7,CO8	Illustrate the procedure for skin preparation and the surgical site's marking process.	1	Lecture	CAN	Knows- how	L&PPT ,L_VC,Mn t,PL			
CO2,CO7,CO8	Demonstrate the surgical site preparation and marking	2	Practical1.6	PSY-GUD	Shows- how	D-BED,D- M			
لات 4 Ālāt (آلات 4	Instruments)								
ع جديد ترقيات :1.4.1	1.4.1: قديم جراح آلات مع جديد ترقيات Qadīm Jarāḥī Ālāt maʻa Jadīd Taraqqiyāt (Ancient Surgical instrument with recent advancement)								
ست کے طریقے :1.4.2 Uqda Jarāḥiyya,	عقدة جراحية , مواد خياطت اور خياطت اور خياطت ك طريقة 1.4.2: Uqda Jarāḥiyya, Mawādd-e- Khayyātat aur Khayyātat ke Tareeqe (Surgical knots, suture materials with suturing techniques)								
ل أنبوب نكاتى :1.4.3	Inbūb-e-Nikāsī (Drainage Tube)								

Mawādd-e- Zamād wa turuq-e-Tazmīd (Dressing materials and bandaging techniques) مواد صاد وطرق تضميد .1.4.4

عمل كَ و جديد ترقيات Amal-e- Kayy wa Jadīd Taraqqiyāt (Cauterization and recent advancement) عمل كَ و جديد ترقيات 1.4.5

آلات تنظير بطن :Ālāt-e-Tanẓīr-e-Baṭn (Laparoscopic Equipment) آلات

آلات تنظير داخلي :Ālāt-e-TanẓĪr-e-Dākhilī (Endoscopic Instrument) آلات تنظير داخلي

References: 8,9,10,11,30

3A	3B	3C	3D	3E	3F	3G
CO2,CO7,CO8	Categorise and discuss the surgical instruments with their names and parts	1	Lecture	CS	Knows- how	L&PPT ,L_VC,PL
CO2,CO7,CO8	Expound the techniques for suturing and drain placement	1	Lecture	CE	Knows- how	BL,FC,L& PPT ,L_VC
CO2,CO7,CO8	Organise the proper handling of instruments.	2	Practical1.7	PSY-MEC	Shows- how	DL,D- M,PBL,RL E,SIM,TB L
CO2,CO7,CO8	Demonstrate the methods of surgical knot tying, and suturing.	2	Practical1.8	PSY-ORG	Shows- how	D- M,PT,W
CO2,CO7,CO8	Coordinate the use of surgical instruments and drainage tubes.	4	Experiential - Learning1.7	PSY-MEC	Does	KL,PT,SI M
CO2,CO7,CO8	Practice the techniques of surgical knot tying and suturing.	3	Experiential - Learning1.8	AFT-CHR	Does	KL,SIM
CO2,CO7,CO8	Practice the techniques of dressing and cauterization.	3	Experiential - Learning1.9	PSY-MEC	Does	KL,SIM,W

CO2,CO7,CO8	Explain the techniques of surgical dressings, and cauterization.	1	Lecture	CE	Knows- how	BL,FC,L& PPT ,L_VC	
CO2,CO7,CO8	Describe and Categorise the surgical instruments with their functions	1	Lecture	сс	Knows- how	L&PPT ,L_VC	
CO2,CO7,CO8	Demonstrate various bandaging techniques.	2	Practical1.9	PSY-MEC	Shows- how	D- M,GBL,W	
CO2,CO7,CO8	Illustrate the Procedure of cauterisation	2	Practical1.1 0	PSY-ORG	Shows- how	DL,D- M,PT	
Practical Training	g Activity						
Practical 1.1 : Et	hics & Responsibilities of a surgeon						
Total Learning H	lours: (2 Hours)						
1. Introduction (15 mins): The session begins with a brief lecture on the importance of ethics, professionalism, and surgical conscience in the surgical field. Key concepts such as patient autonomy, confidentiality, informed consent, and the moral obligations of a surgeon are outlined.							
 Demonstration (30 mins): A senior surgeon will perform a simulated surgical procedure while emphasizing the ethical principles throughout. Key moments, such as obtaining informed consent, ensuring patient comfort, maintaining a professional demeanour, and addressing patient concerns, will be highlighted. The mentor will model compassionate communication with the patient and staff. 							
3. Mentoring and Participants will with the patient,	d Hands-On Activity (45 mins): engage in small groups, each observing a mentor during a clinical procedure. They will prac addressing concerns, and demonstrating respect and professionalism.	ctice communica	ation skills, inc	luding discu	ssing the pro	cedure	
 Reflection and Discussion (30 mins): Participants will reflect on the activity in a group discussion, guided by the mentor, to reinforce lessons learned on ethics, professionalism, and the surgeon-patient relationship. 							
Practical 1.2 : Application of ethical principles in surgical practice							
Total Learning H	lours: (2 Hours)						

1. Introduction to Ethical Principles (15 minutes)

Method: Presentation & Demonstration

Begin with a short presentation introducing the core ethical principles of Unani surgery, focusing on key ideas from classical texts. Demonstrate principles such as nonmaleficence, beneficence, confidentiality, and justice. Open the floor for a brief discussion on how these principles apply in modern surgery.

2. Case Study Analysis (40 minutes)

Method: Group Work & Presentation

Divide participants into small groups and assign each group a case study based on real-life ethical dilemmas in Unani surgery (e.g., patient consent, cultural conflicts in treatment). Each group discusses and presents their analysis, referencing classical ethical guidelines to propose solutions.

3. Role-Playing Ethical Scenarios (30 minutes)

Method: Edutainment & Role-Playing

Participants engage in role-play, acting out common ethical dilemmas (e.g., respecting patient autonomy while explaining a treatment plan). The scenarios should reflect the ethical issues discussed earlier. After each role-play, the group provides feedback and discusses how classical texts guide decision-making.

4. Mentoring and Reflection (25 minutes)

Method: Mentoring

Pair participants with mentors for a reflective discussion on applying the learned ethics in their practice. Mentors provide feedback on ethical decision-making and challenges faced in modern-day Unani surgery.

5. Conclusion (10 minutes)

Method: Summary & Open Discussion

Conclude with a summary of key points and encourage participants to share insights gained during the activity.

Practical 1.3 : OT attire- Demonstration and Hands-On Practice

Total Learning Hours: (2 Hours)

1. Demonstration by the teacher: (45 mins)

Start with a video that outlines the fundamental principles of aseptic techniques and proper surgical attire. Then, proceed with a live demonstration, where the instructor systematically demonstrates the steps for putting on surgical attire, performing surgical handwashing, and scrubbing.

2. Hands-On Practice: (45 mins)

Students will perform these tasks themselves under supervision, using appropriate materials like sterile gloves, and gowns.

3. Feedback: (30 mins)

Real-time feedback will be given to correct mistakes and reinforce proper techniques. The instructor will assess performance with DOPS (Direct Observation of Procedural Skills).

Practical 1.4 : Methods of Sterilization

Total Learning Hours: (2 Hours)

1. Introduction and Tutorial (20 minutes)

Begin with a brief tutorial on the importance of sterilization in healthcare, the different sterilization methods (e.g., autoclaving, dry heat, chemical sterilization), and safety protocols. Highlight key infection control standards and proper handling of sterilizing equipment.

2. Demonstration in the Lab (30 minutes)

The instructor demonstrates the step-by-step process of sterilizing instruments using an autoclave. This includes cleaning, packaging, loading, and operating the autoclave. The demonstration emphasizes correct techniques and safety precautions.

3. Co-Learning and Group Practice (40 minutes)

Participants are divided into small groups, each tasked with sterilizing a set of instruments. Teams will rotate through different sterilization methods (e.g., autoclaving, and chemical sterilization) under instructor supervision. Participants collaborate and offer feedback to each other, ensuring that everyone practices hands-on techniques.

Workshop and Troubleshooting (30 minutes)

In a workshop-style format, participants troubleshoot common issues in the sterilization process (e.g., malfunctioning autoclave, improperly packaged instruments). Teams discuss and address these issues, guided by the teacher.

Practical 1.5 : Preoperative assessment.

Total Learning Hours (2 Hours)

1. Demonstration/video: (60 mins)

For teaching preoperative assessment, begin with a video demonstration outlining the importance, steps, and safety measures of each process. In the ward/pre-operative assessment room, the teacher will demonstrate a complete preoperative assessment, including taking a patient's medical history, evaluating vital signs, and assessing surgical risks.

2. Hands-On Practice: (45 mins)

Students will then perform these tasks on patients/models under supervision, simulating a real clinical environment.

3. Feedback: (15 mins)

Feedback will focus on technique, adherence to protocols, and patient safety measures to ensure competency.

Practical 1.6 : Preparation of surgical site

Total Learning Hours: (2 Hours)

1. Divide PG students into pairs or small groups, ensuring one student acts as the surgeon and others as assistants. Provide sterile equipment: antiseptic solutions, sterile drapes, markers, gloves, and surgical instruments. In a clinical setting, students will prepare a consenting patient by performing hand hygiene, applying antiseptic to the surgical area, and covering with sterile drapes. The student will mark the surgical site, ensuring accuracy according to anatomical landmarks. (60 minutes)

2. Discuss the importance of proper site identification, patient safety, and prevention of wrong-site surgeries. (45 minutes)

3. Conclude with a feedback session and Q&A. (15 minutes)

Practical 1.7 : Handling of instruments.

Total Learning Hours (2 Hours)

1. Introduction and Demonstration (20 minutes)

Begin with a brief lecture on the importance of skin preparation and site marking in preventing infections and ensuring correct surgery. Follow with a live demonstration in the lab where the instructor demonstrates the step-by-step process using a model. Emphasise sterile technique, anatomical landmarks, and correct use of skin preparation agents.

2. Demonstration on Model (30 minutes)

Participants work in pairs or small groups, practising skin preparation and surgical site marking on anatomical models. The facilitator provides guidance on technique and addresses any questions. Each participant gets the chance to perform the procedure under supervision.

3. Problem-Based Learning (30 minutes)

In teams, participants are presented with a challenging case scenario (e.g., a patient with a complex anatomy or a high-risk condition). Teams must collaboratively decide the best approach to skin prep and site marking. They then demonstrate their plan on the model, applying their solution.

4. Simulation and Team Practice (30 minutes)

Using mannequins, teams practice skin preparation and marking the site in real time, simulating a surgical environment. Team members rotate roles, ensuring active involvement from all participants. Peer feedback is encouraged.

5. Debrief and Reflection (10 minutes)

Conclude with a group discussion to reflect on challenges, techniques learned, and key takeaways.

Practical 1.8 : Surgical knot tying, and suturing.

Total Learning Hours (2 Hours)

1. Demonstration: (45 mins)

Begin with a demonstration of surgical knot tying, suturing methods (e.g., interrupted, continuous, subcutaneous).

Highlight key techniques, safety protocols, and common errors.

2. Hands-On Practice: (60 mins)

Knot Tying: Participants practice knot tying using silk threads or suture materials on knot-tying boards or foam blocks.

Suturing: Provide synthetic skin models or animal tissue (e.g., chicken breast) for suturing practice. Participants perform different suturing techniques under supervision.

3. Real-Time Feedback: (15 mins)

The teacher provides immediate guidance, addressing errors and suggesting improvements.

Practical 1.9 : Cauterisation procedure

Total Learning Hours: (2 Hours)

1. Demonstration by the teacher: (45 mins)

Begin with a demonstration of the safe use of cauterisation tools.

Highlight key techniques, safety protocols, and common errors.

2. Hands-On Practice: (60 mins)

Cauterisation: Use cauterisation simulators to practice safe and precise tissue coagulation or dissection.

3. Real-Time Feedback: (15 mins)

The teacher provides immediate guidance, addressing errors and suggesting improvements.

Practical 1.10 : Demonstration of bandaging techniques

Total learning hours: (02 Hours)

1. Teacher Demonstration (30 minutes)

The teacher will introduce different types of bandaging techniques, such as circular, spiral, figure-eight, recurrent, and triangular bandages.

The teacher will explain the purpose and appropriate use of each technique (e.g., support, immobilisation, or wound protection).

Using a mannequin or a volunteer, the teacher will demonstrate each bandaging method step by step while explaining key considerations like tension, comfort, and circulation checks.

The teacher will emphasise common errors to avoid and best practices for securing bandages effectively.

2. Student Practice (60 minutes)

Students will pair up and take turns applying different bandaging techniques to each other under the teacher's supervision.

Each student will practice on different body parts (e.g., hand, ankle, knee, head) to ensure familiarity with varied applications.

The teacher will observe and provide immediate guidance if a student faces difficulty in technique or bandage placement.

3. Individual Assessment & Feedback (30 minutes)

Each student will individually demonstrate a bandaging technique of their choice.

The teacher will assess based on criteria such as accuracy, tightness, neatness, and patient comfort.

Constructive feedback will be given, highlighting strengths and areas for improvement.

A brief Q&A session will address any remaining doubts.

Experiential learning Activity

Experiential-Learning 1.1 : Ethics and responsibilities of a surgeon

Total Learning Hours: (3 Hours)

1. Introduction & Team-Based Learning (60 min)

The session begins with a brief interactive discussion on core concepts: surgical ethics, professionalism, and the surgeon-patient relationship. Students are then divided into small teams and provided with complex clinical cases involving ethical dilemmas (e.g., informed consent, confidentiality, surgical error disclosure). Teams analyse, discuss, and propose ethically sound approaches, referencing professional guidelines.

2. Role Plays & Reflective Debrief (60 min)

Selected teams perform role plays simulating real-life interactions—pre-operative consent, breaking bad news, or managing patient expectations. Peers observe using a structured feedback rubric. Each role-play is followed by a facilitated debrief where students reflect on the ethical tensions, communication strategies, and the emotional weight of professional responsibility.

3 – Recitation/Presentation & Consolidation (60 min)

Teams prepare and deliver brief recitations or presentations, summarising key ethical takeaways from their role-play or case. They connect actions to principles such as beneficence, autonomy, and surgical conscience. The facilitator closes the session by guiding a whole-group reflection on how these experiences shape readiness for real-world clinical practice.

Experiential-Learning 1.2 : Responsibilities of a surgeon mentioned in classical literature

Total Learning Hours (02 Hours)

1. Presentation on Classical Ethics of Surgery (30 minutes)

Method: PowerPoint Presentation

Begin with a brief introduction, the ethical responsibilities of a surgeon in classical literature. Focus on key ethical principles, such as non-maleficence, patient autonomy, honesty, and confidentiality. Use PowerPoint slides to highlight quotes, principles, and real-world applications of these ethics in modern surgery.

3. Conclusion and Reflection (15 minutes)

4. Group Presentation (30 minutes)

Method: Group Presentation

After role-plays, each group presents their scenario and the ethical principles they applied during the exercise. They should explain how classical literature guided their decisions. Encourage discussion and allow other participants to ask questions, providing further insights.

5. Role-Play of Ethical Dilemmas (45 minutes)

After the lecture, divide participants into small groups and assign each group a scenario based on ethical dilemmas in surgery (e.g., obtaining informed consent, deciding between treatment options, or maintaining patient confidentiality). Participants role-play as surgeons, patients, and family members, acting out these dilemmas. The rest of the group observes and provides feedback on the ethical decisions made.

Each role-play scenario should reflect the ethical principles discussed earlier.

Experiential-Learning 1.3 : Demonstration of OT attire, and scrubbing

Total Learning Hours (2 Hours)

1. Introduction (15 minutes)

Begin with a brief lecture on the importance of OT attire and proper hand scrubbing techniques in maintaining a sterile environment during surgeries. Discuss the role of attire (gowns, gloves, masks, and caps) in infection control and the significance of surgical hand scrubbing in reducing microbial contamination.

2. Demonstration (15 minutes)

A senior staff member or instructor demonstrates the step-by-step process of donning the full OT attire, followed by the surgical hand scrub procedure. This includes explaining the rationale behind each step.

3. Co-learning and Team-based Practice (45 minutes)

Participants are divided into small teams. Each team collaborates to practice donning the OT attire, taking turns assisting and critiquing each other's technique. Afterwards, each team member practices the surgical hand scrub under supervision. The focus is on peer feedback and mutual learning, with participants sharing tips and discussing their challenges.

4. Real-life Scenario Simulation (30 minutes)

The teams simulate an emergency surgical setup, where they must quickly prepare by wearing OT attire and performing the hand scrub. The activity encourages teamwork, time management, and the application of learned skills under realistic conditions.

5. Debrief and Reflection (15 minutes)

A group discussion allows participants to reflect on their experiences, challenges encountered, and lessons learned. This session encourages self-assessment and continuous improvement.

Experiential-Learning 1.4 : Sterilisation

Total learning hours: (3 Hours)

1. Introduction and Overview (20 minutes)

Begin with an introduction on the importance of sterilization in healthcare settings. Discuss the different sterilization methods (e.g., autoclaving, chemical sterilization), their applications, and key infection control standards. Emphasize the role of sterilization in preventing healthcare-associated infections (HAIs).

2. Demonstration in the Lab (50 minutes)

The instructor demonstrates the step-by-step sterilization process in the lab, covering the use of autoclaves, sterilizing agents, and handling instruments. The demonstration will also include pre-sterilization cleaning and packaging procedures. Participants will observe and ask questions.

3. Co-Learning and Group Practice (60 minutes)

Participants are divided into small groups to practice sterilization procedures. Each group will be tasked with sterilizing a set of instruments using the autoclave, chemical sterilizers, or other methods, depending on the case scenario. Team members will take turns operating equipment, cleaning instruments, and monitoring the process.

4. Real-Life Experience Simulation (30 minutes)

In teams, participants simulate a real-life scenario where they must sterilize various instruments under time pressure, mimicking an actual clinical setting. This task encourages collaboration, time management, and problem-solving in a high-stakes environment.

5. Debrief and Reflection (20 minutes)

Conclude with a group reflection on the activity, focusing on challenges faced during sterilization, key learning points, and improvements to make in future practices.

Experiential-Learning 1.5 : Negotiation of preoperative assessment techniques

Total Learning Hours (3 Hours)

1. Introduction and Overview (20 minutes)

Begin with an overview of preoperative assessment, covering the key components such as patient history, risk factors, physical examination, and necessary diagnostic tests. Discuss the importance of a multidisciplinary approach in preoperative assessment and the role of effective communication.

2. Simulation-Based Learning (45 minutes)

Participants engage in a simulated scenario with a trained actor or high-fidelity mannequin, where they perform a preoperative assessment for a patient with multiple comorbidities. Participants work in teams, rotating roles (e.g., surgeon, anesthesiologist, nurse), and negotiate the best approach for assessment, considering patient concerns, medical history, and test requirements. The simulation emphasizes real-time decision-making and collaborative communication.

3. Case-Based Learning (45 minutes)

Small groups are given complex case studies that require preoperative assessments for patients with varying levels of risk (e.g., pediatric patients, elderly with cardiovascular risk, diabetic patients). Each team discusses the case, negotiates the most appropriate preoperative strategy, and presents their approach to the class. Group discussion follows, with peer feedback and facilitator guidance.

4 .Co-Learning and Team-Based Practice (45 minutes)

In teams, participants practice peer assessments. One person acts as the patient while others perform the assessment. Afterwards, the team discusses what worked well, areas for improvement, and alternative approaches to assessment. Emphasis is on collaborative learning and refining clinical skills.

5. Debrief and Reflection (25 minutes)

Conclude with a reflective discussion where participants share their insights, challenges faced during the activity, and strategies for applying these techniques in real-world settings. Facilitators highlight key takeaways and guide continuous improvement.

Experiential-Learning 1.6 : Skin preparation in Ilmul Jarahat (surgery)

Total Learning Hours (3 Hours)

1. Introduction and Overview (20 minutes)

Begin with a brief introduction on the importance of skin preparation and correct surgical site marking in preventing infections and ensuring patient safety. Discuss the techniques, tools, and guidelines used for effective skin preparation and site marking, emphasising sterile techniques and adherence to protocols.

2. Simulation-Based Learning (45 minutes)

Using mannequins or simulation tools, participants practice preparing the skin and marking the surgical site for various surgical procedures. In small teams, participants rotate roles—one performs the skin preparation, while others oversee the marking procedure, ensuring proper technique, safety, and communication. The focus is on sterile technique, accuracy, and patient-centred care.

3. Case-Based Learning (45 minutes)

Present complex case scenarios (e.g., orthopaedic surgery, abdominal surgery) in small groups. Each group discusses the best approach for skin preparation and surgical site marking, considering factors like the patient's condition, anatomical landmarks, and procedure type. Teams then demonstrate their process on the mannequins, followed by group feedback and discussion.

4. Co-Learning and Team-Based Practice (45 minutes)

In this segment, participants perform skin preparation and site marking together in pairs or small teams. Peer feedback and self-assessment are encouraged, allowing participants to reflect on their techniques and learn from one another. Facilitators provide real-time guidance.

5. Debrief and Reflection (25 minutes)

The session concludes with a debriefing where participants reflect on the activity, discuss challenges encountered, and share best practices for skin preparation and site marking. Facilitators offer insights for refining skills in real-world clinical settings.

Experiential-Learning 1.7 : Handling of surgical instruments and application of drainage tubes

Total Learning Hours (4 Hours)

1. Hands-On Practice: (90 mins)

Participants independently practice handling of instruments including Laparoscopic instruments and inserting or managing drainage tubes on surgical simulators or anatomical models, replicating real-life scenarios.

2. Case Simulation: (90 mins)

Create a simulated surgical scenario where participants select appropriate instruments and place a drainage tube based on the patient's condition (e.g., Abdominal drainage).

3. Feedback: (60 mins)

The teacher will provide detailed feedback to each of the students.

Experiential-Learning 1.8 : Mastering Knot Tying and Suturing Techniques

Total Learning Hours (3 Hours)

1. Hands-On Practice: (60 mins)

Participants are given suture materials, needle drivers, and tissue models (e.g., rubber or synthetic skin) to practice knot tying.

2. Suturing Practice on Simulated Tissue:(60 mins)

Participants then practice suturing on simulated tissue. Each participant performs a basic suture technique (e.g., simple interrupted) and moves to more advanced techniques (e.g., continuous suturing).

Emphasis is placed on maintaining even spacing, depth, and suture tension.

3. Peer Review and Feedback: (60 mins) Participants pair up and review each other's knot tying and suturing techniques, providing constructive feedback. Teacher will provide feedback to individual students. **Experiential-Learning 1.9**: Technique for dressing and cauterization Total Learning Hours (3 Hours) 1. Setup: (30 Minutes) Arrange a simulation station with realistic wound models, dressing supplies, and cauterization equipment (or simulators for safety). 2. Practice: (60 Minutes) Participants practice dressing wounds and performing cauterization under supervision. Focus on key steps such as cleaning the wound, applying dressings, and safely using cauterization tools. 3. Scenario Challenge: (60 Minutes) Students address a simulated wound with specific complications (e.g., heavy bleeding, infection). Students can also perform dressing and cauterization on real patients. 4. Feedback: (30 Minutes) Students will discuss their experiences, ask questions, and clarify doubts. The teacher will give feedback about the performance of each of the students. Modular Assessment Assessment method 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: Δ A written note of the conversation with the patient, who has been advised of admission, explaining the facilities and limitations of our hospital, and all the treatment options available for the specific condition in and outside our hospital. (25 Marks) and

Hand hygiene and assembling the sterilised instrument tray for a particular case. (25 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)

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical/experiential) learning session, the students should be able to)	3C Notional Learning Hours	3D Lecture/ Practical/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/ Shows how/ Knows how/ Know)	3G Teaching Learning Methods			
Module 2 : روداداورعومي جسمالي معانته Roodaad wa Umoomi Jismani Muʻā'ina (History Taking and General Physical Examination)									
Module Lea (At the end	Module Learning Objectives (At the end of the module, the students should be able to)								
1. Describe	1. Describe the importance of a General History taking for the diagnosis of surgical diseases.								
2. Discuss the typical surgical signs and symptoms mentioned in both contemporary and classical literature.									
3. Demonst	rate the recording of General History and General Physical Examination on a case	sheet.							
4. Demonst	rate the typical surgical signs and symptoms.								
5. Record th	ne proper history and General Physical Examination and identify the typical surgica	Il signs and	symptoms.						
Fروداد Unit 1	Roodaad (History Taking)								
) روداد :2.1.1	مریض کی تفصیلات، موجودہ پیاری کی روداد،ماضی کی روداد ، دواکی روداد، الرجی اور ^ع مل تلقیح کی روداد ، ذاتی اور خاندانی								
Mareez ki T	afseelat, Maujoodah Bimari ki Roodaad , Maazi ki Roodaad , Dawa ki Roodaad, A	llergy wa Am	nal-e-Talqeeh ki	Roodad					
(Particulars	(Particulars of the patient, History of present illness, Past History, Drug History, History of Allergy & Immunization, Personal & Family History)								
References	References: 11,12,14								
3A	3B	3C	3D	3E	3F	3G			
CO3,CO4	Describe the particulars of the patient, chief complaints and explain their components	1	Lecture	сс	Knows- how	BL,FC,L&PPT ,L_VC			
--	---	---	------------------------------	-------------	---------------	---------------------	--		
CO3,CO4	Describe how to take and record the history of present illness, previous anaesthesia, previous operation history, and drug and allergy history.	1	Lecture	CE	Knows- how	BL,FC,L&PPT ,L_VC			
CO3,CO4	Demonstrate how to take and record the patient's particulars, chief complaints and history of present illness in detail.	3	Practical2.1	PSY- MEC	Shows- how	CBL,RP			
CO3,CO4	Demonstrate how to collect and record immunization history, past medical history, and drug history.	3	Practical2.2	PSY- GUD	Shows- how	CBL,D-BED,RP,SIM			
CO3,CO4	Execute all the steps and key points for documenting the patient particulars along with chief complaints in admitted patients.	2	Experiential- Learning2.1	PSY- ADT	Does	CD,CBL,RP			
CO3,CO4	Familarise with the process of documenting past medical history, family history, immunization history.	2	Experiential- Learning2.2	PSY- GUD	Shows- how	CBL,PrBL,SIM			
CO3,CO4	Describe the past history, family history, and immunization history.	1	Lecture	сс	Knows- how	BL,FC,L&PPT ,L_VC			
CO3,CO4	Assemble the history of present illness in detail.	2	Experiential- Learning2.3	PSY- ADT	Does	CD,CBL,DIS,RP,SIM			
CO3,CO4	Assess family history, previous history of operation, history of allergy and medical history.	2	Experiential- Learning2.4	PSY- ADT	Does	CBL,DIS,PrBL,RP,SIM			
unit 2 ستخيص امراض يراحيه ميل معاون علامات اور تشليل Tashkhīs-e-Amraz-e-Jarhiya mein muawin Alāmāt w nishaniyan (Symptoms and signs helpful in diagnosis of surgical diseases)									
وقع، قيئ، أوردة ظاهرة، وذمة غائرة، سوء مزاج كى علامات، غلبه اخلاط كى علامات، غلبه اخلاط كى علامات، تفرق إتصال كى علامات : 2.2.1									
Waja, Qai, Awrida Zahira, Wazamah Gha'ira, Su'-e Mizaj ki Alamat, Ghalba Akhlat ki Alamat aur Lafarruq-e-Ittisalki Alamat									

(Pain, Vomiting, Visible veins and Pitting oedema)

References: 11,12,13,14

3A	3B	3C	3D	3E	3F	3G
CO3,CO4	Illustrate the important characteristics of different signs in the diagnosis of surgical diseases	1	Lecture	CS	Knows- how	L&PPT

CO3,CO4	Discuss the importance of symptoms based on the Unani System in diagnosing surgical conditions.	1	Lecture	CS	Knows- how	FC,L&PPT	
CO3,CO4	Demonstrate the symptoms in diagnosing surgical conditions.	2	Practical2.3	PSY- ADT	Shows- how	CD,CBL,D,DIS,RP	
CO3,CO4	Demonstrate thoroughly the signs and symptoms of surgical diseases based on of $S\bar{u}$ '-e Miz \bar{a}_{j} , and Ghalba Akhl \bar{a}_{t} .	2	Practical2.4	PSY- MEC	Shows- how	CBL,D,D-BED,RP,SIM	
CO3,CO4	Diagnose surgical conditions based on symptoms.	3	Experiential- Learning2.5	PSY- ADT	Does	CD,CBL,DIS,PER,PBL	
CO3,CO4	Identify and frame the diagnosis of surgical diseases based on of S \bar{u} '-e Miz \bar{a} j, and Ghalba Akhla \bar{t} .	3	Experiential- Learning2.6	PSY- ADT	Does	CBL,PER,PBL,SIM,TBL	
CO3,CO4	Illustrate the important characteristics of different symptoms in the diagnosis of surgical diseases	1	Lecture	CS	Knows- how	L&PPT	
CO3,CO4	Describe the importance of signs based on the Unani System in diagnosing surgical conditions.	1	Lecture	CS	Knows- how	FC,L&PPT ,L_VC	
CO3,CO4	Demonstrate signs in diagnosing surgical conditions.	2	Practical2.5	PSY- ADT	Shows- how	CD,CBL,D,RP,SIM	
CO3,CO4	Demonstrate the signs and symptoms of surgical diseases based on of <i>Tafarruq-e-Ittişā I.</i>	2	Practical2.6	PSY- MEC	Shows- how	CBL,D-BED,RLE,RP,SIM	
CO3,CO4	Diagnose surgical conditions based on signs.	2	Experiential- Learning2.7	PSY- SET	Does	CD,CBL,DIS,PER,PBL	
CO3,CO4	Frame the diagnosis of surgical diseases based on of Tafarruq-e-Ittiṣāl	2	Experiential- Learning2.8	PSY- SET	Does	CBL,PER,PBL,PrBL,SIM	
Unit 3 است مین عوی جسمانی معائند Jarahat Mein Umoomi Jismani Muʻā'ina (General physical examination in Surgery)							
2.3.1: محوى جاكزه Umūmī Jā'iza (General survey)							
2.3.2: معانَّنه مقامى Maqāmī Mu'ā'ina (Local Examination)							
2.3.3: معاننه عمومی Umūmī Muʻā'ina (General Examination)							

References: 11,12,14

3A	3В	3C	3D	3E	3F	3G		
CO3,CO4	Describe the components of general physical examination, such as general survey, mental state and intelligence, build and state of nutrition, attitude, gait, facies, decubitus, and vitals.	1	Lecture	CS	Knows- how	DIS,L&GD,L&PPT ,PL		
CO3,CO4	Describe the steps of general physical examinations	1	Lecture	CS	Knows- how	L&PPT		
CO3,CO4	Demonstrate the components and procedure of general survey of case taking	3	Practical2.7	PSY- ORG	Shows- how	D-BED,D-M,SIM		
CO3,CO4	Demonstrate the procedure for conducting general physical examinations.	3	Practical2.8	PSY- ORG	Shows- how	CD,CBL,D-BED,RP,SIM		
CO3,CO4	Perform the detailed general survey to diagnose surgical conditions.	4	Experiential- Learning2.9	PSY- SET	Does	CD,CBL,DIS,TBL		
CO3,CO4	Frame a provisional diagnosis of a surgical condition through a general physical examination.	4	Experiential- Learning2.10	PSY- MEC	Does	CBL,SIM		
CO3,CO4	Evaluate the colour of skin, Jaundice and skin eruptions during general physical examination of a surgical case.	1	Lecture	CS	Knows- how	DIS,L&GD,L&PPT ,PL		
Practical Tr	aining Activity							
Practical 2.	1 : Chief complaints and history of present illness in Ilmul Jarahat							
Total Learn	ing Hours: (3 Hours)							
1. Role-Pla	y Practice: (75 mins)							
Students are paired, one acting as the patient presenting a surgical condition (e.g., abdominal pain), and the other as the clinician. Pre-designed scenarios guide the "patient" responses.								
2. Detailed	2. Detailed Questioning: (75 mins)							
Clinicians ask open-ended and specific questions to gather a detailed history, focusing on the patient's complaints, medical background, and lifestyle factors.								

3. Feedback and Refinement: (30 mins)

The teacher observes, provides feedback on the technique, and suggests ways to improve clarity and empathy.

Practical 2.2 : Mastering History Collection of Immunization, Past Medical, and Drug History

Total Learning Hours: (3 Hours)

1. Introduction & Structured Demonstration (30 minutes):

The instructor provides a brief interactive lecture on the importance of detailed history taking in clinical practice. This includes the relevance of immunization schedules, significant past illnesses, surgeries, allergies, and current or past drug use. A live demonstration is given on how to approach a patient systematically and sensitively while collecting history.

2. Case-Based Learning (45 minutes):

Students are divided into small groups and provided with different clinical case scenarios (e.g., a child presenting with fever, an elderly patient with chronic illness). Each group identifies the relevant components of immunization, past medical, and drug history for their case, discusses, and prepares a summary for presentation.

3. Role Play & Simulation (60 minutes):

In pairs, students take turns as "doctor" and "patient" using role cards with clinical backgrounds. They practice interviewing techniques in a simulated environment, focusing on clarity, empathy, and completeness. Faculty observes and provides formative feedback.

4. Bedside Demonstration & Reflection (45 minutes):

At the bedside or with a standardized patient, students perform supervised history taking. The session concludes with a group reflection and instructor feedback.

Practical 2.3 : Symptoms in the diagnosis of surgical conditions.

Total Learning Hours: (2 Hours)

1. Demonstration: (30 mins)

The teacher will demonstrate how various signs and symptoms are evaluated to diagnose surgical cases.

2. Case-Based Learning: (40 mins)

Students are divided into small groups and each group receives a patient scenario involving common surgical conditions (e.g., appendicitis, gallstones, or hernia).

• Example: "A 40-year-old patient presents with right upper quadrant pain, fever, nausea, and vomiting."

Groups discuss the patient's symptoms and signs, perform a simulated physical examination (e.g., palpation, inspection), and formulate a possible diagnosis based on the clinical findings.

3. Simulation with Standardized Patients: (40 mins)

Each group then practices their diagnostic skills with a standardized patient (simulated patient role-playing a surgical condition). The clinician should assess the signs like tenderness, swelling, or abnormal findings.

4. Presentation and Feedback: (10 mins)

Groups present their diagnosis and reasoning, and the facilitator provides feedback on the accuracy of the diagnosis and the importance of differential diagnosis.

 $\label{eq:practical 2.4} \textbf{Practical 2.4}: Sign \ and \ symptoms \ of \ S\bar{u}'-e \ Miz\bar{a}j, \ and \ Ghalba \ Akhl\bar{a}t.$

Total Learning Hours: (2 Hours)

1. Demonstration: (30 mins)

The teacher will demonstrate how to evaluate different signs and symptoms of Sū'-e Mizāj, Ghalba Akhlāţ, and Tafarruq-e-Ittiṣāl in detail then the teacher will instruct the student to do so.

2. Role-Play with Simulated Patients: (40 mins)

Students are divided into pairs: one plays the clinician and the other the "patient," who is given a case scenario (e.g., patient with excessive heat or weakness).

The clinician evaluates the signs and symptoms based on the scenario and makes a diagnosis.

3. Real-Life Patient Evaluation: (40 mins)

Students observe and assess a real-life patient with one of the conditions. They record findings, discuss with the teacher, and formulate a diagnosis based on the symptoms observed.

4. Debrief and Feedback: (10 mins)

The teacher reviews the accuracy of diagnoses, discussing how to differentiate the conditions in simulated and real-life settings.

Practical 2.5 : Demonstration of signs

Total Learning Hours: (2 Hours)

1. Demonstration by the teacher: (30 mins)

The teacher will demonstrate how various signs and symptoms are evaluated to diagnose surgical cases.

2. Case-Based Group Work: (40 mins)

Students are divided into small groups and each group receives a patient scenario involving common surgical conditions (e.g., appendicitis, gallstones, or hernia).

Example: "A 40-year-old patient presents with right upper quadrant pain, fever, nausea, and vomiting."

Groups discuss the patient's symptoms and signs, perform a simulated physical examination (e.g., palpation, inspection), and formulate a possible diagnosis based on the clinical findings.

3. Simulation with Standardized Patients: (40 mins)

Each group then practices their diagnostic skills with a standardized patient (simulated patient role-playing a surgical condition). The clinician should assess the signs like tenderness, swelling, or abnormal findings.

4. Presentation and Feedback: (10 mins)

Groups present their diagnosis and reasoning, and the facilitator provides feedback on the accuracy of the diagnosis and the importance of differential diagnosis.

Practical 2.6 : Categorisation of features of Tafarrug-e-Ittisā/

Total Learning Hours: (2 Hours)

1. Demonstration: (30 mins)

The teacher will demonstrate how to evaluate different signs and symptoms of Sū'-e Mizāj, Ghalba Akhlāţ, and Tafarruq-e-Ittiṣāl in detail then the teacher will instruct the student to do so.

2. Role-Play with Simulated Patients: (40 mins)

Students are divided into pairs: one plays the clinician and the other the "patient," who is given a case scenario (e.g., patient with excessive heat or weakness).

The clinician evaluates the signs and symptoms based on the scenario and makes a diagnosis.

3. Real-Life Patient Evaluation: (40 mins)

Students observe and assess a real-life patient with one of the conditions. They record findings, discuss with the teacher, and formulate a diagnosis based on the symptoms observed.

4. Debrief and Feedback: (10 mins)

The teacher reviews the accuracy of diagnoses, discussing how to differentiate the conditions in simulated and real-life settings.

Practical 2.7 : Recording general survey in surgery

Total Learning Hours: (3 Hours)

1. Demonstration on a Real-Life Patient: (60 mins)

The teacher performs the survey on a volunteer patient, explaining each step and addressing patient interaction, such as gaining consent, ensuring privacy, and maintaining professionalism.

2. Simulation Practice: (75 mins)

Students work in pairs, alternating as "clinician" and "simulated patient."

Realistic scenarios, such as a patient with fever or fatigue, will be assigned.

Clinicians conduct the survey, documenting findings systematically.

3. Debrief and Feedback: (45 mins)

The teacher reviews participants' performance, emphasizing accurate observation, patient communication, and correct technique.

Practical 2.8 : General physical examination

Total Learning Hours: (3 Hours)

1. Demonstration by the Teacher: (60 mins)

The teacher will demonstrate how to do a general physical examination on any real or simulated patient in front of the students.

2. Hands-on Practice: (60 mins)

Divide participants into pairs: one as the "examiner" and the other as the "patient."

Using a checklist, the examiner performs the steps of a general physical exam (e.g., inspection, palpation, percussion, auscultation).

Focus areas include assessing posture, gait, skin condition, and vital parameters like pulse, blood pressure, and respiratory rate.

3. Peer Feedback: (30 mins)

Switch roles and repeat the process. Partners provide feedback on technique, thoroughness, and professionalism.

4. Teacher Debrief: (30 mins)

Review common errors, emphasize patient comfort and communication, and answer questions.

Experiential learning Activity

Experiential-Learning 2.1 : Recording patient particulars and chief complaints

Total Learning Hours: (2 Hours)

1. Introduction and Briefing (30 minutes)

Explain how recording patient particulars and chief complaints accurately is crucial in a hospital ward for continuous care, accurate diagnosis, and treatment planning.

2. Patient Interaction and Data Recording (Simulation or Real) (60 minutes)

Patient Role-Play (if in training or with volunteers):

Simulated Patient Interaction: Have participants pair up, where one acts as the healthcare provider and the other as the patient.

The "patient" should present their chief complaint and give background details.

The "healthcare provider" will ask questions to gather patient particulars and the chief complaint.

The healthcare provider should document the details on a form or in the EHR system.

Real Patient Interaction (if in a clinical ward setting):

Observe and Record: Participants will interact with real patients under supervision, gathering patient particulars and chief complaints.

The healthcare provider will approach the patient politely, introduce themselves, and explain the purpose of the data collection.

Gather essential patient particulars and document the patient's chief complaint. If needed, ask follow-up questions to ensure complete and accurate documentation.

Emphasize the importance of patient privacy and confidentiality while interacting with patients.

3. Review, Reflection, and Discussion (30 minutes)

Experiential-Learning 2.2 : Patient history overview

Total Learning Hours: (2 Hours)

1. Role-Play Setup: (30 mins)

Divide participants into pairs: one as the "patient" and the other as the "clinician." Provide patients with detailed scenario cards outlining their medical, family, immunization, and medication history.

2. History-Taking Simulation: (60 mins)

Clinicians interview patients, documenting their histories systematically while maintaining rapport and clarity.

3. Facilitator Debrief: (30 mins)

Review common errors, highlight best practices, and address participant questions to enhance accuracy and efficiency.

Experiential-Learning 2.3 : Recording history of present illness.

Total Learning Hours: (2 Hours)

1. Introduction to History of Present Illness and Medical History (30 minutes)

Discuss the importance of gathering a detailed History of Present Illness (HPI) when assessing patients in a clinical ward. HPI provides crucial information about the patient's current condition, which can guide diagnosis and treatment.

2. Simulated Patient Interaction and Data Collection (60 minutes)

Role-Playing: Simulated Patient Interview:

Patient Role: One participant acts as the patient, providing a scenario that includes a medical complaint (e.g., abdominal pain).

Provider Role: The healthcare provider will interview the "patient," asking specific questions to gather details about the History of Present Illness.

Recording Information:

The healthcare provider will record all the information on a patient chart or intake form (if using paper) or in the EHR system (if available).

3. Reflection, Group Discussion, and Troubleshooting (30 minutes)

Experiential-Learning 2.4 : Recording Medical History.

Total Learning Hours: (2 Hours)

1. Introduction to History of Present Illness (30 minutes)

Discuss the importance of gathering a detailed History of Present Illness (HPI) when assessing patients in a clinical ward. HPI provides crucial information about the patient's current condition, which can guide diagnosis and treatment.

2. Simulated Patient Interaction and Data Collection (60 minutes)

Role-Playing: Simulated Patient Interview:

Patient Role: One participant acts as the patient, providing a scenario that includes a medical complaint (e.g., abdominal pain).

Provider Role: The healthcare provider will interview the "patient," asking specific questions to gather details about the History of Present Illness.
Recording Information:
The healthcare provider will record all the information on a patient chart or intake form (if using paper) or in the EHR system (if available).
3. Reflection, Group Discussion, and Troubleshooting (30 minutes)
Experiential-Learning 2.5 : Ddiagnosis of surgical diseases using symptoms
Total Learning Hours: (3 Hours)
Case-Based Group Activity
1. Group Formation: (15 mins)
Divide participants into small groups (4–5 members).
2. Patient Scenarios: (90 minutes)
Each group receives at minimum two case scenarios describing a patient's symptoms and clinical signs (e.g., acute abdominal pain, swelling, or localized tenderness).
Example: "A 25-year-old presents with severe right lower abdominal pain, fever, nausea, and rebound tenderness."
Groups analyze the case, discuss differential diagnoses, and formulate a final surgical diagnosis (e.g., acute appendicitis).
3. Presentation and Discussion: (1 hour)
Each group presents their diagnosis and reasoning.
4. Feedback: (15 mins)
The teacher provides feedback, addressing gaps or misconceptions in each group.

Experiential-Learning 2.6 : Diagnosis of surgical diseases based on of Sū'-e Mizāj, and Ghalba Akhlāt,

Total Learning Hours: (3 Hours)

Case-Based Group Activity

Step 1: Form Small Groups (15 mins)

Divide participants into groups of 2-3 members.

Step 2: Interactive Cases: (45 mins)

Provide each group with 3-4 patient scenarios. Scenarios include:

- A description of the patient's *Mizaj* (temperament).
- Symptoms (A'raaz) fever, cough, fatigue, or digestive issues.
- Any relevant lifestyle factors or dietary habits (Asbab).
- Physical observations such as skin tone, tongue condition, and pulse characteristics.

Example Case:

"A 35-year-old patient presents with lethargy, yellowish complexion, excessive thirst, and reduced appetite. He complains of a burning sensation in the stomach after meals. He has a preference for cold foods and drinks. His pulse is rapid and thin."

Step 3: Group Diagnosis: (45 mins)

Groups analyze the case using Unani diagnostic principles to identify the disease.

They formulate a diagnosis (e.g., Sodaawi Bukhar or bilious fever).

Step 4: Presentation: (60 mins)

Each group presents their diagnosis, explaining their reasoning and the signs/symptoms they prioritized.

Reflection and Debrief: (15 mins)

Groups discuss challenges faced during diagnosis.

The facilitator provides constructive feedback, clarifies doubts, and highlights the importance of holistic assessment in Unani medicine.
Experiential-Learning 2.7 : Diagnosis of surgical diseases using signs
Total Learning Hours: (2 Hours)
1. Case-Based Group Activity
Group Formation: (10 mins)
Divide participants into small groups (4–5 members).
2. Patient Scenarios: (60 minutes)
Each group receives at minimum two case scenarios describing a patient's symptoms and clinical signs (e.g., acute abdominal pain, swelling, or localized tenderness).
Example: "A 25-year-old presents with severe right lower abdominal pain, fever, nausea, and rebound tenderness."
Groups analyze the case, discuss differential diagnoses, and formulate a final surgical diagnosis (e.g., acute appendicitis).
3. Presentation and Discussion: (40 minutes)
Each group presents their diagnosis and reasoning.
Feedback: (10 mins)
The teacher provides feedback, addressing gaps or misconceptions in each group.
Experiential-Learning 2.8 : Diagnosis of surgical diseases based on of Tafarruq-e-Ittiṣāl
Total Learning Hours: (2 Hours)
1. Case-Based Group Activity
Step 1: Form Small Groups (15 mins)
Divide participants into groups of 2-3 members.

Step 3: Group Diagnosis: (45 mins) Groups analyze the case using Unani diagnostic principles to identify the disease. They formulate a diagnosis. Step 4: Presentation: (45 mins) Each group presents their diagnosis, explaining their reasoning and the signs/symptoms they prioritized. 2. Reflection and Debrief: (15 mins) Groups discuss challenges faced during diagnosis. The facilitator provides constructive feedback, clarifies doubts, and highlights the importance of holistic assessment in Unani medicine. Experiential-Learning 2.9 : General survey in surgery Total Learning Hours: (4 Hours) 1. Case-Based Role-Play: (3 hours) Setup: Divide students into small groups. Assign roles: "patient," "clinician," and "observer." Scenario Cards: Each "patient" receives a card with a surgical condition (e.g., appendicitis, hernia, or limb ischemia) detailing observable signs and symptoms. Survey Activity: The "clinician" performs a general survey and uses findings to hypothesize a surgical diagnosis, supported by the "observer." 2. Discussion & Feedback : (1 hour) Each group presents their findings, diagnosis, and reasoning. The teacher offers guidance on improving observation and decision-making skills. Experiential-Learning 2.10 : General physical examination in surgery Total Learning Hours: (4 Hours) 1. Scenario-Based Practice: (45 mins) © NCISM - UNIPG-AB-IJ - Sem 2 -47 of 181

Students are given various simulated patient cases with specific surgical complaints (e.g., abdominal pain, swelling, or fever).	
Role-play the patient and examiner: one participant performs a physical examination, while the other acts as the patient with symptoms.	
2. Step-by-Step Examination: (75 mins)	
Inspect for abnormalities (e.g., swelling, discolouration).	
Palpate to identify masses, tenderness, or organ enlargement.	
Percuss to detect fluid or air abnormalities.	
Auscultate for bowel sounds or vascular bruits.	
3. Formulate Provisional Diagnosis: (60 mins)	
Based on findings, participants identify the likely surgical condition and document their reasoning, considering differential diagnoses.	
4. Feedback and Reflection: (60 mins)	
The teacher provides real-time feedback on examination techniques, diagnostic reasoning, and patient interaction.	
Discuss the importance of correlating clinical findings with the patient's history.	
Modular Assessment	
Assessment method	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):	4
History and General Physical Examination. Assessment will be based on:	

© NCISM - UNIPG-AB-IJ - Sem 2 -48 of 181

Recording history and findings of the General Examination on a case sheet. (30)	
and	
Identifying the typical surgical signs and symptoms of that particular condition according to contemporary and classical literature. (20)	
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)	

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical/experiential) learning session, the students should be able to)	3C Notional Learning Hours	3D Lecture/ Practical/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/ Shows how/ Knows how/ Know)	3G Teaching Learning Methods		
ین : Module 3	Module 3 : دان درجة تن اور تد نين Rās, Wajh, 'Unuq aur Sadyayn (Head, Face, Neck, Thyroid Gland and Breast)							
Module Learning Objectives (At the end of the module, the students should be able to)								
1. Describe	the importance of History taking in the diseases of the Head, Face, Neck, Thyroid and E	Breast.						
2. Discuss th	ne examination and specific investigations required in confirming the diagnosis of the d	iseases of th	e Head, Face, N	leck, Thyro	d and Brea	ast.		
3. Demonstr	ate the examination of all surgical conditions of the Head, Face, Neck, Thyroid and Bre	ast.						
4 Differentiate the different surgical conditions of Head, Face, Neck, Thyroid and Breast, establish a provisional diagnosis and prescribe the investigations to confirm the diagnosis.								
ال دوجه Unit 1	∪Rās wa Wajh (Head and Face)							
قى آفات :3.1.1	لله Khllqī Āfāt (Congenital Lesions),							
) آفات :3.1.2	Zarbātī Āfāt (Traumatic Lesions) ضرباد							
3.1.3: التهابي آفات Iltiḥābī Āfāt (Inflammatory Lesions)								
3.1.4: قروح، سلعات اور اکیاس Qurūḥ, Salaʿāt aur Akyaas (Ulcers, Tumors and Cysts)								
3.1.5: خاص چَرے Khās Chehre (Characteristic Facies)								
References:	11,12,14							

3A	3В	3C	3D	3E	3F	3G
CO3,CO4	Identify the features of Congenital Lesions, Traumatic Lesions, Inflammatory Lesions, Ulcers, Tumours, Cysts and importance of Characteristic Facies in Different diseases.	1	Lecture	ск	Knows- how	L&PPT
CO3,CO4	Demonstrate the method of diagnosis of Congenital Lesions, Traumatic Lesions, Inflammatory Lesions, Ulcers, Tumours, Cysts and Characteristic Facies	2	Practical3.1	PSY- MEC	Shows- how	D,D-BED,D-M
CO3,CO4	Frame the diagnosis of Congenital Lesions, Traumatic Lesions, Inflammatory Lesions, Ulcers, Tumours, Cysts and Characteristic Facies	3	Experiential- Learning3.1	PSY- MEC	Does	CD,CBL,D,D-BED,D- M,SIM
رددر قیہ Unit 2	Unuq wa Ghudad Daraqiyyah (Neck and Thyroid Gland) ^{عن} ن دغ					
الا عنق :3.2.1	nuq (Neck)					
H روداد :3.2.2	istory					
نی معائنہ :3.2.3	Jismani Muʻā'ina (Physical Examination)					
مخصوصه :3.2.4	TafṭĪshāt-e Makhṣūṣah (Specific Investigations) تفتيشات					
بس فارقہ :3.2.5	عَتْ Taškhīṣ fāriqah (Differential diagnosis)					
ره درقیه :3.2.6	Ghuddah Daraqiyyah (Thyroid gland):					
H روداد :3.2.7	istory					
نی معائنہ :3.2.8	Jismani Muʻā'ina (Physical Examination)					
مخصوصه :3.2.9	TafṭĪshāt-e Makhṣūṣah (Specific Investigations) تفتيشات					
ي فارقه :3.2.10	3.2.10: تشخيص فارقه Taškhīṣ fāriqah (Differential diagnosis)					
References:	: 11,12,14					
3A	3В	3C	3D	3E	3F	3G

CO3,CO4	Analyse the history taking & recording, physical examination, differential diagnosis and investigations in diseases of the neck	1	Lecture	CAN	Knows- how	L&PPT ,L_VC
CO3,CO4	Demonstrate systemically the points of history taking, method of physical examination, differential diagnosis in diseases of neck.	2	Practical3.2	PSY- ORG	Shows- how	D-BED,D-M,SIM
CO3,CO4	Demonstrate points of history taking, method of physical examination, differential diagnosis, and investigational findings in thyroid gland diseases.	2	Practical3.3	PSY- MEC	Shows- how	CBL,D-BED,D-M,SIM
CO3,CO4	Record history taking, physical examination, differential diagnosis and interpretation of laboratory findings in diseases of neck.	3	Experiential- Learning3.2	PSY- MEC	Does	CD,CBL,D,D-BED,D- M,SIM
CO3,CO4	Diagnose thyroid diseases through history taking, physical examination, differential diagnosis, and interpretation of investigations.	2	Experiential- Learning3.3	PSY- ORG	Does	CD,CBL,D,D-BED,D- M,SIM
CO3,CO4	Analyse the history taking & recording, physical examination, differential diagnosis and investigations in diseases of the thyroid gland	1	Lecture	CAN	Knows- how	BL,EDU,IBL,L&PPT ,L_VC
Unit 3 ثر نَبِن Sadyayn (Breast)						
H روداد :3.3.1	istory					
نى معائنه :3.3.2	Jismani Muʻā'ina (Physical Examination)					
مخصوصه :3.3.3	TafṭĪshāt-e Makhṣūṣah (Specific Investigations) تقتيشات					
بس فارقه :3.3.4	تَخْتُ Taškhౖīş fāriqah (Differential diagnosis)					
References:	11,12,14					
3A	3В	3C	3D	3E	3F	3G
CO3,CO4	Describe the method of history taking and physical examination in diseases of the breast	1	Lecture	CE	Knows- how	BL,L&PPT ,L_VC
CO3,CO4	Demonstrate the method of history taking and physical examination, differential diagnosis, and investigations in breast diseases.	4	Practical3.4	PSY- MEC	Shows- how	D,D-BED,D-M,SIM
CO3,CO4	Demonstrate and note the method of history taking and physical examination in diseases of breast.	3	Experiential- Learning3.4	PSY- ADT	Does	CD,CBL,D,D-BED,D- M,SIM

CO3,CO4	Evaluate breast diseases using differential diagnosis and specific investigations	2	Experiential- Learning3.5	PSY- SET	Does	CD,CBL,D,D-BED,D- M,SIM		
CO3,CO4	Describe the differential diagnosis and investigations in diseases of the breast	1	Lecture	CE	Knows- how	BL,CD,FC,GBL		
Practical Tra	aining Activity							
Practical 3.1	Practical 3.1 : Diagnosis of disease of head and face							
Total Learni	ng Hours: (2 Hours)							
 Demonstration by the teacher: (50 mins) The teacher will begin by presenting clinical cases, showing slides, or using mannequins. Each lesion type (congenital, traumatic, inflammatory, ulcers, tumours, cysts) and characteristic facies will be explained, emphasizing diagnostic methods such as physical examination, history taking, palpation, and imaging (if applicable). For example, the teacher will palpate a simulated cyst to demonstrate its mobility or illustrate facial features associated with a specific condition. Student Practice: (50 mins) Under supervision, students will examine pre-arranged clinical models or case simulations. They will practice identifying key diagnostic features, such as lesion texture, size, and associated symptoms. Each student will document findings and explain the diagnostic reasoning to the teacher, onsuring correct techniques, and understanding. 								
3. Feedback	x: (20 mins)							
Feedback w	ill be provided for improvement.							
Practical 3.2	2 : Diagnosis of diseases of neck							
Total Learni	ng Hours: (2 Hours)							
1. Introducti Brief overvie	ion (10 mins): ew of common neck pathologies (e.g., lymphadenopathy, thyroid swellings, cysts).							
2. Bedside Demonstration (40 mins): A real patient with neck swelling will be presented.								
History takin	History taking: Students observe focused questioning on onset, progression, pain, systemic symptoms.							
Examination: Inspection, palpation, percussion, auscultation demonstrated step-by-step.								

Clinical reasoning: Key findings discussed interactively.

3. Model-Based Demonstration (30 mins):

Use of neck anatomy models to reinforce landmarks (e.g., anterior/posterior triangle, deep cervical nodes).

Demonstration of examination techniques on mannequin or peer using structured checklist.

4. Simulation Activity (30 mins):

Students work in small groups using simulated case scenarios (paper-based or digital) to practice forming differential diagnoses.

Each group presents findings with justification for likely diagnosis.

5. Summary & Feedback (10 mins):

Recap of structured approach: History \rightarrow Physical Exam \rightarrow Differential Diagnosis.

Faculty gives feedback and answers queries.

Practical 3.3 : Evaluation of Diseases of Thyroid Gland

Total Learning Hours: (2 Hours)

1. Introduction (10 mins): Brief overview of common thyroid disorders (goiter, hyperthyroidism, hypothyroidism, thyroid malignancy).

2. Bedside Demonstration (30 mins):

A patient with thyroid swelling is examined in real-time.

History taking: Focused on duration, changes in size, symptoms of hyper/hypothyroidism, pressure symptoms, and family history.

Examination: Inspection (neck swelling, eye signs), palpation (mobility, consistency, lymph nodes), auscultation (bruit), and systemic examination (e.g., reflexes, pulse rate).

Findings discussed with clinical reasoning.

3. Model-Based Demonstration (20 mins):

Use of anatomical neck model to show thyroid landmarks and surgical anatomy.

Demonstration of examination techniques on peer using checklists.

4. Case-Based Learning (30 mins):

Small groups given clinical cases with varied presentations (e.g., toxic nodular goiter, papillary carcinoma).

Students analyze history, examination, and interpret investigation reports (TSH, T3/T4, USG, FNAC).

Groups present differential diagnosis and management plan.

5. Simulation (20 mins):

Simulated thyroid case using mannequin or digital case scenario for diagnostic reasoning and discussion.

6. Wrap-Up & Feedback (10 mins):

Key takeaways summarized.

Student reflections and faculty feedback.

Practical 3.4 : Demonstration and Practice of Breast Disease Evaluation

Total Learning Hours: (4 Hours)

1. Introduction & Demonstration (30 minutes):

A brief interactive lecture using multimedia tools (slides, videos) on common breast diseases, key points in history, clinical examination techniques, and investigative approaches. Instructor demonstrates standardized history taking and physical examination on a breast model.

2. Demonstration on Model & Simulation (45 minutes):

In small groups, students rotate through simulation stations using silicone breast models with different pathologies (e.g., lumps, peau d'orange). They practice inspection, palpation, and documentation under instructor guidance.

3. Bedside Demonstration (1.5 hours):

In clinical settings (or using standardized patients), the instructor demonstrates a full assessment on a consenting patient. Each student takes turns performing supervised examinations. History taking is practiced with real or standardized patients.

4. Case-Based Group Work (45 minutes):

Students are divided into groups and given case vignettes. Each group discusses and presents differential diagnoses and appropriate investigations for their case.

5. Debrief & Feedback (30 minutes):

Recap key learning points. Faculty provides feedback on skills, clinical reasoning, and communication. Students reflect and ask questions.

Experiential learning Activity

Experiential-Learning 3.1 : Diagnosis of Congenital Lesions, Traumatic Lesions, Inflammatory Lesions, Ulcers, Tumours, Cysts and Characteristic Facies

Total Learning Hours: (3 Hours)

1. Introduction & Demonstration (30 minutes):

Brief instructor-led presentation using images and videos showcasing key features of different lesions and facies (e.g., café-au-lait spots, cleft lip, traumatic scars, pyogenic granuloma, basal cell carcinoma, sebaceous cyst, Down syndrome facies). Demonstration on high-fidelity models with simulated lesions.

2. Case-Based Learning & Simulation (60 minutes):

Students are split into small groups, each assigned a clinical scenario (e.g., child with swelling on face, adult with chronic ulcer, etc.). Using simulation models and mannequins with applied moulage, students assess, identify the lesion type, and propose a provisional diagnosis. Faculty circulates to guide and ask probing questions.

3. Demonstration at Bedside or on Standardized Patient (45 minutes):

Real or standardized patients with classic signs (or detailed video cases if patients unavailable) are presented. Instructor demonstrates clinical approach, followed by student participation in assessment.

4. Group Presentation & Feedback (45 minutes):

Each group presents their diagnosis and reasoning. Instructor provides structured feedback on clinical approach, diagnostic accuracy, and communication.

Experiential-Learning 3.2 : Comprehensive Evaluation of Neck Diseases

Total Learning Hours: (3 Hours)

1. Introduction & Demonstration (30 minutes):

Instructor provides a focused overview of common neck diseases (thyroid swellings, lymphadenopathy, cysts, abscesses, tumors) with key clinical features. Live or video demonstration on a model showing proper neck examination techniques—inspection, palpation (including thyroid), auscultation, and special tests.

2. Case-Based Learning & Simulation (60 minutes):

Students are divided into small groups. Each group is given a clinical case scenario (e.g., midline swelling in a young adult, enlarged lymph nodes with fever, etc.). Using models or mannequins with simulated findings, students perform mock history taking, physical examination, and suggest differential diagnoses. Simulated lab reports (e.g., FNAC, thyroid profile, CBC) are provided for interpretation.

3. Bedside/Standardized Patient Demonstration (45 minutes):

In a clinical or simulated setting, the instructor demonstrates full patient assessment. Students take turns practicing history taking and physical exam on standardized patients or real patients (with consent), focusing on neck pathologies.

4. Group Discussion & Reflection (45 minutes): Groups present their findings, diagnosis, and investigation plan. Faculty facilitates discussion, correcting errors and reinforcing clinical reasoning.

Experiential-Learning 3.3 : Evaluation of Thyroid Gland Diseases

Total Learning Hours: (2 Hours)

1. Introduction & Demonstration on Model (20 minutes):

The instructor gives a brief overview of thyroid diseases—goiter, hypothyroidism, hyperthyroidism, thyroiditis, and neoplasms. A demonstration using a neck model or mannequin highlights inspection, palpation of thyroid lobes and isthmus, detection of nodules, consistency, mobility, and special signs (e.g., Pemberton's sign, thyroid bruit).

2. Case-Based Learning & Simulation (40 minutes):

Students are divided into small groups and assigned clinical cases such as a patient with weight loss and neck swelling or fatigue and dry skin. Each group engages in history taking and physical examination on standardized patients or simulation mannequins with realistic signs. Simulated investigation reports (TSH, T3/T4, thyroid scan, FNAC) are provided for interpretation and diagnosis formulation.

3. Demonstration on Bedside or Standardized Patient (30 minutes):

The instructor performs a complete thyroid assessment on a real or standardized patient, emphasizing clinical correlations. Students then perform supervised examinations.

4. Group Discussion & Feedback (30 minutes):

Groups present their diagnostic reasoning and interpretation of lab findings. The instructor provides feedback, clarifies misconceptions, and summarizes key diagnostic strategies.

Experiential-Learning 3.4 : History recording and physical examination in diseases of breast

Total Learning Hours: (3 Hours)

1. Introduction & Demonstration on Model (30 minutes):

The instructor gives an overview of common breast diseases (e.g., fibroadenoma, breast abscess, carcinoma). A live demonstration is conducted on a breast model, showing

the proper steps of inspection and palpation, including assessment of quadrants, nipple-areola complex, skin changes, and axillary lymph nodes. Emphasis is placed on patient communication, privacy, and consent.

2. Case-Based Learning & Simulation (60 minutes):

Students are divided into small groups and assigned clinical scenarios (e.g., a young woman with a mobile lump, an elderly patient with nipple retraction). Each group practices history taking and performs physical examination on silicone breast simulators with varied pathologies. They record findings systematically using clinical examination formats.

3. Demonstration on Bedside or Standardized Patient (45 minutes):

The instructor performs a complete breast examination on a real or standardized patient, demonstrating professionalism, technique, and patient comfort. Students observe and then take turns performing the examination under supervision.

4. Group Reflection & Feedback (45 minutes):

Students present their case findings. The instructor provides feedback on technique, communication, and documentation. Common errors are discussed and corrected.

Experiential-Learning 3.5 : Differential diagnosis and investigations in diseases of breast

Total Learning Hours: (2 Hours)

1. Introduction & Demonstration on Model (20 minutes):

The session begins with a brief presentation on common breast conditions (e.g., fibroadenoma, breast abscess, carcinoma, cysts). The instructor demonstrates breast examination techniques (inspection, palpation, lymph node assessment) using anatomical breast models with simulated pathologies.

2. Case-Based Learning & Simulation (40 minutes):

Students are divided into small groups and provided with clinical case vignettes (e.g., a young woman with a painless lump, an older woman with nipple discharge). Each group conducts focused history taking and examination on a breast simulator or standardized patient. Relevant investigations (e.g., mammogram, ultrasound, FNAC, core biopsy reports) are given for interpretation. Groups are tasked with listing differential diagnoses and arriving at a provisional diagnosis.

3. Bedside/Standardized Patient Demonstration (30 minutes):

Instructor demonstrates clinical examination and communication with a real or standardized patient. Students observe and then perform examination under supervision.

4. Group Presentation & Discussion (30 minutes):

Each group presents their case, differentials, and diagnostic rationale. Faculty provides feedback, addresses questions, and summarizes key diagnostic pathways and investigation choices.

Modular Assessment

Assessment method

Hour

Instructions - Conduct a structured Modular assessment. The assessment will be for 25 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 ass	sessment. C	alculate the Mod	ular grade j	point as pe	r Table 6 C.	
Case-based	d evaluation (25 marks):						
History reco	ording and systemic physical examination of a specific case from either system: He	ad, Face, N	eck, Thyroid Gla	nd or Breas	st.		
Assessmen	t will be based on: 1. Recording of case history (10 Marks), and 2. Recording of ex	amination (I	nspection, Palpa	ation, Percu	ission and		
Auscultation	n) (15 Marks)						2
or							2
Advise basi	c and advanced investigations to confirm the provisional diagnosis and to rule out	differential d	liagnoses. (25 M	arks)			
or							
Any practica	al in converted form can be taken for assessment. (10 Marks)						
and							
Any of the e	xperiential as portfolio/reflections/presentations, can be taken as an assessment	(15 Marks)					
					1		
3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical/experiential) learning session, the students should be able to)	Ats Hours Hours Hours And Hours Hour					3G earning Methods
Module 4 : اورام عامة وبطنAwrām-e-'Āmma wa Baṭn (General Swellings and Abdomen)							
Module Learning Objectives (At the end of the module, the students should be able to)							
1 Describe the importance of history taking of General Body Lumps, Abdominal Lumps, Acute Abdomen, Chronic Abdominal Conditions, Different Hernias and Inguino scrotal swellings.							

2 Demonstrate the history recording and examination of General Body Lumps, Abdominal Lumps, Acute Abdomen, Chronic Abdominal Conditions, Different Hernias and Inguino scrotal swellings.

3 Differentiate and establish the provisional diagnosis of General Body Lumps, Abdominal Lumps, Acute Abdomen, Chronic Abdominal Conditions, Different Hernias and Inguino scrotal swellings.

Unit 1 دسلعات اورام Awram wa Sal'at (General Swellings)

4.1.1: اورام عامة وكتلة Awrām-e-'Āmma wa Kutla (General Swelling and Lump):

4.1.2: روداد History

4.1.3: جسماني معائنه Jismani Mu'ā'ina (Physical Examination)

4.1.4: تفتيشات تفتيشات TafṭĪshāt-e Makhṣūṣah (Specific Investigations)

```
لتشخيص فارقه :4.1.5 متشخيص فارقه :4.1.5 Taškhīs fāriqah (Differential diagnosis)
```

References: 11,12,14

3A	3В	3C	3D	3E	3F	3G
CO3,CO4	Describe the approach to history taking for cases of swelling and lumps.	1	Lecture	сс	Knows- how	BL,C_L,DIS,L&PPT ,L_VC
CO3,CO4	Describe the differential diagnosis and recommended investigations for cases of swelling and lumps.	1	Lecture	сс	Knows- how	BL,L&PPT ,L_VC,PL
CO3,CO4	Demonstrate the differential diagnosis and investigative methods for swelling and lump cases.	3	Practical4.1	PSY- GUD	Shows- how	CBL,D-BED,D-M
CO3,CO4	Demonstration the examination of swelling and lumps including differential diagnostic points and investigations.	3	Practical4.2	PSY- GUD	Shows- how	CBL,D-BED,D- M,L_VC,RP,SIM
CO3,CO4	Apply the method of history taking in a case of lump and swelling	3	Experiential- Learning4.1	PSY- ADT	Does	CD,CBL,SIM

CO3,CO4	Evaluate a lump and swelling using points for differential diagnosis.	2	Experiential- Learning4.2	PSY- MEC	Does	CD,CBL,PER	
CO3,CO4	Demonstrate the method of history recording, & physical examination in abdominal lump	2	Practical4.3	PSY- GUD	Shows- how	CD,CBL,D,D-BED,D- M,DIS,PER,W	
CO3,CO4	Diagnose acute abdomen and chronic abdominal conditions by interpretation of investigations and differential diagnosis	3	Experiential- Learning4.3	PSY- MEC	Does	CD,CBL,SIM	
CO3,CO4	Describe the approach to physical examination for cases of swelling and lumps.	1	Lecture	сс	Knows- how	BL,L&PPT ,L_VC,LS	
CO3,CO4	Apply the method of physical examination in the case of lump and swelling	2	Experiential- Learning4.4	PSY- ADT	Shows- how	CD,CBL,SIM	
CO3,CO4	Diagnose of a lump and swellings from investigations	2	Experiential- Learning4.5	PSY- MEC	Does	CD,CBL	
CO3,CO4	Demonstrate the interpretation of investigations, & differential diagnosis in an abdominal lump	2	Practical4.4	PSY- GUD	Shows- how	CD,CBL,D-BED,D-M,DIS	
Unit 2 کتلة بطن Kutla Baṭn) Abdominal Lump							
تلة ^{بط} ن :4.2.1	r (Kutla Batn) Abdominal Lump						
۲ روداد :4.2.2	listory						
بي معائنه :4.2.3	بسمار Jismani Muʻā'ina (Physical Examination)						
مخصوصه :4.2.4	TafṭĪshāt-e Makhṣūṣah (Specific Investigations) تفتيشات						
ں فارقہ :4.2.5	تَحْقِيْ Taškḥīṣ fāriqah (Differential diagnosis)						
References	: 11,12,14						
3A	3В	3C	3D	3E	3F	3G	
CO3,CO4	Describe the importance of history taking in an abdominal lump	1	Lecture	сс	Knows- how	L&PPT	

CO3,CO4	Demonstrate the method of history recording and physical examination of abdominal lump.	3	Experiential- Learning4.6	PSY- ADT	Does	CD,CBL,SIM	
CO3,CO4	Diagnose by interpretation of investigations and differential diagnosis in abdominal lump	3	Experiential- Learning4.7	PSY- MEC	Does	CD,CBL,LRI,PER,PrBL	
CO3,CO4	Describe the specific investigations and differential diagnosis in an abdominal lump	1	Lecture	сс	Knows- how	L&GD,L&PPT	
CO3,CO4	Describe the method of physical examination in an abdominal lump	1	Lecture	сс	Knows- how	BL,L&GD,L_VC,PL,PER	
B ^{بط} ن Unit 3	atn (Abdomen)						
طن :4.3.1 E	Batn (Abdomen)						
H روداد :4.3.2	listory						
4.3.3: اتهم شکایات Aham Shikāyāt (Chief complaints)							
4.3.4: جسماني معائنه Jismani Mu'ā'ina (Physical Examination)							
4.3.5: تفتيثات تغتيثات تفتيتات مخصوصه TaftIshāt-e MakhṢūṢah (Specific Investigations)							
<i>ن</i> فارقه :4.3.6	تَحْقِعُ Taškhīş fāriqah (Differential diagnosis)						
References	: 11,12,14						
3A	3B	3C	3D	3E	3F	3G	
CO3,CO4	Describe the method of history taking in acute and chronic abdominal conditions	1	Lecture	сс	Knows- how	L&PPT	
CO3,CO4	Describe the interpretation of investigations and differential diagnosis in acute and chronic conditions of abdomen	1	Lecture	сс	Knows- how	L&PPT	
CO3,CO4	Demonstrate the method of history taking and physical examination in acute and chronic conditions of abdomen	4	Practical4.5	PSY- GUD	Shows- how	D-BED,D-M,PAL,RP	

CO3,CO4	Demonstrate the investigations and differential diagnosis for acute and chronic conditions of abdomen	4	Practical4.6	PSY- GUD	Shows- how	CD,CBL,D,DIS,PER		
CO3,CO4	Apply the method of history taking interpretation of investigations, differential diagnosis in acute and chronic abdominal conditions.	3	Experiential- Learning4.8	PSY- ADT	Shows- how	CBL,SIM		
CO3,CO4	Frame the diagnosis in acute and chronic conditions of abdomen by performing detailed physical examinations	4	Experiential- Learning4.9	PSY- MEC	Shows- how	CD,CBL,SIM		
CO3,CO4	Describe the method of physical examination in acute and chronic abdominal conditions	1	Lecture	сс	Knows- how	BS,L&PPT ,L_VC,PL		
ت ق Unit 4 P	atq (Hernia):							
ں اقسام : 4.4	Fatq kī Aqsām (Types of Hernia)							
ا روداد :4.4	History							
) معائنه :4.4	Jismani Muʻā'ina (Physical Examination)							
ں فارقہ :4.4 <u>4</u>	۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲ ۲							
References	: 11,12,14				[
3A	3B	3C	3D	3E	3F	3G		
CO3,CO4	Describe the types of hernia	1	Lecture	сс	Knows- how	BL,FC,L&PPT ,L_VC		
CO3,CO4	Describe the points of differential diagnosis in hernia	1	Lecture	сс	Knows- how	BL,BS,L&PPT ,L_VC,PL		
CO3,CO4	Demonstrate the pointwise history recording in hernia	3	Practical4.7	PSY- GUD	Shows- how	CD,CBL,D-BED,D- M,L_VC,RP		
CO3,CO4	Demonstrate method of physical examination in hernia	3	Practical4.8	PSY- GUD	Shows- how	BL,CBL,D-BED,D- M,PBL,SIM		
CO3,CO4	Demonstrate the differential diagnosis in case of hernia	2	Practical4.9	PSY-	Shows-	CD,CBL,D-BED,D-M,L_VC		
	Ŭ			GOD	now			

CO3,CO4	Demonstrate the method of history taking and physical examination in different cases of hernia.	5	Experiential- Learning4.10	PSY- ADT	Does	CBL,PER,PBL		
CO3,CO4	Diagnose of different types of hernia by differential points	4	Experiential- Learning4.11	PSY- MEC	Does	CBL,DIS,PER,PBL		
CO3,CO4	Describe the history taking in case of hernia	1	Lecture	сс	Knows- how	L&PPT ,L_VC		
CO3,CO4	Describe the physical examination of hernia	1	Lecture	сс	Knows- how	BL,L&PPT ,L_VC,PL		
یافخدی Unit 5	ورم ٱربِي–صقنى،Waram-e-Urbī-Ṣafnī ya Fakhazī (Inguino-scrotal or Groin Swelling)							
يا فخدى :4.5.1	ورم أربى-صفنى بِWaram-e-Urbī-Ṣafnī ya Fakhazī (Inguino-scrotal or Groin Swelling)							
۲ روداد :4.5.2	listory							
4.5.3: جسماني معائنه Jismani Mu'ā'ina (Physical Examination)								
4.5.4: تشخيص فارقه Taškhīṣ fāriqah (Differential diagnosis)								
References: 11,12,14								
3A	3В	3C	3D	3E	3F	3G		
CO3,CO4	Describe the key aspects of history taking, and physical examination, in inguinoscrotal swelling.	1	Lecture	сс	Knows- how	BL,DIS,L&PPT		
CO3,CO4	Demonstrate history taking and physical examination in inguino-scrotal swelling.	2	Practical4.10	PSY- GUD	Shows- how	D-BED,D-M,SIM		
CO3,CO4	Demonstrate the key points for differential diagnosis in inguino-scrotal swelling.	2	Practical4.11	PSY- GUD	Shows- how	D-BED,D-M		
CO3,CO4	Demonstrate the skills in history taking and physical examination for inguino- scrotal swelling.	3	Experiential- Learning4.12	PSY- ADT	Does	CD,C_L,DIS,PBL		
CO3,CO4	Diagnose inguino-scrotal swelling by evaluating the points of differential diagnosis	2	Experiential- Learning4.13	PSY- MEC	Does	CD,CBL		

CO3,CO4	Describe the key aspects of differential diagnosis of inguinoscrotal swelling.	1	Lecture	CE	Knows- how	BL,FC,L&GD,L&PPT			
Practical Tr	raining Activity								
Practical 4.	1 : Demonstration of differential diagnosis and investigation of swelling and lump.								
Total Learn	Total Learning Hours: (3 Hours)								
1. Demonstration by the teacher: (45 mins)									
The teache case scena	The teacher begins by demonstrating key diagnostic points for identifying specific swellings or lumps and interpreting reports. Students will then work with real patients or case scenarios to formulate diagnoses under the teacher's supervision.								
Case-Base detailed his	Case-Based Learning: Present students with clinical scenarios of patients or real patients with swellings or lumps in different regions (e.g., neck, abdomen, limbs). Provide detailed history, physical examination findings, and initial clinical impressions.								
2. Group Di consistency	iscussion: (30 mins) Divide students into small groups to analyze the cases. Encou y, progression, and associated symptoms.	Irage them	to identify possib	ole differenti	al diagnos	es based on location, size,			
3. Investigation interpret the	ation Workshop: (30 mins) Provide investigation results such as imaging reports (ult ese findings and correlate them with clinical features to narrow down diagnoses.	trasound, C	T, or MRI), blood	d tests, or b	iopsy findii	ngs. Teach students to			
4. Problem	-Solving Presentation: (45 mins) Each group presents their diagnostic reasoning, s	upported by	investigative ev	vidence, and	d proposes	management plans.			
5. Feedbac	k:(30 mins)								
Feedback	will focus on the student's ability to logically interpret data, differentiate between co	nditions, an	d utilize investig	ations effec	tively in cli	nical reasoning.			
Practical 4.	Practical 4.2 : Evaluation of swelling and lump								
Total Learning Hours: (3 Hours)									
To teach diagnosis of swellings and lumps based on differential diagnostic points and investigations by practical activity, follow these steps:									
1. Introduction with Case Scenarios: (40 mins)									

Provide students with diverse clinical scenarios featuring different types of swellings and lumps (e.g., benign vs. malignant, inflammatory vs. congenital). Include details such as location, size, progression, and associated symptoms.

2. Group Analysis of Differential Diagnostic Points: (40 mins)

Assign students to small groups to identify and discuss key differential diagnostic points, such as consistency, mobility, tenderness, surface characteristics, and systemic symptoms.

3. Investigation Interpretation: (30 mins)

Provide investigation reports for each case (e.g., imaging, biopsy, blood tests). Guide students to correlate clinical features with findings and refine their differential diagnoses.

4. Role-Play Presentation: (40 mins)

Each group presents their diagnostic approach, justifying their reasoning with clinical findings and investigation results.

5. Feedback: (30 mins)

Feedback will focus on clinical reasoning, systematic analysis, and accurate diagnosis. This activity encourages hands-on learning and collaborative problem-solving.

Practical 4.3 : Evaluation of abdominal lump

Total Learning Hours (02 Hours)

1. Demonstration by the teacher: (45 mins)

The teacher will demonstrate a detailed method of evaluation of an abdominal lump by any video clip or on a real or simulated patient in front of the students. Then assign various case scenarios of an abdominal lump to the students and instruct them to formulate the diagnosis by taking detailed history, physical examination interpretation of investigations and differential diagnosis.

2. Hands-on Practice: (45 mins)

History Recording: Begin with a role-play exercise where students interact with standardized patients presenting with an abdominal lump. They will practice eliciting key history points, such as duration, progression, associated symptoms (pain, weight loss, bowel or urinary changes), and past medical or surgical history.

Physical Examination: In the lab, demonstrate a step-by-step examination of abdominal lumps, including inspection, palpation, percussion, and auscultation. Highlight techniques to assess lump size, consistency, mobility, tenderness, and relation to surrounding structures.

Investigation Interpretation: Provide students with case-based investigation reports (e.g., imaging, biopsy, blood tests). Teach them how to correlate findings with clinical observations.

Differential Diagnosis: Have students work in groups to analyze all data, propose differential diagnoses, and justify their reasoning.

3. Feedback: (30 mins)

The teacher will give feedback to each of the students. Feedback will focus on systematic history-taking, accurate examination techniques, and logical interpretation to develop diagnostic confidence.

Practical 4.4 : Interpretation of investigations, & differential diagnosis in abdominal lump

Total Learning Hours (02 Hours)

1. Demonstration: (45 mins)

The teacher will demonstrate a detailed method of evaluation of an abdominal lump by any video clip or on a real or simulated patient in front of the students. Then assign various case scenarios of an abdominal lump to the students and instruct them to formulate the diagnosis by taking detailed history, physical examination interpretation of investigations and differential diagnosis.

2. Hands-on Practice: (45 mins)

History Recording: Begin with a role-play exercise where students interact with standardized patients presenting with an abdominal lump. They will practice eliciting key history points, such as duration, progression, associated symptoms (pain, weight loss, bowel or urinary changes), and past medical or surgical history.

Physical Examination: In the lab, demonstrate a step-by-step examination of abdominal lumps, including inspection, palpation, percussion, and auscultation. Highlight techniques to assess lump size, consistency, mobility, tenderness, and relation to surrounding structures.

Investigation Interpretation: Provide students with case-based investigation reports (e.g., imaging, biopsy, blood tests). Teach them how to correlate findings with clinical observations.

Differential Diagnosis: Have students work in groups to analyze all data, propose differential diagnoses, and justify their reasoning.

3. Feedback: (30 mins)

The teacher will give feedback to each of the students. Feedback will focus on systematic history-taking, accurate examination techniques, and logical interpretation to develop diagnostic confidence.

Practical 4.5 : History taking and physical examination in acute and chronic conditions of abdomen

Total Learning Hours: (4 Hours)

1. Demonstration by the teacher: (90 mins)

The teacher demonstrates how to take a detailed history for both acute and chronic abdominal conditions, emphasizing:

Acute Abdominal Conditions: Sudden onset of symptoms like pain, nausea, vomiting, and changes in bowel habits (e.g., appendicitis, bowel obstruction).

Questions about the onset, location, intensity, and radiation of pain, recent trauma, and associated symptoms (e.g., fever, vomiting).

Chronic Abdominal Conditions: Long-standing symptoms such as persistent pain, bloating, or weight loss (e.g., peptic ulcers, IBS, liver cirrhosis).

Focus on the duration of symptoms, changes over time, dietary habits, alcohol use, and past medical history (e.g., gastrointestinal disorders).

Example for Acute: "When did the pain start? Is it sharp or dull? Does it radiate anywhere?"

Example for Chronic: "How long have you been experiencing these symptoms? Have they worsened over time?"

Physical Examination Demonstration

The teacher demonstrates how to perform a focused physical examination of the abdomen:

Inspection: Look for signs of distention, scars, or abnormalities.

Palpation: Assess tenderness, guarding, and masses. For acute conditions, focus on areas like the right lower quadrant (appendicitis). For chronic conditions, palpate for liver enlargement or splenomegaly.

Percussion and Auscultation: Listen for bowel sounds, tympany, or any abnormal noises.

Example for Acute: Check for rebound tenderness, guarding, and localized pain. Example for Chronic: Palpate for organ enlargement or signs of ascites. 2. Hands-On Practice: (90 mins) Students are divided into pairs: one acts as the clinician, the other as the patient (using either real or simulated patients). The clinician practices history-taking, followed by a physical examination of the abdomen for acute and chronic conditions. Clinicians should document findings and formulate potential diagnoses based on the symptoms and signs. 3. Peer Feedback and Review: (30 mins) Students swap roles and provide feedback on the completeness and accuracy of the history and examination. The teacher reviews common errors, guiding how to improve diagnostic accuracy. 4. Debrief and Reflection: (30 mins) The teacher discusses key takeaways, challenges faced during the activity, and ways to refine clinical skills for both acute and chronic abdominal conditions. Practical 4.6 : Investigations and differential diagnosis for acute and chronic conditions of abdomen Total Learning Hours: (4 Hours) 1. Demonstration: (60 mins) The teacher will demonstrate how to diagnose cases of acute and chronic conditions of the abdomen using points of differential diagnosis and various investigations using some videos or real or simulated patients. 2. Case Scenarios: (70 mins)

Present students with detailed case scenarios of real patients (in clinical settings) or simulated patients (actors or mannequins) with either acute (e.g., appendicitis, pancreatitis) or chronic abdominal conditions (e.g., irritable bowel syndrome, Crohn's disease).
Investigation Reports: Provide the students with relevant investigation reports (e.g., blood tests, imaging studies, endoscopic findings) for each case.

3. Group Discussion: (60 mins)

In small groups, students will analyze the patient's history, clinical presentation, and investigation results. They will discuss possible differential diagnoses based on the clinical and investigative data.

4. Decision Making: (20 mins)

Students will determine the most likely diagnosis, and suggest additional investigations if needed.

5. Presentation and Feedback: (30 mins)

Each group will present their diagnostic approach and reasoning, followed by feedback from instructors on their interpretation of investigations and diagnostic accuracy.

Practical 4.7 : History recording in hernia

Total Learning Hours: (3 Hours)

1. Demonstration by the teacher: (75 mins)

To teach history recording in hernia cases, begin with a clinical video case demonstrating a structured approach to obtaining a comprehensive patient history. Emphasize critical points such as the onset, duration, and progression of swelling, associated symptoms (pain, vomiting, constipation), and factors like reducibility or changes with activity or posture. Include inquiries about past medical and surgical history, occupation, lifestyle, and family history of hernias.

2. Students Practice: (75 mins)

Students will role-play with standardized patients or peers, practising history-taking skills. Each student will use a guided checklist to ensure all relevant points are covered, focusing on clear communication and empathetic interaction.

3. Feedback: (30 mins)

After the exercise, the teacher will provide feedback on thoroughness, communication skills, and the logical flow of questions, ensuring students can elicit and document key information.

Practical 4.8 : Physical Examination of Hernia

Total Learning Hours: (3 Hours)

1. Demonstration by the teacher: (60 minutes)

The teacher will explain the steps of a physical examination for different types of hernia, including inspection and palpation techniques. Using a volunteer or mannequin, the teacher will demonstrate identifying bulges, examining while the patient is standing and lying down, and the Valsalva manoeuvre to assess the presence of a hernia. Key points, such as differentiating between direct and indirect inguinal hernias, will be highlighted.

2. Student Practice: (60 minutes)

Students will work in pairs under the teacher's supervision. Each student will examine a partner or mannequin, following the demonstrated steps. The teacher will observe, provide feedback, and correct techniques as needed to ensure proper understanding and skill acquisition.

3. Reflection and Discussion: (60 minutes)

Students will discuss their experiences, ask questions, and clarify doubts.

Practical 4.9 : Differential diagnosis in hernia

Total Learning Hours: (2 Hours)

To teach differential diagnosis in hernia, begin with a clinical video demonstration showing different types of hernias (inguinal, femoral, umbilical, incisional) and their key diagnostic features. Emphasize aspects like location, reducibility, pain, and associated complications such as strangulation or obstruction.

1. Demonstration by the Teacher: (30 mins)

The teacher will demonstrate the physical examination techniques on a model or simulated or standardized patient. This includes inspecting the hernia site, palpating for defects, checking for reducibility, and performing manoeuvres like the cough impulse test. Discuss the clinical implications of findings and how they guide differentiation between hernia types and other mimicking conditions, such as lymphadenopathy or lipomas.

2. Students activity:(1 Hour)

Students will then practice examination techniques, under supervision.

3. Feedback: (30 mins)

Feedback will focus on diagnostic accuracy, proper technique, and systematic clinical reasoning for differential diagnosis.

Practical 4.10 : History taking and physical examination in inguino-scrotal swelling

Total Learning Hours: (2 Hours)

1. Demonstration in Lab, Demonstration on Model or Bedside: (50 mins)

To teach history taking and physical examination for inguinoscrotal swelling, start with a clinical video demonstration showing a structured approach to gathering patient history and performing a physical exam. Highlight key history points, such as the onset, duration, progression, associated symptoms (pain, fever, urinary changes), and relevant medical/surgical history.

In the lab, the teacher will demonstrate history-taking techniques with a standardized patient, focusing on empathetic communication and eliciting critical details. They will show the physical examination process, including inspection, palpation, transillumination, and tests like the cough impulse.

2. Hands-on Practice: (40 mins)

Students will practice these skills in pairs or small groups using simulated patients or models.

3. Feedback: (30 mins)

Feedback will address communication, thoroughness, and clinical reasoning, ensuring students can systematically evaluate inguinoscrotal swelling.

Practical 4.11 : Differential diagnostic points in inguino-scrotal swelling

Total Learning Hours: (2 Hours)

1. Demonstration and Case-Based Learning: (45 mins)

For differential diagnosis of inguinoscrotal swelling, begin with a clinical video case illustrating various presentations of inguinoscrotal swelling (e.g., hernia, hydrocele, epididymitis, or varicocele). Highlight key diagnostic features such as swelling characteristics, transillumination, reducibility, and tenderness.

In the lab, the teacher will demonstrate these examination techniques on a model or a standardized patient, emphasizing steps such as inspection, palpation, and special tests like the cough impulse and transillumination. Explain the clinical significance of findings in forming differential diagnoses.

2. Hands-on Practice: (45 mins)

Students will then practice the examination techniques on models or peers under supervision.

3. Feedback: (30 mins)

Feedback will focus on clinical reasoning, proper technique, and application of findings to differentiate between conditions. This ensures skill acquisition and diagnostic accuracy.

Experiential learning Activity

Experiential-Learning 4.1 : History recording in a case of lump and swelling

Total Learning Hours: (3 Hours)

1. Case-Based Scenarios: (2 hours)

Provide students with diverse cases (real or simulated) involving lumps or swellings in different locations (e.g., neck, abdomen, groin). Each scenario includes patient history and initial examination findings to guide their approach.

Students practice history-taking with standardized patients or peers. They tailor their questions to explore the lump's onset, progression, associated symptoms, and relevant medical history.

Physical Examination: Students perform systematic examinations on mannequins or standardized patients, focusing on adapting techniques to the lump's location.

Key examination points include inspection (size, shape, skin changes), palpation (consistency, mobility, tenderness), and specific tests (e.g., transillumination, cough impulse test).

2. Group Analysis and Reflection: (45 minutes)

In small groups, students discuss their findings and diagnostic impressions, highlighting how their adapted methods influenced their conclusions.

3. Feedback and Debrief: (15 minutes)

Instructors provide constructive feedback on the students' techniques and reasoning, emphasizing adaptability and clinical accuracy.

Experiential-Learning 4.2 : Dfferential diagnosis in case of lump and swelling

Total Learning Hours: (2 Hours)

1. Case-Based Learning: (80 mins)

Assign students to work with real patients (in clinical settings) or simulated patients (actors or mannequins) presenting with lumps or swellings minimum of two cases.

Provide detailed case histories and examination opportunities. Real patients allow firsthand experience, while simulated patients offer a controlled learning environment.

Students will analyse the provided investigation results (e.g., imaging, lab reports).

In small groups, students will discuss findings, formulate differential diagnoses, and suggest additional investigations.

2. Presentation: (30 mins)

Each group presents their approach, supported by clinical evidence.

3. Feedback: (10 mins)

The teacher provides feedback on diagnostic accuracy, communication skills and systematic evaluation.

Experiential-Learning 4.3 : Interpretation of investigations and differential diagnosis in acute abdomen and chronic abdominal conditions

Total Learning Hours: (3 hours)

Case-Based Learning: (45 mins)

Students will be provided with real or simulated patient cases of acute and chronic abdominal conditions. Begin by presenting students with detailed case scenarios of acute (e.g., appendicitis, perforated peptic ulcer) and chronic (e.g., Crohn's disease, chronic pancreatitis) abdominal conditions. Each scenario will include patient history, physical examination findings, and investigation results such as blood tests, imaging, or endoscopy reports.

Hands-on Learning: (60 mins)

Students will work in small groups to analyse the data, identify key clinical clues, and interpret the investigation findings. They will then formulate differential diagnoses, prioritize possible conditions, and propose further confirmatory tests or management plans.

Group Discussion: (45 mins)

The teacher will facilitate group discussions, encouraging critical thinking and reasoning.

Feedback: (30 mins)

Feedback will highlight the students' ability to correlate clinical findings with investigations and arrive at accurate diagnoses through a structured approach. Experiential-Learning 4.4 : Physical examination in the case of lump and swelling Total Learning Hours: (2 Hours) 1. Case-Based Scenarios: (1 hour) Provide students with diverse cases (real or simulated) involving lumps or swellings in different locations (e.g., neck, abdomen, groin). Each scenario includes patient history and initial examination findings to guide their approach. Students practice history-taking with standardized patients or peers. They tailor their questions to explore the lump's onset, progression, associated symptoms, and relevant medical history. Physical Examination: Students perform systematic examinations on manneguins or standardized patients, focusing on adapting techniques to the lump's location. Key examination points include inspection (size, shape, skin changes), palpation (consistency, mobility, tenderness), and specific tests (e.g., transillumination, cough impulse test). 2. Group Analysis and Reflection: (45 minutes) In small groups, students discuss their findings and diagnostic impressions, highlighting how their adapted methods influenced their conclusions. 3. Feedback and Debrief: (15 minutes) Instructors provide constructive feedback on the students' techniques and reasoning, emphasizing adaptability and clinical accuracy. Experiential-Learning 4.5 : Investigations in case of lump and swellings Total Learning Hours: (2 hours) 1. Case-Based Learning: (80 mins) Assign students to work with real patients (in clinical settings) or simulated patients (actors or mannequins) presenting with lumps or swellings minimum of two cases. Provide detailed case histories and examination opportunities. Real patients allow firsthand experience, while simulated patients offer a controlled learning environment.

Students will analyse the provided investigation results (e.g., imaging, lab reports).

In small groups, students will discuss findings, formulate differential diagnoses, and suggest additional investigations.

2. Presentation: (30 mins)

Each group presents their approach, supported by clinical evidence.

3. Feedback: (10 mins)

The teacher provides feedback on diagnostic accuracy, communication skills and systematic evaluation.

Experiential-Learning 4.6 : History recording and physical examination of abdominal lump

Total Learning Hours: (3 Hours)

1. Case-Based Scenarios: (40 mins)

Provide students with diverse patient cases (real or simulated), each involving abdominal lumps with varying characteristics such as size, location, progression, and associated symptoms.

2. Hands-On Practice: (90 mins)

History-Taking: Students interact with standardized patients or peers, practising history-taking to explore onset, duration, symptoms (pain, bowel changes), and risk factors (trauma, infections, family history).

Physical Examination: Students perform detailed examinations, adapting their approach based on the lump's characteristics (e.g., palpating for consistency, mobility, tenderness, or using techniques like percussion and auscultation).

Group Analysis: Students discuss their findings in small groups, correlating history and examination results with possible differential diagnoses.

3. Feedback and Reflection: (50 mins)

Groups present their adapted methods and conclusions. The instructor provides feedback on their clinical reasoning and adaptability.

Experiential-Learning 4.7 : Investigation, their interpretation and differential diagnosis in abdominal lump

Total Learning Hours (03Hours)

1. Case Scenarios: (60 mins)

Provide students with detailed case scenarios (real or simulated) involving patients with abdominal lumps. Include clinical history, physical examination findings, and investigation reports such as ultrasound, CT scans, blood tests, or biopsy results.

2. Group Analysis: (30 mins)

Divide students into small groups. Each group will study the given case, evaluate the clinical data, and interpret the investigation findings to identify key diagnostic clues.

3. Framing the Diagnosis: (30 mins)

Students will apply differential diagnostic principles to determine possible causes of the abdominal lump (e.g., hernia, tumor, abscess, cyst). They will prioritize the likely diagnosis and discuss their reasoning.

4. Presentation and Justification: (30 mins)

Groups will present their diagnostic process, highlighting how the investigation results guided their conclusions and differentiating between similar conditions.

5. Feedback: (30 mins)

Provide constructive feedback on the students' interpretation of findings, clinical reasoning, and approach to forming a differential diagnosis.

Experiential-Learning 4.8 : Diagnosis of acute and chronic abdominal conditions from history taking

Total Learning Hours: (3 hours)

1. History Taking: (45 mins)

Each student is assigned a simulated patient scenario (either acute or chronic abdominal condition). Students independently conduct a complete history-taking process, including:

Chief Complaint: Determine the main issue the patient is facing.

History of Present Illness (HPI): Explore symptom onset, duration, nature, and aggravating or relieving factors.

Past Medical History (PMH): Identify any previous abdominal surgeries, chronic conditions, or relevant family history.

Drug History: Inquire about current medications and possible over-the-counter or herbal remedies.

Lifestyle Factors: Ask about diet, alcohol use, and exercise.

2. Interpretation of Investigations: (30 mins)

After history-taking, the student receives a set of relevant patient investigation results (e.g., blood tests, imaging, stool analysis) from the facilitator.

The student interprets the lab results (e.g., elevated white blood cell count, liver function tests) and imaging findings (e.g., free air, organ enlargement) independently.

They then correlate the results with the symptoms and history to refine their clinical reasoning.

3. Differential Diagnosis Formulation: (30 mins)

Based on the history and investigations, the student independently formulates a differential diagnosis, considering both common and less common causes for the abdominal condition.

For acute cases: The student may consider conditions like appendicitis, perforation, or pancreatitis.

For chronic cases: They may consider IBS, peptic ulcers, or inflammatory bowel disease.

4. Observation and Assessment: (45 mins)

The teacher observes each student throughout the activity, assessing their:

Ability to gather a thorough and accurate history.

Skill in interpreting investigations and linking them to clinical findings.

Diagnostic reasoning and ability to construct a coherent differential diagnosis.

The teacher may take notes on the student's approach, asking clarifying questions as needed but not providing direct input.

5. Feedback and Reflection: (30 mins)

After all students have completed the activity, the teacher provides individual feedback based on the student's history taking, interpretation of investigations, and differential diagnosis formulation.

Experiential-Learning 4.9 : Physical examination in acute and chronic abdominal conditions

Total Learning Hours: (4 hours)

Case-Based Practice: (35 mins)

Provide students with a minimum of two case scenarios of patients (real or simulated) presenting with acute (e.g., appendicitis, bowel obstruction) and chronic abdominal conditions (e.g., hepatomegaly, abdominal tumours). Include patient history for context.

Physical Examination: (60 mins)

Students perform detailed abdominal examinations on standardized patients or mannequins, focusing on identifying clinical signs relevant to each condition. Emphasize techniques like Murphy's sign, Rovsing's sign, and shifting dullness to guide diagnosis.

Group Discussion and Diagnosis Framing: (60 mins)

In small groups, students analyse their findings, correlate them with clinical features, and frame a diagnosis for each case, including differential diagnoses.

Case Presentation: (45 mins)

Groups present their diagnostic process.

Feedback: (40 mins)

The teacher will provide feedback on their examination techniques, identification of key signs, and diagnostic reasoning.

Experiential-Learning 4.10: History taking and physical examination to different cases of hernia.

Total Learning Hours: (5 Hours)

1. Case-Based Scenarios: (60 Minutes)

Provide students with various case scenarios or real patients representing different hernias, each including patient history, symptoms, and clinical clues.

2. Hands-On Practice: (2 Hours 30 mins)

History-Taking Role-Play: In pairs or small groups, students practice eliciting relevant history for each hernia type from standardized patients or peers, focusing on onset, progression, reducibility, pain, and risk factors like occupation or surgery.

Physical Examination: Students perform hernia-specific examination techniques, including inspection, palpation for defects, and manoeuvres like the cough impulse test, adapting their approach based on hernia location and characteristics.

3. Group Analysis and Discussion: (60 Minutes)

Students analyze findings within their groups, identify key differential points, and frame a provisional diagnosis for each case.

4. Presentation and Feedback: (30 Minutes)

Groups present their adapted methods and findings to the class. The instructor provides feedback, emphasizing the importance of tailoring the approach to individual cases and ensuring accurate diagnosis.

Experiential-Learning 4.11 : Differential points of diagnosis in hernia

Total Learning Hours: (4 Hours)

1. Case Scenarios: (45 mins)

Provide students with case scenarios of patients (real or simulated) presenting with hernia-related symptoms. Include details such as the lump's location, duration, reducibility, pain, and systemic symptoms.

2. Physical Examination Practice: (45 mins)

Students perform physical examinations on simulated or standardized patients, focusing on key diagnostic manoeuvres such as the cough impulse test, palpation for defect location, and assessment of reducibility.

3. Investigation Interpretation: (45 mins)

Present investigation results, imaging or lab tests for each case. Students will interpret these findings to confirm their diagnosis.

4. Group Discussion and Diagnosis Framing: (45 mins)

Students work in small groups to analyse findings, compare differential points, and frame a diagnosis for each case.

5. Presentation: (30 mins)

Groups present their diagnosis and reasoning.

6. Feedback: (30 mins)

The teacher provides feedback on the accuracy of their differential points and diagnostic process.

Experiential-Learning 4.12 : History Taking and Physical Examination for Inguino-Scrotal Swelling

Total Learning Hours: (3 Hours)

1. Case-Based Group Activity (80 mins)

Students will be divided into groups and assigned to various cases of inguinoscrotal swelling.

Students practice history-taking with real patients or peers. They focus on key aspects such as onset, duration, progression, associated symptoms (pain, fever, urinary changes), and relevant medical/surgical history.

Students perform systematic physical examinations on mannequins or real patients. Techniques include:

Inspection for asymmetry, swelling, and skin changes.

Palpation to assess consistency, reducibility, and tenderness.

Performing specific tests like the cough impulse test and transillumination (if applicable).

2. Group Discussion and Diagnosis: (60 mins)

Students discuss findings in small groups, correlate them with clinical scenarios, and propose differential diagnoses for the swelling.

3. Feedback and Reflection: (40 mins)

The teacher provides individualized feedback on technique and reasoning, emphasizing thoroughness and accuracy. Students reflect on their performance to identify areas for improvement.

Experiential-Learning 4.13 : Differential diagnosis in inguino-scrotal swelling

Total Learning Hours: (2 Hours)

1. Case Presentation: (20 mins)

Provide students with detailed clinical scenarios involving patients (real or simulated) presenting with inguinoscrotal swellings. Include history elements such as onset, duration, pain, and any systemic symptoms, alongside physical examination findings.

2. Hands-On Practice: (40 mins)

Students will perform physical examinations on standardized patients or mannequins. They will apply techniques, like inspection, palpation, transillumination, and cough impulse testing to evaluate the swelling's characteristics.

3. Investigation Interpretation: (20 mins)

Supply relevant investigation reports, such as ultrasound or lab results, for students to interpret and correlate with clinical findings.

4. Group Diagnosis Framing: (20 mins)

In small groups, students analyse the findings and frame a diagnosis, justifying their reasoning based on differential points. Each group present their conclusions to the class.

5. Feedback: (20 mins)

The teacher provides feedback on their diagnostic approach, clinical reasoning, and interpretation of findings.

Modular Assessment	
Assessment method	Hour
Instructions - Conduct a structured Modular assessment. Assessment will be for 75 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.	c
Case-based evaluation:	0

History recording and systemic physical examination of a specific case of any General Body Swelling or Abdominal swelling. (20 Marks)	
and	
History recording and systemic physical examination of Acute Abdomen or Chronic Abdominal Condition. (20 Marks)	
and	
A case of Hernia or Inguinoscrotal swelling for recording history and systemic physical examination. (20 Marks)	
and	
Basic and advanced investigations to confirm the provisional diagnosis and to rule out differential diagnosis. (15 Marks)	
or	
Any practical in converted form can be taken for assessment (30 Marks)	
and	
Any of the experiential/presentations can be taken as an assessment. (45 Marks)	

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical/experiential) learning session, the students should be able to)	3C Notional Learning Hours	3D Lecture/ Practical/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/ Shows how/ Knows how/ Know)	3G Teaching Learning Methods
ل : Module 5	Nizām-e-Maqʻadī-Mustaqīmī wa Tanāsulī Bawlī (Ano-Rectal a نظام مقعدی۔ مستعیمی و تناکل پول	and Genitou	rinary system)			
Module Lea (At the end o	rning Objectives of the module, the students should be able to)					
1 Describe t	the importance of history taking of different surgical conditions of the Ano-Rectal &	Genitourina	ry System.			
2 Describe t	the examination of the Ano-Rectal & Genitourinary System and the specific investig	ations requi	ired for confirmin	ng the diagr	nosis.	
3 Demonstra	ate the examination of different surgical conditions of the Ano-Rectal & Genitourina	ry System.				
4 Differentia	ate the different surgical conditions of the Ano-Rectal & Genitourinary System.					
5 Illustrate t	he specific investigations required for confirming the provisional diagnosis.					
معاءستقيم Unit 1	مقعرومMaq'ad wa Ma'ā' Mustaqīm (Ano-Rectal Case)					
ء منتقم :5.1.1	مقعد و معا Maq'ad wa Ma'ā' Mustaqīm (Ano-Rectal Case)					
5.1.2: روداد History						
5.1.3: مقعد و معاء متنقيم كا معائنه Mu'ā'ina <i>Maq'ad wa</i> Ma'ā' Mustaqīm (Ano-rectal Examination)						
5.1.4: تفتيشات مخصوصه TafṭĪshāt-e Makhṣūṣah (Specific Investigations)						
5.1.5: تشخيص فارقه Taškhīṣ fāriqah (Differential diagnosis)						

References	: 11,12,14						
ЗA	3В	3C	3D	3E	3F	3G	
CO3,CO4	Describe the points of history taking and recording in anorectal diseases.	1	Lecture	сс	Knows- how	L&PPT	
CO3,CO4	Describe the specific investigations and differential diagnosis in ano-rectal diseases.	1	Lecture	сс	Knows- how	L&PPT	
CO3,CO4	Demonstrate history taking and recording in a case of ano-rectal disease.	2	Practical5.1	PSY- GUD	Shows- how	D-BED	
CO3,CO4	Demonstrate the ano-rectal examination and interpretation of related investigations.	4	Practical5.2	PSY- GUD	Shows- how	CD,CBL,SIM	
CO3,CO4	Apply the appropriate method of history taking in ano-rectal cases.	4	Experiential- Learning5.1	PSY- ADT	Does	CD,CBL,SIM	
CO3,CO4	Frame the diagnosis of ano-rectal cases by physical examination.	4	Experiential- Learning5.2	PSY- MEC	Shows- how	CBL,RLE,SIM	
CO3,CO4	Describe the method of anorectal examination.	1	Lecture	сс	Knows- how	BL,L&GD,L&PPT ,L_VC,LS	
رنافذة Unit 2	ى المورنافدة وغي vāsūr Nāfizah wa Ghayr Nāfizah (Sinus and Fistula)						
نانذة :5.2.1	اصور نافذة وغير Nāsūr Nāfizah wa Ghayr Nāfizah (Sinus and Fistula)						
۲ روداد :5.2.2	listory						
) معائنه :5.2.3	بسماؤ Jismani Muʻā'ina (Physical Examination)						
فخصوصه :5.2.4	Taftīshāt-e Makhṣūṣah (Specific Investigations) تفتيثات						
5.2.5: تشخيص فارقه Taškhīṣ fāriqah (Differential diagnosis)							
References	: 11,12,14						
3A	3B	3C	3D	3E	3F	3G	

CO3,CO4	Illustrate the points in history taking, physical examination, specific investigations and differential diagnosis of sinus and fistula	1	Lecture	CAN	Knows- how	L&PPT		
CO3,CO4	Demonstrate history taking and detailed physical examination of sinus and fistula	2	Practical5.3	PSY- GUD	Shows- how	D-BED,D-M,SIM		
CO3,CO4	Adapt the history-taking process and physical examination methods to identify cases of sinus and fistula	3	Experiential- Learning5.3	PSY- ADT	Shows- how	CBL,PBL,RLE,SIM		
ظہریہ Unit 3	Unit 3 اعضاء تناسليه ظاہر بي A'zā' Tanāslīyah Zāhirīyah (External Genitalia) ^{صف} ن وقضيب (Ṣafan wa Qazīb) Scrotum and Penis							
ظاہر بیہ :5.3.1	Şafan wa Qazīt) صفن وقضيب (A'zā' Tanāslīyah Żāhirīyah (External Genitalia) صفن وقضيب) Scrotum a	and Penis					
۲ روداد :5.3.2	listory							
) معائنه :5.3.3	Jismani Muʻā'ina (Physical Examination)							
فخصوصه :5.3.4	َقْتَيْتَاتِ Tafṭīshāt-e Makhṣūṣah (Specific Investigations)							
ں فارقہ :5.3.5	تَخْتِعُمُ Taškhīş fāriqah (Differential diagnosis)							
References	: 11,12,14							
ЗА	3В	3C	3D	3E	3F	3G		
CO3,CO4	Describe the points of history taking in diseases of the scrotum and penis	1	Lecture	сс	Knows- how	L_VC		
CO3,CO4	Describe specific investigations and differential diagnosis in diseases of scrotum and penis	1	Lecture	сс	Knows- how	L_VC		
CO3,CO4	Display the right way of history taking in scrotal and penile diseases	3	Practical5.4	PSY- GUD	Shows- how	RP,SIM		
CO3,CO4	Demonstrate physical examination of scrotum and penis	3	Practical5.5	PSY- GUD	Shows- how	D-BED,D-M		
CO3,CO4	Organise the history taking and physical examination to diagnose the case of scrotum and penis	3	Experiential- Learning5.4	PSY- ADT	Does	CBL,DIS,RLE,SIM		

CO3,CO4	Frame the diagnosis of disease of scrotum and penis by interpreting the investigations	4	Experiential- Learning5.5	PSY- MEC	Does	DIS,PBL,RLE,SIM	
CO3,CO4	Describe the points of history taking and way of physical examination in diseases of the scrotum and penis	1	Lecture	сс	Knows- how	BL,L&GD,L_VC,PL,PER	
Unit 4 الظام بوليہ Nizam-e- Bawliya (Urinary system)							
مِ بوليه :5.4.1	Nizam-e- Bawliya (Urinary system) نظ						
ا روداد :5.4.2	History						
) معائنہ :5.4.3	Jismani Muʻā'ina (Physical Examination) جسمان						
فصوصه :5.4.4	تفتيشاتِ Taftīshāt-e Makhṣūṣah (Specific Investigations)						
ں فارقہ :5.4.5	تَخْتِعُمُ Taškhīṣ fāriqah (Differential diagnosis)						
References	: 11,12,14						
3A	3В	3C	3D	3E	3F	3G	
CO3,CO4	Describe important points related to history taking in urinary diseases	1	Lecture	сс	Knows- how	L&PPT	
CO3,CO4	Describe the specific investigations and differential diagnosis in urinary diseases	1	Lecture	сс	Knows- how	L&PPT	
CO3,CO4	Demonstrate the history taking in diagnosis of urinary case	2	Practical5.6	PSY- GUD	Shows- how	CBL,RP,SIM	
CO3,CO4	Demonstrate the diagnosis of urinary case by detailed physical examination and interpretations of investigations	4	Practical5.7	PSY- GUD	Shows- how	D-BED,SIM	
CO3,CO4	Apply the right way of history taking in urinary cases	4	Experiential- Learning5.6	PSY- GUD	Does	PBL,RLE,SIM	
	From the diagnosic of diagons of uringry system using physical examination		Exportiontial	Dev			
CO3,CO4	and investigation reports	4	Learning5.7	MEC	Does	CBL,RLE,SIM	

CO3,CO4	Describe how to do physical examination for urinary diseases	1	Lecture	сс	Knows- how	L&PPT ,L_VC	
Practical T	Practical Training Activity						
Practical 5.	Practical 5.1 : History taking in a case of ano-rectal diseases						
Total Learn	Total Learning Hours (02 Hours)						
1. Demons	tration: (50 mins)						
The teache	er conducts a live demonstration with a standardized patient or role-playing assistan	t, emphasiz	ing the following	key areas:			
Presenting	Complaints: Document symptoms such as pain, bleeding, discharge, constipation,	or swelling.					
History of F	Presenting IIIness: Explore onset, duration, aggravating/relieving factors, and assoc	iated sympt	oms.				
Past Medic	cal History: Inquire about previous ano-rectal conditions (e.g., haemorrhoids, fissure	es), surgerie	s, or systemic il	lnesses like	Crohn's d	isease.	
Family Hist	tory: Focus on genetic conditions or similar complaints.						
Lifestyle an	nd Dietary Habits: Assess bowel habits, dietary fibre intake, and physical activity.						
The teache	er demonstrates a structured recording of the history in a patient file.						
2. Student	Practice: (50 mins)						
Each stude	ent takes a detailed history of a standardized patient, focusing on effective communic	cation and a	ctive listening.				
Records the	e findings systematically in a structured format provided.						
3. Observation and Assessment: (20 mins)							
The teache	The teacher observes the interaction, evaluating:						
Completen	Completeness and relevance of the history.						

Clarity and organization of recorded notes. Professionalism and patient-centered communication. Provides personalized feedback to each student. Practical 5.2 : Ano-Rectal Examination and interpretation of investigations Total Learning Hours (04 Hours) 1. Demonstration: (90 mins) The teacher performs a detailed ano-rectal examination on a mannequin or standardized patient while explaining each step. Inspection: Observe for external abnormalities (e.g., haemorrhoids, fistulas, fissures). Digital Rectal Examination (DRE): Demonstrate technique, assessing sphincter tone, rectal wall integrity, and presence of masses. Proctoscopy/Anoscopy: Explain and perform the procedure to visualize the anal canal and rectum. Discuss common findings (e.g., internal haemorrhoids, strictures, or growths). Explain the interpretation of investigations such as stool examination, proctoscopy results, colonoscopy, or imaging (MRI/CT). 2. Student Practice: (90 mins) Each student practices the examination on a mannequin or simulated model, following the demonstrated sequence. Practice interpreting mock investigation reports provided by the teacher. 3. Observation and Assessment: (30 mins) Observe each student's examination technique using a structured checklist: The thoroughness of inspection and palpation.

Proper DRE and anoscopy technique. Accurate interpretation of clinical findings and investigations. 4. Feedback: (30 mins) Provide feedback and clarify errors or misunderstandings. Practical 5.3 : Evaluation of Sinus and Fistula Total Learning Hours (02 Hours) 1. Teacher Demonstration: (45 mins) The teacher demonstrates the following steps on a real or simulated patient: History Taking Chief Complaint: Ask about symptoms such as discharge (purulent, serous, or bloody), pain, swelling, itching, or difficulty with movement. History of Present Illness (HPI): Explore the onset, duration, progression, aggravating and relieving factors, and previous treatments. Associated Symptoms: Inquire about fever, systemic symptoms, or recurrent infections. Past Medical and Surgical History: Document any history of trauma, previous surgeries, infections, or chronic illnesses such as diabetes or Crohn's disease. Lifestyle and Social History: Ask about hygiene practices, occupational hazards, or lifestyle factors like smoking or alcohol use. Family History: Identify familial predispositions to hidradenitis suppurativa or Crohn's disease. **Physical Examination** Inspection: Observe the location, size, and appearance of the sinus or fistula.

Look for signs of inflammation (redness, swelling), discharge, scarring, or secondary openings. Assess skin changes like induration or discolouration. Palpation: Check for tenderness, induration, or fluctuation. Trace the tract gently to assess its extent and connections. Identify any underlying masses or nodes. Discharge Examination: Assess the type (serous, purulent, or bloody) and odour of discharge, if present. Special Tests: Use a probe to assess the tract's direction and depth (gently, under sterile conditions). Perform a fistulogram or imaging if clinically indicated. 2. Student Practice Under Supervision: (45 mins) Each student independently performs the procedure on a real or simulated patient, guided by the teacher's demonstration. History Taking Gather comprehensive information about the patient's symptoms, medical history, and associated factors. **Physical Examination** Conduct a systematic and careful examination, applying the demonstrated techniques. Pay attention to detail, such as secondary openings and systemic signs. 3. Teacher Observation and Feedback: (30 mins)

The teacher observes students' performance, ensuring adherence to proper methods and attention to patient comfort and safety.

Feedback is given after the session, focusing on:

Completeness and relevance of the history.

Technique and thoroughness during the physical examination.

Accuracy in identifying key findings and potential complications.

Practical 5.4 : History Taking in Scrotal and Penile Diseases

Total Learning Hours (03 Hours)

1. Demonstration by the teacher: (70 mins)

Structured History Taking:

The teacher demonstrates history-taking from a simulated or standardized patient with scrotal or penile symptoms. Key areas include:

Presenting Complaints: Inquire about pain, swelling, discharge, lesions, itching, or urinary issues.

Symptom Onset and Progression: Explore duration, triggering events (e.g., trauma, infections), and changes over time.

Associated Symptoms: Fever, groin pain, systemic symptoms like weight loss, or sexual dysfunction.

Medical and Surgical History: History of sexually transmitted infections, surgeries (e.g., circumcision), or systemic diseases (e.g., diabetes, TB).

Sexual History: Non-judgmentally explores practices, partners, and contraception use.

Lifestyle and Habits: Smoking, alcohol, hygiene practices, and occupational exposures.

The teacher emphasizes effective communication, empathy, and maintaining patient comfort.

2. Student Practice: (70 mins)

Students practice history-taking on simulated patients, following the demonstrated approach.

Document the patient's history in a structured and organized manner.

Present findings and propose differential diagnoses such as epididymitis, hydrocele, balanitis, or Peyronie's disease.

3. Reflection and Feedback: (40 mins)

Students receive immediate feedback on their questioning, communication style, and documentation.

Group discussion to highlight challenges and refine techniques.

Practical 5.5 : Physical Examination of the Scrotum and Penis

Total Learning Hours (03 Hours)

1. Demonstration: (70 mins)

The instructor demonstrates a step-by-step physical examination on a mannequin or simulated patient, emphasizing:

Inspection: Observing for swelling, discolouration, lesions, or discharge.

Palpation: Assessing for tenderness, masses, temperature, and consistency of the testes, epididymis, and spermatic cord.

Special Tests: Techniques like transillumination for differentiating cystic from solid masses or assessing hernia presence.

Highlight appropriate communication, patient positioning, and maintaining privacy and respect.

2. Student Practice: (70 mins)

Students perform the same examination on mannequins or under supervision on simulated patients, following the demonstrated steps.

They practice identifying normal findings and variations, and documenting results accurately.

3. Reflection and Feedback: (40 mins)

Immediate feedback is provided to correct techniques.

A group discussion follows to clarify doubts and share observations.

Practical 5.6 : History taking in urinary case

Total Learning Hours (02 Hours)

1. Demonstration: (45 mins)

The teacher demonstrates how to take a comprehensive urinary history from a simulated or real patient. Key points include:

Presenting complaints: Onset, duration, and progression of symptoms like dysuria, frequency, urgency, haematuria, or nocturia.

Associated symptoms: Fever, flank pain, nausea, or systemic symptoms like fatigue.

Past medical history: Previous urinary infections, surgeries, or chronic conditions like diabetes or hypertension.

Social and lifestyle history: Fluid intake, smoking, or occupational exposures.

Family history: Kidney diseases or hereditary conditions.

The teacher models active listening, patient empathy, and effective note-taking.

2. Student Practice: (45 mins)

Students independently take a history from standardized patients or simulated scenarios with a structured format.

Practice organizing and documenting the collected information in a logical flow.

Present the history to peers or instructors, identifying key points leading to a provisional diagnosis (e.g., UTI, nephrolithiasis).

3. Reflection and Feedback: (30 mins)

Immediate feedback is provided on communication, completeness, and organization of the history.

Group discussion follows to highlight best practices and address common challenges.

Practical 5.7 : Evaluation of urinary case using physical examination and investigations Total Learning Hours (04 Hours) 1. Demonstration by the teacher: (100 mins) Physical Examination: The teacher demonstrates a step-by-step examination focusing on: Inspection: Observing for abdominal distension, visible masses, or flank swelling. Palpation: Assessing for kidney enlargement, bladder distension, or tenderness in the flanks or suprapubic area. Percussion: Demonstrating techniques for assessing bladder fullness or Costo-vertebral angle tenderness. Auscultation: Listening for renal bruits in hypertensive cases. Interpretation of Investigations: The teacher explains the correlation between physical findings and common investigations like urinalysis, ultrasound, CT, and kidney function tests. Example: linking haematuria with stones or proteinuria with glomerular disease. 2. Student Practice: (100 mins) Students perform the demonstrated examination steps on simulated or real patients under supervision. They review and interpret provided investigation reports, correlating findings with clinical signs to propose a diagnosis (e.g., UTI, nephrolithiasis, or acute kidney injury). 3. Reflection and Feedback: (40 mins) The teacher provides immediate feedback on examination techniques and diagnostic reasoning. Students discuss their interpretations and refine their understanding through peer and teacher feedback. **Experiential learning Activity**

Experiential-Learning 5.1 : History taking in ano-rectal cases Total Learning Hours (04 Hours) 1. Case Assignment: (30 mins) The teacher provides a real or simulated patient scenario presenting with common ano-rectal complaints such as pain, bleeding, discharge, swelling, or changes in bowel habits. Each student is assigned an individual patient to gather history independently. 2. Student-Led History Taking: (2 hours) Students follow a structured history-taking approach: **Chief Complaint** Identify the primary reason for the patient's visit (e.g., rectal pain, bleeding, swelling, discharge). History of Present Illness Explore the details of the complaint: Onset: When did the symptoms start? Progression: Have the symptoms worsened, improved, or remained the same? Characteristics: Nature of the pain (sharp, dull, burning), type of discharge (purulent, serous, or bloody), type of bleeding (streaks, drops, or profuse). Associated Symptoms: Constipation, diarrhoea, fever, systemic fatigue, or urinary symptoms. **Bowel Habits** Investigate frequency, consistency, straining, or presence of mucus or blood in stools.

Past Medical History Previous ano-rectal conditions (e.g., haemorrhoids, fissures, fistulas). Chronic illnesses like diabetes, inflammatory bowel disease, or tuberculosis. Surgical History History of ano-rectal surgeries, trauma, or interventions. Family History Familial predisposition to colorectal cancer, inflammatory bowel disease, or other ano-rectal disorders. Lifestyle Factors Diet (fibre intake), hydration, physical activity, and any relevant occupational hazards. 3. Observation and Assessment: (45 mins) The teacher observes the interaction to evaluate: Communication skills and empathy. Systematic coverage of all relevant history components. Attention to patient comfort and cultural sensitivity. 4. Feedback and Reflection: (45 mins) The teacher provides immediate, structured feedback on the student's strengths and areas for improvement. Students reflect on their approach and discuss how they could enhance their skills. Experiential-Learning 5.2 : Diagnosis of Ano-Rectal Cases through Physical Examination

Total Learning Hours (04 Hours) 1. Preparations: (30 mins) Students are assigned various real or simulated patients, with relevant symptoms like pain, bleeding, discharge, or swelling in the ano-rectal region. Students activity: Students perform the following steps independently. 2. History Taking: (50 mins) Document the chief complaint (e.g., pain, bleeding, swelling, discharge). Explore the history of the present illness (HPI), focusing on the onset, duration, triggers, progression, and associated symptoms like constipation, fever, or incontinence. Inquire about past medical and surgical history (e.g., previous ano-rectal procedures, infections). Assess lifestyle factors such as diet, hydration, bowel habits, and family history of ano-rectal diseases. 3. Physical Examination: (50 mins) Inspection: Observe the perianal area for swelling, redness, fissures, fistula openings, external haemorrhoids, or prolapse. Note skin changes, scars, or signs of chronic irritation. Palpation: Conduct a gentle digital rectal examination (DRE) to evaluate the tone, tenderness, masses, or irregularities in the anal canal and rectum. Assess for the presence of abscesses, induration, or internal haemorrhoids. Special Tests:

Assess the extent of a fistula tract using a probe, if indicated and under sterile conditions.
Examine for signs of systemic infection (e.g., fever, generalized swelling).
4. Framing the Diagnosis: (50 mins)
Based on the findings, students synthesize a differential diagnosis and justify their reasoning. Examples include:
Haemorrhoids: Painless bleeding, external swelling.
Anal Fissure: Painful defecation, visible tear.
Fistula: Persistent discharge, external opening.
Abscess: Redness, tenderness, fluctuance.
Rectal Prolapse: Visible protrusion during straining.
5. Observation and Assessment: (1 hour)
The teacher observes the students during the entire activity, evaluating:
Communication skills and thoroughness during history taking.
Accuracy and technique during physical examination.
Logical reasoning in formulating a diagnosis.
The teacher uses a checklist or rubric for structured assessment and provides immediate feedback on strengths and areas for improvement.
Experiential-Learning 5.3 : Evaluation of the case of sinus and fistula
Total Learning Hours (03 Hours)
1. Real Life Experience: (70 mins)

History Taking: Students interview patients presenting with discharging sinus or fistula. Inquire about the onset, duration, nature of discharge, associated pain, previous surgeries, infections, or underlying conditions like tuberculosis or Crohn's disease.

Physical Examination: Perform a systematic examination of the sinus/fistula site, assessing for location, discharge characteristics, tenderness, induration, or secondary openings. Use tools like a probe to trace the sinus tract if applicable.

Present findings and propose a diagnosis under supervision (e.g., pilonidal sinus, anal fistula).

2. Simulation Exercise: (70 mins)

Practice on mannequins or standardized patients with simulated sinus or fistula conditions.

Interpret visual and tactile signs, supplemented by clinical scenarios detailing patient history.

Document findings and suggest differential diagnoses for assessment.

3. Reflection and Feedback: (40 mins)

Engage in post-activity discussions to refine diagnostic reasoning and address challenges faced during history taking and examination.

Experiential-Learning 5.4 : Evaluation of diseases of scrotum and penis

Total Learning Hours (03 Hours)

1. Real Life Experience: (70 mins)

History Taking: Students independently interview patients with symptoms such as swelling, pain, discharge, or lesions. Use a structured approach to inquire about onset, duration, associated symptoms, past infections, trauma, or sexual history.

Physical Examination: Conduct a systematic examination, including inspection and palpation of the scrotum and penis, assessing for tenderness, masses, or skin changes.

Discuss findings with the supervisor to propose a diagnosis (e.g., epididymitis, hydrocele, balanitis).

2. Simulation Exercise: (70 mins)

Practice on mannequins or standardized patients simulating common scrotal and penile conditions.

Analyse symptoms and clinical signs to frame a diagnosis. Submit documentation of history and examination findings for evaluation. 3. Reflection and Feedback: (40 mins) Group debrief to discuss common errors and refine techniques for accurate diagnosis. Experiential-Learning 5.5 : Interpretation of investigations in the diagnosis of scrotum and penis diseases Total Learning Hours (04 Hours) 1. Real Life Experoience: (90 mins) Students examine patients presenting with symptoms like scrotal swelling, pain, discharge, or lesions. Review investigation reports such as ultrasound scrotum, doppler studies, STD panel tests, or biopsy results. Correlate clinical findings with investigation data to form a probable diagnosis (e.g., hydrocele, varicocele, balanitis, or testicular torsion). 2. Simulation Exercise: (90 mins) Use case-based scenarios or virtual platforms presenting detailed patient histories, clinical examination findings, and investigation results. Students interpret data independently, identify possible differential diagnoses, and justify their conclusions. Engage in discussions to validate the diagnostic approach. 3. Reflection and Feedback: (60 mins) Post-activity debrief to discuss diagnostic accuracy and address gaps in interpretation. Experiential-Learning 5.6 : History taking in Urinary cases Total Learning Hours (04 Hours) 1. Real Life Experience: (100 mins)

Students independently interview patients with urinary complaints under supervision.

Use a structured format to ask about presenting symptoms (e.g., frequency, urgency, pain, colour changes, or systemic symptoms like fever).

Explore past medical, surgical, and family history, along with lifestyle factors (e.g., fluid intake, occupational risks).

Present the history to the supervisor for feedback.

2. Simulation Exercise: (95 mins)

Independently interact with a standardized patient (trained actor) or virtual patient presenting with urinary symptoms.

Gather detailed history and document findings in a logical, systematic manner.

Submit the written history for evaluation and discussion.

3. Discussion and Feedback: (45 mins)

Conduct group discussions to compare approaches and refine questioning techniques.

Experiential-Learning 5.7 : Evaluation of Urinary case

Total Learning Hours (04 Hours)

Preparation: (15 mins)

Students will be divided into groups and assigned various cases of the urinary system and asked to frame the diagnosis

Real Patient Interaction: (90 mins)

Students perform a focused physical examination, observing symptoms like flank pain, oedema, or abnormal urination.

Review investigation reports (e.g., urinalysis, ultrasound, kidney function tests).

Discuss findings with other students to frame a diagnosis.

Simulation Exercise: (90 mins)	
Engage in a high-fidelity simulation using mannequins or virtual patients presenting urinary symptoms (e.g., haematuria, dysuria).	
Analyse mock investigation reports to correlate with clinical signs.	
Feedback: (45 mins)	
Present diagnostic conclusions to peers and receive feedback.	
Modular Assessment	
Assessment method	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:	
Assessment of a specific case of Ano-Rectal or Genitourinary system. Assessment will be based on:	
Recording history and systemic physical examination. (25 Marks)	4
and	
Advise basic and advanced investigations to confirm the provisional diagnosis and to rule out differential diagnosis. (25 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 assessment.. (25 Marks)

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical/experiential) learning session, the students should be able to)	3C Notional Learning Hours	3D Lecture/ Practical/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/ Shows how/ Knows how/ Know)	3G Teaching Learning Methods		
Module 6 : اطراق عروق ولمفاوية جرح وق ولمان ولمان ولمان ولمان ولمان ولمان ولمان ولمان ولمان ولم								
Module Learr (At the end of	ning Objectives the module, the students should be able to)							
1 Describe th	e importance of history taking in peripheral vascular conditions, the Lymphatic system, 8	& Ulcers.						
2 Discuss the	specific investigations required to confirm the diagnosis of peripheral vascular condition	is, the lymph	atic system, & U	lcers.				
3 Demonstrat	te the examination of peripheral vascular conditions, the Lymphatic system, & Ulcers.							
4. Illustrate th	ne specific investigations required to confirm the diagnosis of peripheral vascular conditio	ons, the Lymp	ohatic system ar	nd Ulcers.				
3 Identify and	l differentiate the different surgical conditions of peripheral vascular conditions, the Lymp	hatic system	, & Ulcers.					
ظام شریانی Unit 1	່ອ່Nizam-e-Shiryani (Arterial system)							
His روداد :6.1.1	story							
6.1.2: جسماني معائنه Jismani Mu'ā'ina (Physical Examination)								
6.1.3: تفتيتاتِ مخصوصه TafţĪshāt-e Makhṣūṣah (Specific Investigations)								
6.1.4: معائنه غانغرانه و اقسامِ غانغرانه و اقسامِ عانغرانه و اقسامِ عانغرانه و اقسامِ غانغرانه و اقسامِ غانغرانه و اقسامِ عانغرانه د 6.1.4								
6.1.5: معاننه أنيورزم Muʻā'ina Aneurysm (Physical Examination of Aneurysm)								
References: 7	11,12,14							
3A	3В	3C	3D	3E	3F	3G		
--	--	----	------------------------------	-------------	---------------	------------------	--	
CO3,CO4	Describe the eliciting and documenting history in arterial diseases.	1	Lecture	сс	Knows- how	L&PPT		
CO3,CO4	Describe the specific investigations of arterial disease.	1	Lecture	сс	Knows- how	L&PPT		
CO3,CO4	Demonstrate the history taking and interpretation of specific investigations of different arterial diseases like gangrene and aneurysm	4	Practical6.1	PSY- GUD	Shows- how	D-BED,D-M,RP,SIM		
CO3,CO4	Conduct detailed physical examination in a case of arterial disease	4	Practical6.2	PSY- GUD	Shows- how	D-BED,SIM,TUT		
CO3,CO4	Synthesize the provisional diagnosis of arterial diseases by history taking and physical examination	5	Experiential- Learning6.1	PSY- ADT	Does	DIS,PBL,RP,SIM		
CO3,CO4	Analyse the findings of investigations/lab reports to confirm the provisional diagnosis of arterial diseases.	4	Experiential- Learning6.2	PSY- MEC	Does	DIS,LRI,L		
CO3,CO4	Describe the physical examination in arterial diseases	1	Lecture	сс	Knows- how	BL,L&PPT ,PL		
CO3,CO4	Describe the specific investigations concerning gangrene.	1	Lecture	сс	Knows- how	BL,L&PPT ,PL		
نِظام وريد Unit 2	Nizam-Vareed (Venous system)							
His روداد :6.2.1	story							
وردة دوالى :6.2.2	مواتند أ Muʿāʾina Awrida Dawālī (Physical Examination of Varicose veins)							
مده وريدي <u>ي</u> :6.2.3	معانينہ – Muʿāʾina Suddah Varīdīyah (Physical Examination of Venous thrombosis)							
6.2.4: تفتيشات TafṭĪshāt-e Makhṣūṣah (Specific Investigations)								
References:	11,12,14							
3A	3В	3C	3D	3E	3F	3G		

CO3,CO4	Describe the history taking of varicose veins and venous thrombosis.	1	Lecture	сс	Knows- how	L&PPT
CO3,CO4	Describe the specific investigations of venous diseases and their interpretation.	1	Lecture	сс	Knows- how	L&PPT
CO3,CO4	Demonstrate the history taking and interpretation of lab reports/specific investigations of diseases of venous system.	3	Practical6.3	PSY- GUD	Shows- how	CD,CBL,D-BED,D- M,RP,SIM
CO3,CO4	Conduct detailed physical examination in case of varicose vein and venous thrombosis	3	Practical6.4	PSY- GUD	Shows- how	D-BED,D- M,FC,RP,SIM
CO3,CO4	Conduct a history taking and physical examination to diagnose venous system diseases.	4	Experiential- Learning6.3	PSY- ADT	Does	CD,CBL,PBL,SIM
CO3,CO4	Differentiate and diagnose the varicose vein and venous thrombosis by interpretation of investigations (reports).	4	Experiential- Learning6.4	PSY- MEC	Does	CD,CBL,PBL,SIM
CO3,CO4	Describe the physical examination of varicose veins and venous thrombosis.	1	Lecture	сс	Knows- how	L&GD,L&PPT ,L_VC,LS,PL
ادية نظام Unit 3	Nizam-e-Lymphawiya (Lymphatics system)					
ىانى معائنه :6.3.1	∻ Jismani Mu'ā'ina (Physical Examination)					
ي مخصوصه :6.3.2	تفتيثات Tafṭīshāt-e Makhṣūṣah (Specific Investigations)					
فيص فارقه :6.3.3	Taškhīṣ fāriqah (Differential diagnosis)					
References:	11,12,14					
3A	3В	3C	3D	3E	3F	3G
CO3,CO4	Describe the physical examination of lymphatic system diseases.	1	Lecture	сс	Knows- how	IBL,L&PPT ,L_VC
CO3,CO4	Display the right way of physical examination and interpretation of laboratory findings/reports in lymphatic diseases.	4	Practical6.5	PSY- GUD	Shows- how	D-BED,D-M,SIM
CO3,CO4	Conduct history taking of the lymphatic system to diagnose the related disease	3	Experiential- Learning6.5	PSY- ADT	Does	CD,CBL,PBL,SIM

CO3,CO4														
	Describe the specific investigations and differential diagnosis in Lymphatic diseases.	1	Lecture	сс	Knows- how	BL,EDU,L&PPT ,L_VC,LS,SDL								
CO3,CO4	Diagnose the disease after a detailed physical examination of the lymphatic system.	3	Experiential- Learning6.6	PSY- ADT	Does	CD,CBL,SIM								
زرجو قرح Unit 4	?Jarḥ wa Qarḥ (wound & Ulcer)													
ىيام قروح :6.4.1	اق Aqsam-e-Quruh (Classification of ulcers)													
His روداد :6.4.2	story													
مانی معائنہ :6.4.3	المج Jismani Muʻā'ina (Physical Examination)													
ي مخصوصه :6.4.4	تغتيشات TafṭĪshāt-e Makhṣūṣah (Specific Investigations)													
فيص فارقه :6.4.5	🖵 Taškʰlīṣ fāriqah (Differential diagnosis)													
References:	11,12,14					References: 11,12,14								
3A	3В	3C	3D	3E	3F	3G								
3A CO3,CO4	3B Describe the types of ulcers, history taking, physical examination, specific investigations and differential diagnosis.	3C	3D Lecture	3E CC	3F Knows- how	3G L&PPT								
3A CO3,CO4 CO3,CO4	3B Describe the types of ulcers, history taking, physical examination, specific investigations and differential diagnosis. Demonstrate the history taking, physical examination and interpretation of investigations in a case of wound/ulcer.	3C 1 2	3D Lecture Practical6.6	3E CC PSY- GUD	3F Knows- how Shows- how	3G L&PPT D-BED,D-M								
3A CO3,CO4 CO3,CO4 CO3,CO4 CO3,CO4	3B Describe the types of ulcers, history taking, physical examination, specific investigations and differential diagnosis. Demonstrate the history taking, physical examination and interpretation of investigations in a case of wound/ulcer. Apply the method of history taking, physical examination, and interpretation of the reports to diagnose the type of ulcer.	3C 1 2 3	3D Lecture Practical6.6 Experiential- Learning6.7	3E CC PSY- GUD PSY- ADT	3F Knows- how Shows- how Does	3G L&PPT D-BED,D-M CBL,PBL								
3A CO3,CO4 CO3,CO4 CO3,CO4 Practical Train	3B Describe the types of ulcers, history taking, physical examination, specific investigations and differential diagnosis. Demonstrate the history taking, physical examination and interpretation of investigations in a case of wound/ulcer. Apply the method of history taking, physical examination, and interpretation of the reports to diagnose the type of ulcer. Image Activity	3C 1 2 3	3D Lecture Practical6.6 Experiential- Learning6.7	3E CC PSY- GUD PSY- ADT	3F Knows- how Shows- how Does	3G L&PPT D-BED,D-M CBL,PBL								
3A CO3,CO4 CO3,CO4 CO3,CO4 Practical Trai Practical 6.1	3B Describe the types of ulcers, history taking, physical examination, specific investigations and differential diagnosis. Demonstrate the history taking, physical examination and interpretation of investigations in a case of wound/ulcer. Apply the method of history taking, physical examination, and interpretation of the reports to diagnose the type of ulcer. Ining Activity : History Taking and Interpretation of Specific Investigations in Arterial Diseases (Gangreenees)	3C 1 2 3 ene and Ane	3D Lecture Practical6.6 Experiential- Learning6.7	3E CC PSY- GUD PSY- ADT	3F Knows- how Shows- how Does	3G L&PPT D-BED,D-M CBL,PBL								
3A CO3,CO4 CO3,CO4 CO3,CO4 Practical Trai Practical 6.1 Total Learnin	3B Describe the types of ulcers, history taking, physical examination, specific investigations and differential diagnosis. Demonstrate the history taking, physical examination and interpretation of investigations in a case of wound/ulcer. Apply the method of history taking, physical examination, and interpretation of the reports to diagnose the type of ulcer. ining Activity : History Taking and Interpretation of Specific Investigations in Arterial Diseases (Gangrag Hours: (4 Hours)	3C 1 2 3 ene and Ane	3D Lecture Practical6.6 Experiential- Learning6.7	3E CC PSY- GUD PSY- ADT	3F Knows- how Shows- how Does	3G L&PPT D-BED,D-M CBL,PBL								

2. Bedside Demonstration (60 mins): At patient bedside (if available), instructor demonstrates how to take focused history and perform peripheral vascular examination (inspection, palpation, auscultation). 3. Demonstration on Models (45 mins): Use anatomical models or mannequins to demonstrate assessment of pulses, Doppler use, and anatomical locations of aneurysms. 4. Role Play/Simulation (60 mins): Students work in pairs or groups to role-play scenarios involving patient interviews and delivery of findings. Simulation of Doppler and ABI (Ankle-Brachial Index) interpretation. 5. Interpretation Workshop (30 mins): Review and discussion of investigation results: Doppler studies, CT angiograms, and lab findings. Students interpret findings in small groups. 6. Debrief and Feedback (15 mins): Reflection on learning, Q&A session, and formative feedback. Practical 6.2 : Detailed physical examination in case of arterial diseases Total Learning Hours (04 Hours) 1. Demonstration: (90 mins) The teacher demonstrates a comprehensive arterial examination on a standardized patient or simulation model: General Inspection: Assess the patient for pallor, cyanosis, trophic changes (e.g., hair loss, shiny skin), ulcers, or gangrene. Palpation: Check skin temperature using the dorsum of the hand. Palpate peripheral pulses (carotid, brachial, radial, femoral, popliteal, dorsalis pedis, posterior tibial) for presence, symmetry, and amplitude. Assess capillary refill time (<2 seconds is normal). Auscultation: Listen for bruits over major arteries (carotid, abdominal aorta, femoral arteries).

Special Tests:

Buerger's Test: Evaluate ischemic changes during elevation and dependency of the limb.

Ankle-Brachial Index (ABI): Demonstrate the use of a Doppler device to measure ABI.

Allen's Test: Assess collateral circulation in the hand.

2. Student Practice: (90 mins)

Students perform the physical examination step-by-step under teacher supervision, focusing on identifying abnormalities.

Practice performing and interpreting special tests such as ABI and Buerger's test.

3. Observation and Assessment: (60 mins)

Evaluate students on:

- Systematic and accurate examination technique.
- Identification and description of clinical signs.

Logical correlation of findings with potential diagnoses.

Provide immediate feedback, highlighting areas for refinement and accuracy.

Practical 6.3 : History taking and laboratory interpretation

Total Learning Hours (03 Hours)

1. Teacher Demonstration: (70 mins)

The teacher performs a demonstration of history taking and interpreting lab reports or investigations related to venous system diseases.

History Taking:

© NCISM - UNIPG-AB-IJ - Sem 2 -110 of 181

Presenting Complaints: Ask questions about symptoms like pain, swelling, heaviness, cramping, discolouration, or visible veins. Risk Factors: Inquire about a history of deep vein thrombosis (DVT), varicose veins, immobility, obesity, smoking, or previous surgeries (e.g., vein stripping). Medical and Surgical History: Ask about comorbid conditions (e.g., heart disease, diabetes, or cancer) and previous venous interventions. Family History: Inquire about family members with similar vascular conditions. Lifestyle and Occupation: Ask about prolonged sitting or standing, and physical activity levels. Interpretation of Lab Reports and Investigations: Doppler Ultrasound: Demonstrate the interpretation of Doppler ultrasound results, including venous reflux, thrombus identification, and patency of veins. CT or MRI Venography: Show how to interpret findings of venous abnormalities, including thrombosis, varices, and venous reflux. Ankle-Brachial Index (ABI): Discuss how ABI measurements help distinguish between arterial and venous causes of lower limb symptoms. Blood Tests: Explain relevant blood tests (e.g., D-dimer for DVT, clotting profile, or markers of venous insufficiency). 2. Student Practice: (70 mins) Students take a detailed history of a standardized patient, focusing on venous system diseases. Students interpret mock lab reports or investigations, such as a Doppler ultrasound or D-dimer result, and discuss their findings with the teacher. Students practice correlating history with lab results to arrive at a clinical diagnosis. 3. Observation and Assessment: (40 mins) Assess students on: Completeness and relevance of the history taken, especially identifying venous risk factors. Accuracy in interpreting lab reports and imaging results.

Ability to correlate clinical findings with investigative results for a coherent diagnosis.
Clear communication and logical reasoning during discussions of interpretation.
Provide immediate feedback to correct misunderstandings and refine skills.
Practical 6.4 : Detailed physical examination in a case of varicose vein and venous thrombosis
Total Learning Hours (03 Hours)
1. Teacher Demonstration: (70 mins)
The teacher performs a step-by-step physical examination on a standardized patient or model:
Varicose Veins:
Inspection:
Examine the patient in standing and supine positions for dilated, tortuous veins.
Note skin changes (e.g., pigmentation, eczema, ulcers) and signs of chronic venous insufficiency.
Palpation:
Assess for tenderness, induration, and vein compressibility.
Perform the Trendelenburg Test: Elevate the leg, empty veins, apply a tourniquet, and ask the patient to stand to observe vein filling.
Perform the Perthes Test: Evaluate deep vein patency by applying a tourniquet and observing superficial vein behaviour during calf muscle contraction.
Venous Thrombosis:
Inspection:
Look for unilateral swelling, redness, or skin discolouration.

Note any visible collateral veins.

Palpation:

Check for tenderness along the deep veins (e.g., Homan's sign: pain in the calf on dorsiflexion of the foot).

Assess for pitting oedema and compare limb circumference bilaterally.

Special Tests:

Modified Pratt's Test: Palpate for a cord-like structure along the vein.

Demonstrate compression ultrasonography findings (if available).

2. Student Practice: (70 mins)

Students perform the examination step-by-step under teacher supervision, focusing on correct techniques and observing clinical signs.

Practice performing Trendelenburg, Perthes, and Homan's tests on a partner or model.

3. Teacher Observation and Assessment: (40 mins)

Evaluate students based on:

Systematic approach and accuracy of examination techniques.

Ability to identify and describe findings.

Logical interpretation of clinical signs for varicose veins and venous thrombosis.

Provide feedback on technique and reasoning, addressing errors or gaps.

Practical 6.5 : Physical examination and interpretation of laboratory findings/reports in lymphatic diseases

Total Learning Hours (04 Hours)

1. Demonstration: (1 hour) The teacher demonstrates on a standardized patient or simulation model, focusing on lymphatic diseases such as lymphedema and lymphadenopathy. History Taking. Physical Examination: Inspection: Assess for swelling, asymmetry, skin changes (e.g., peau d'orange, ulceration), and pressure effects. Palpation: Systematically examine lymph nodes (cervical, axillary, inguinal) for number, size, surface, margins, consistency, tenderness, mobility, and warmth. Assess the drainage area. Interpretation of Investigations: Lymphatic Imaging: Explain findings from lymphoscintigraphy or MR lymphography to assess lymphatic flow. Blood Tests: Interpret CBC for signs of infection or malignancy and other chronic conditions. Biopsy/Histopathology: Discuss findings in cases of suspected malignancy or granulomatous diseases. Aspiration 2. Student Practice: (2 hours) Students perform a full lymphatic examination under teacher supervision. Practice interpreting mock investigation reports, such as imaging or biopsy results. 3. Observation and Assessment: (30 mins)

Teacher will evaluate students on: Systematic examination technique and ability to identify abnormalities. Logical interpretation of investigation findings and their relevance to clinical diagnosis. Clear and accurate documentation of findings. 4. Feedback: (30 mins) Teache will provide personalized feedback to address gaps and improve technique Practical 6.6 : History Taking, Physical Examination, and Interpretation of Investigations in wounds/ulcers Total Learning Hours: (2 Hours) Demonstration by the teacher: (45 mins) The teacher models the process using a standardized patient or wound care simulation model: History Taking: Focus on the onset, duration, and progression of the wound or ulcer. Pain, discharge, and associated disease. Physical Examination: Demonstrate inspection of wound number, position size, shape, edges, discharge, and surrounding tissue. Palpate for tenderness, induration, margins, edges, base, depth, bleeding, warmth, relation with deeper structures, and condition of the surrounding skin. Investigation Interpretation: Explain diagnostic tools like wound cultures, Doppler studies, imaging, or biopsy.

Provide sample investigation reports and explain key findings.

Student Practice: (45 mins)

Students conduct history taking, perform physical examinations, and interpret mock investigation results for a standardized patient or model.

Observation and Assessment: (30 mins)

The teacher will evaluate each student based on:

Completeness of history.

Accuracy and technique in physical examination.

Logical interpretation of investigation results.

Provide individualized feedback and highlight areas for improvement.

Experiential learning Activity

Experiential-Learning 6.1 : Provisional diagnosis of arterial diseases by taking proper history and physical examination.

Total Learning Hours (05 Hours)

1. Case Setup: (30 mins)

The teacher provides various real or simulated patient scenarios presenting with symptoms suggestive of arterial diseases, such as claudication, ischemic pain, cold extremities, or ulceration.

Basic clinical context is provided, such as age, risk factors (e.g., diabetes, smoking, hypertension), and symptom duration.

2. Student-Led Activity: (3 hours)

Students independently perform the following tasks:

History Taking

Gather detailed clinical history focusing on arterial disease indicators: Chief Complaint: Nature of symptoms (e.g., pain, colour changes, or ulceration). History of Present Illness: Onset, progression, aggravating or relieving factors, and associated symptoms. Risk Factors: Smoking, diabetes, hypertension, hyperlipidemia, or family history of vascular diseases. Claudication History: Distance walked before pain, rest relief, and location of pain (e.g., calf, thigh). Acute Symptoms: Sudden pain, pallor, or paresthesia suggesting acute arterial occlusion. Chronic Symptoms: Cold limbs, rest pain, or ulcers indicating chronic arterial insufficiency. Physical Examination Perform a systematic physical examination to identify arterial insufficiency: Inspection: Observe for skin changes (e.g., pallor, cyanosis, or necrosis). Check for ulcers, gangrene, or hair loss in distal extremities. Palpation: Assess temperature differences between limbs. Palpate pulses (e.g., femoral, popliteal, dorsalis pedis) for strength and symmetry. Auscultation: Listen for bruits over arteries indicating stenosis. Special Tests:

Perform Buerger's test to assess arterial insufficiency.

Evaluate capillary refill time and ankle-brachial index (if applicable).

Provisional Diagnosis

Synthesize findings to frame a provisional diagnosis, such as:

Peripheral artery disease (PAD).

Acute arterial occlusion.

Aneurysms or embolic conditions.

3. Teacher Assessment: (45 mins)

The teacher observes the student's ability to:

Gather a complete and focused history.

Perform a systematic physical examination.

Identify key clinical features and correlate them with arterial diseases.

4. Feedback and Discussion: (45 mins)

The teacher provides individualized feedback, addressing areas for improvement.

A reflective discussion follows, where students share their findings and diagnostic reasoning.

Experiential-Learning 6.2 : Interpretation of investigations/lab reports of arterial disease

Total Learning Hours (04 Hours)

1. Case Setup: (30 mins)

The teacher provides anonymized clinical cases with provisional diagnoses of arterial diseases (e.g., peripheral artery disease, acute arterial occlusion, or vasculitis). Each case includes relevant lab reports and imaging investigations such as: Blood tests (CBC, lipid profile, CRP, ESR, etc.). Imaging studies (Doppler ultrasound, ABI, CTA, MRA). Specialized tests (PVR, ABG, segmental pressures). Student-Led Activity: (120 mins) Students independently perform the following tasks: Analyze Lab Reports Identify abnormal values related to arterial diseases in: Blood Tests: Lipid profile, inflammatory markers, glucose levels, etc. Serology: ANCA or other autoimmune markers if vasculitis is suspected. Interpret Imaging Studies Review imaging findings to detect: Arterial narrowing or occlusion (Doppler or angiography). Abnormal ABI values indicate peripheral artery disease. Plaque formation, stenosis, or aneurysms. Enumerate Findings Compile a structured summary of the findings for each case, categorizing them as:

Laboratory Findings: Examples: Elevated CRP or ESR, dyslipidemia.
Imaging Features: Examples: ABI < 0.9, stenosis on CTA, abnormal Doppler waveforms.
Specialized Test Results: Examples: Abnormal PVR or segmental pressures.
Synthesize and Present
Present findings in a systematic format, correlating them with the provisional diagnosis.
2. Observation and Assessment: (45 mins)
The teacher observes and assesses students on:
Accuracy in identifying key abnormal values and imaging findings.
Systematic categorization and presentation of findings.
Logical reasoning linking findings to the provisional diagnosis.
3. Feedback and Reflection: (45 mins)
The teacher provides detailed feedback on the student's ability to interpret and enumerate findings.
Students reflect on their approach, clarify doubts, and discuss with peers and the teacher.
Experiential-Learning 6.3 : Method of history taking and physical examination of venous system
Total Learning Hours (04 Hours)
1. Case Setup: (30 mins)
The teacher provides real or simulated patient cases with venous disease symptoms (e.g., leg swelling, pain, varicose veins, or signs of DVT).
A brief history is included, with complaints like leg heaviness, swelling, visible veins, pain, or redness, to guide the clinical examination.

2. Student-Led Activity: (120 mins) Students independently perform the following tasks: History Taking Presenting Complaints: Ask about the onset, duration, and nature of symptoms such as pain, swelling, or discolouration. Pain Characteristics: Inquire about the type of pain (e.g., aching, throbbing, burning) and its relation to activity, position, or time of day. Risk Factors: Explore contributing factors, such as prolonged standing or sitting, pregnancy, obesity, history of trauma, previous venous disease, or family history. Associated Symptoms: Ask about other symptoms, like skin ulcers, heaviness in the legs, itching, or varicosities. Past Medical History: Review the history of deep vein thrombosis (DVT), pulmonary embolism, or phlebitis. Physical Examination Inspection: Examine the legs for visible varicosities (twisted, dilated veins), swelling, skin changes (e.g., pigmentation or ulcers), and redness or warmth. Look for oedema in the lower extremities, noting whether it is pitting or non-pitting. Check for venous stasis dermatitis or skin ulcerations, especially near the medial malleolus, indicative of chronic venous insufficiency. Palpation: Gently palpate the affected areas to assess for tenderness, swelling, or temperature changes, particularly over deep veins (DVT). Check for signs of lymphedema or thrombophlebitis (painful, swollen superficial veins). Functional Tests: Trendelenburg test: To assess for venous reflux by raising the leg and observing how quickly the veins fill upon standing.

Doppler ultrasound (if available): To detect venous reflux or thrombus in the veins. Calf Circumference Measurement: Compare calf size for signs of DVT. Special Signs: Check for Homan's sign (pain in the calf with dorsiflexion), though not always reliable for DVT. Observe venous filling and capillary refill time in the legs. Formulating Provisional Diagnosis Based on the clinical findings from history and physical examination, frame the provisional diagnosis of venous disease such as: Varicose Veins: Dilated, twisted superficial veins with a history of prolonged standing. Chronic Venous Insufficiency: Swelling, pigmentation, and ulcers, often with a long-standing history. Deep Vein Thrombosis (DVT): Tenderness, swelling, warmth, and redness with positive physical examination signs like Homan's sign. Consider differential diagnoses such as lymphatic obstruction or musculoskeletal pain. 3. Observation and Assessment: (45 mins) The teacher observes the student's ability to: Conduct a systematic history-taking and physical examination, focusing on all relevant aspects of venous disease. Identify abnormal findings (e.g., varicose veins, swelling, skin changes, signs of DVT) and assess for functional abnormalities. Demonstrate accurate clinical reasoning to frame a diagnosis based on history and examination. 4. Feedback and Reflection: (45 mins) The teacher provides constructive feedback on the students' history-taking approach, examination techniques, and differential diagnosis. Students reflect on their process, ask clarifying questions, and discuss challenging cases with the teacher and peers.

Experiential-Learning 6.4 : Diagnosis of varicose vein and venous thrombosis by interpretation of investigation and differential points.

Total Learning Hours (04 Hours)

1. Case Setup: (30 mins)

The teacher provides simulated patient cases presenting with symptoms indicative of varicose veins or venous thrombosis.

The clinical scenarios include details such as leg swelling, pain, redness, or a history of deep vein thrombosis (DVT), and the student is provided with investigation reports such as Doppler ultrasound, venography, and D-dimer levels.

2. Student-Led Activity: (120 mins)

Students independently perform the following tasks:

Review the Clinical History

Symptoms: Ask about pain, swelling, heaviness, or skin changes (e.g., discoloration, ulcers).

Risk Factors: Identify contributing factors, such as prolonged sitting/standing, pregnancy, trauma, or previous venous thromboembolism.

Duration and Progression: Explore when the symptoms began, their severity, and if they're getting worse.

Interpret the Investigation Reports

Doppler Ultrasound:

Assess for signs of varicose veins (e.g., reflux in superficial veins) or deep vein thrombosis (e.g., thrombus in the deep veins).

Evaluate the venous insufficiency and determine whether the venous flow is disrupted in varicose veins.

Venography:

Look for abnormal vein filling, blocked veins, or abnormalities in vein structure to diagnose venous thrombosis.

D-Dimer Levels: Elevated D-dimer suggests venous thrombosis or recent clot formation. A normal D-dimer may help rule out active thrombus but does not rule out varicose veins. Differentiate Between Varicose Veins and Venous Thrombosis Varicose Veins: Typically associated with long-term symptoms (e.g., aching, heaviness) and visible swollen veins. Positive findings on Doppler ultrasound indicating venous reflux in the superficial veins. Symptoms often improve with elevation or compression stockings. Venous Thrombosis: Presents with acute symptoms such as swelling, redness, warmth, and tenderness over the affected area. Doppler ultrasound may show thrombosis in deep veins, often with no visible external veins. Elevated D-dimer and possible complications like pulmonary embolism if left untreated. Frame the Diagnosis Based on the investigation findings and clinical presentation, frame the provisional diagnosis (varicose veins or venous thrombosis). Include possible differential diagnoses such as superficial thrombophlebitis or chronic venous insufficiency. 3. Teacher Observation and Assessment: (45 mins) The teacher observes and assesses students on: The ability to accurately interpret Doppler ultrasound, venography, and D-dimer findings. The differential diagnosis based on clinical history and investigation results.

Clear articulation of the diagnostic reasoning behind varicose veins versus venous thrombosis.

4. Feedback and Reflection: (45 mins)

The teacher provides feedback on the students' interpretative skills and reasoning.

A reflection discussion follows, where students review their approach, ask clarifying questions, and gain insights into more challenging differential points.

Experiential-Learning 6.5 : History taking of lymphatic diseases

Total learning Hours: (3 Hours)

1. Case Setup: (30 mins)

The teacher provides real or simulated patient cases with signs and symptoms suggestive of lymphatic system diseases, such as lymphadenopathy and lymphedema, or systemic conditions like lymphoma or infections.

To give clinical context, a brief case history, including symptoms like swelling, fever, fatigue, or weight loss, is provided.

2. Student-Led Activity: (1 hour)

Gather Clinical History

Ask about the onset, duration, and progression of symptoms.

Inquire about associated symptoms (e.g., fever, night sweats, weight loss).

Explore relevant medical history, such as recent infections, malignancies, or travel to endemic areas.

Formulate a Provisional Diagnosis

Correlate findings with potential lymphatic diseases, such as:

Infections: Reactive lymphadenitis, tuberculosis.

Neoplasms: Lymphoma, metastatic cancer.

Systemic Diseases: Sarcoidosis, HIV.

Obstructive Conditions: Primary or secondary lymphedema.

3. Observation and Assessment: (45 mins)

The teacher observes the student's ability to:

Conduct a systematic physical examination of all lymph node regions.

Identify abnormalities accurately (e.g., enlarged nodes, fixed masses, non-pitting oedema).

Relate findings to clinical history to propose a reasonable diagnosis.

4. Feedback and Reflection: (45 mins)

The teacher provides constructive feedback on examination techniques, diagnostic accuracy, and reasoning.

Students reflect on their approach and discuss challenging cases with the teacher and peers.

Experiential-Learning 6.6 : Physical examination in lymphatic diseases

Total learning Hours: (3 Hours)

1. Case Setup: (30 mins)

The teacher provides real or simulated patient cases with signs and symptoms suggestive of lymphatic system diseases, such as lymphadenopathy and lymphedema, or systemic conditions like lymphoma or infections.

To give clinical context, a brief case history, including symptoms like swelling, fever, fatigue, or weight loss, is provided.

2. Student-Led Activity: (1 hour)

Perform Detailed Physical Examination

Inspection:

Observe for visible swelling, redness, and colour changes over the lymph node.

Palpation:

Systematically palpate lymph node groups: cervical, axillary, inguinal, and supraclavicular.

Assess for:

Size, Consistency, Mobility, Tenderness

Palpate for limb swelling in suspected lymphedema and assess pitting versus non-pitting oedema.

Formulate a Provisional Diagnosis

Correlate findings with potential lymphatic diseases, such as:

Infections: Reactive lymphadenitis, tuberculosis.

Neoplasms: Lymphoma, metastatic cancer.

Systemic Diseases: Sarcoidosis, HIV.

Obstructive Conditions: Primary or secondary lymphedema.

3. Observation and Assessment: (45 mins)

The teacher observes the student's ability to:

Conduct a systematic physical examination of all lymph node regions.

Identify abnormalities accurately (e.g., enlarged nodes, fixed masses, non-pitting oedema).

Relate findings to clinical history to propose a reasonable diagnosis.

4. Feedback and Reflection: (45 mins) The teacher provides constructive feedback on examination techniques, diagnostic accuracy, and reasoning. Students reflect on their approach and discuss challenging cases with the teacher and peers. Experiential-Learning 6.7 : Diagnosis of Ulcer/Wound Total Learning Hours: (3 Hours) Case Setup: (30 mins) The teacher provides a set of simulated or real patient cases presenting with symptoms of ulcers. Student-Led Activity: (90 mins) Students perform the following tasks independently. History Taking Gather a detailed clinical history to assess the nature and type of ulcer: Chief Complaint: Pain & Discharge History of Present Illness: Onset and Duration, Location, Medical History, Previous Wound Treatments. Risk Factors: smoking or poor nutrition **Physical Examination** Perform a systematic physical exam to identify signs of ulcer/wound. Inspection Palpation

Investigation Interpretation	
Analyze diagnostic reports to confirm the ulcer type and complications:	
Endoscopy Reports: Look for evidence of gastric, duodenal, or stress ulcers.	
Biopsy Results: Check for H. pylori infection or malignancy.	
Blood Tests: Identify anaemia or inflammation.	
Diagnosis and Classification	
Correlate history, physical findings, and reports to classify the ulcer.	
Observation and Assessment: (30 mins)	
The teacher observes students' ability to:	
Conduct a thorough and empathetic history-taking.	
Perform physical examinations systematically and effectively.	
Interpret reports accurately and synthesize findings into a logical diagnosis.	
Feedback and Reflection: (30 mins)	
The teacher provides individualized feedback, addressing strengths and areas for improvement.	
A reflective discussion follows, where students share their diagnostic approaches and clarify doubts with teacher guidance.	
Modular Assessment	
Assessment method	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:							
Assessment of a specific case from either the peripheral vascular system, the lymphatic system, or a case of wounds and ulcers. The assessment will be based on:							
Recording history and systemic physical examination. (25 Marks)							
and						4	
Prescription of basic and advanced investigations to confirm the provisional diagnosis and to rule out differential diagnoses. (25 Marks)							
or							
Any practica	al in converted form can be taken for assessment. (25 Marks)						
and							
Any of the experiential/presentations can be taken as an assessment. (25 Marks)							
3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical/experiential) learning session, the students should be able to)	3C Notional Learning Hours	3D Lecture/ Practical/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/ Shows how/ Knows	Teaching Le	3G earning Methods

© NCISM - UNIPG-AB-IJ - Sem 2 -130 of 181

		-						
					how/ Know)			
Module 7 : جامع المالي المري المالي الم								
Module Learning Objectives (At the end of the module, the students should be able to)								
1. Discuss	the indications and normal values of different Pathological, Microbiological Biocher	nical invest	igations related	to surgery.				
2. Describe	the main Imaging techniques required to diagnose the surgical conditions.							
3. Demonst	trate the interpretation of different Pathological, Biochemical, Microbiological invest	igations an	d Imaging relate	ed to surger	у.			
3 Identify a	nd differentiate the normal and abnormal findings in Pathological, Biochemical, Mic	crobiologica	I reports and dif	ferent imag	ing reports			
کی تو تی Unit 1	Marazi Gozārishāt ki aur Khurd-Hayaliyali reports ki Tawzīl مرضى كزادشات اورخرد حياتيانى ربودس	ı (Interpret	ation of Patholo	gical & Micr	obiologica	reports)		
مرضی گزارشات اور خردحیاتیاتی رپورٹس کی توضیح : Marazi Gozārishāt ki aur Khurd-Hayaītiyaītī reports ki Tawzīḥ (Interpretation of Pathological & Microbiological reports)								
ن کون :7.1.1	Marazi Gozarisnat ki aur Knurd-Hayatiyati reports ki Ta مرق كرارست اور كردخياتيك ريورس د	wzni (me		noiogical a	MICIODIOIO	gical reports)		
References	مر کی کرارسک اور کردخیانیک رپورک د : 15	wzn <u>i</u> (inte		noiogical &	MICIODIOIO	gical reports)		
ن لوی :7.1.1 References 3A	مر کی کرارسک اور کردجانیان رپورل کا Marazi Gozarishat ki aur Khurd-Hayatiyati reports ki Ta : 15 3B	3C	3D	3E	3F	3G		
7.1.1: 00 References 3A CO2,CO6	د دیایان ریودن ه Marazi Gozarishat ki aur Khurd-Hayatiyati reports ki Ta : 15 3B Describe the indications of pathological and microbiological investigations	3C 1	3D Lecture	3E CC	3F Knows- how	3G L&GD,L&PPT		
7.1.1: 0 References 3A CO2,CO6 CO2,CO6	ترميني المعالي المعالي معالي المعالي	3C 1 2	3D Lecture Practical7.1	3E CC PSY- GUD	3F Knows- how Shows- how	3G L&GD,L&PPT C_L,DIS,LRI,TBL		
7.1.1: 00 References 3A CO2,CO6 CO2,CO6 CO2,CO6	S کاریک اور کردی یون و کردی دی د	3C 1 2 3	3D Lecture Practical7.1 Experiential- Learning7.1	3E CC PSY- GUD PSY- ADT	3F Knows- how Shows- how Shows- how	3G L&GD,L&PPT C_L,DIS,LRI,TBL C_L,DIS,LRI,PER,TBL		
7.1.1: 00 References 3A CO2,CO6 CO2,CO6 CO2,CO6 CO2,CO6 CO2,CO6 CO2,CO6	Image: 15 Image: 3B Describe the indications of pathological and microbiological investigations Demonstrate the indications and the key components of pathological reports and how to interpret them accurately. Frame a possible diagnosis after analysing various pathological reports. Describe the interpretation of different pathological and microbiological investigations	3C 1 2 3 1	3D Lecture Practical7.1 Experiential- Learning7.1 Lecture	3E CC PSY- GUD PSY- ADT CC	3F Knows- how Shows- how Shows- how Knows- how	3G L&GD,L&PPT C_L,DIS,LRI,TBL C_L,DIS,LRI,PER,TBL BL,BS,LRI,L&PPT ,PL		
7.1.1: 00 References 3A CO2,CO6 CO2,CO6 CO2,CO6 CO2,CO6 CO2,CO6 CO2,CO6 CO2,CO6 CO2,CO6 CO2,CO6	3B Describe the indications of pathological and microbiological investigations Demonstrate the indications and the key components of pathological reports and how to interpret them accurately. Frame a possible diagnosis after analysing various pathological reports. Describe the interpretation of different pathological and microbiological investigations. Demonstrate the interpretation of different pathological and microbiological reports. Describe the interpretation of different pathological and microbiological investigations. Demonstrate the indications and interpretation of microbiological reports.	3C 1 2 3 1 2	3D Lecture Practical7.1 Experiential- Learning7.1 Lecture Practical7.2	3E CC PSY- GUD PSY- ADT CC PSY- GUD	3F Knows- how Shows- how Knows- how Shows- how Shows- how	3G L&GD,L&PPT C_L,DIS,LRI,TBL C_L,DIS,LRI,PER,TBL BL,BS,LRI,L&PPT ,PL DIS,LRI		

© NCISM - UNIPG-AB-IJ - Sem 2 -131 of 181

Unit 2 جانی کیمیانی رپورس کی تشریک به Hayatī Kīmiya i Reports kī Tashriḥ (Interpretation of Biochemical reports)

بالتي كيميكَ رپورٹ كى تشريخ Hayatī Kīmiya i Reports kī Tashriḥ (Interpretation of Biochemical reports) حياتى كيميكَ رپورٹ كى تشريخ 7.2.1:

References: 15

3A	3B	3C	3D	3E	3F	3G
CO2,CO6	Describe the normal range of biochemical reports and their interpretation	1	Lecture	сс	Knows- how	L&PPT
CO2,CO6	Demonstrate the indications of biochemical reports.	2	Practical7.3	PSY- GUD	Shows- how	LRI,PER
CO2,CO6	Present a possible diagnosis after interpretation of various biochemical reports.	5	Experiential- Learning7.3	CAN	Knows- how	BS,LRI,PER
CO2,CO6	Describe the indications of various biochemical reports.	1	Lecture	сс	Knows- how	BL,LRI,L&GD,L&PPT ,PL
CO2,CO6	Demonstrate the interpretation of biochemical reports.	2	Practical7.4	PSY- GUD	Shows- how	LRI,PER,TBL
مویر طبی Unit 3	^{يّ} Taṣwīr –e-ṭibbī (Imaging)					
تشخيص :7.3.1	shu'ā'ī taṣwīr kashī / taẓād taṣwīrī taškh॒īṣ (Radiography/Co شعاعی تصویر کشی/ تضاد تصویری	ontrast Imag	ging)			
دیر کشی :7.3.2 Kampyūțar	كمپيوڑانزڈ طبق تصو āyzḍ tabaqī taṣwīr kashī (Computerized Tomography)					
ونو گرافی :7.3.3	الٹرا-					
7.3.4: التصوير بالرنين المقناطيس Al-taṣwīr bil-ranīn al-maqnāṭīsī (Magnetic Resonance Imaging)						
References: 16,17						
3A	3B	3C	3D	3E	3F	3G
CO4	Describe the indication of various imaging tools (Ultrasonography, X-ray and Contrast imaging-barium study) in diagnosis and treatment.	1	Lecture	сс	Knows- how	DL,L&PPT

CO4	Describe the working of various imaging tools in surgery.	1	Lecture	сс	Knows- how	DL,L&PPT
CO4	Describe the difference between normal and abnormal findings in imaging reports.	1	Lecture	сс	Knows- how	L&PPT
CO4	Demonstrate the indications in the films of Ultrasonography, X-rays and Contrast Imaging.	4	Practical7.5	PSY- GUD	Shows- how	D,DIS,LRI,PER,TUT,X-Ray
CO4	Demonstrate the abnormal findings in films of Computer Tomography, Magnetic Resonance and Angiography.	4	Practical7.6	PSY- GUD	Shows- how	LRI,L&PPT
CO4	Observe the normal and abnormal findings across various imaging modalities, including Ultrasonography, X-rays, and Contrast Imaging, by analyzing and interpreting their respective films.	5	Experiential- Learning7.4	CAN	Shows- how	LRI,TBL,X-Ray
CO4	Identify the differences between normal and abnormal findings in Computer Tomography (CT), Magnetic Resonance Imaging (MRI), and Angiography	5	Experiential- Learning7.5	CAN	Knows- how	LRI
CO4	Describe indications of various imaging tools (Computerised Tomography-Plain & Contrast, Magnetic Resonance Imaging & Angiography) in diagnosis and treatment.	1	Lecture	сс	Knows- how	DL,D-M,L_VC
برداخلی Unit 4	تَطْ Tanzir-Dakhli (Endoscopy)					
نارا ت :7.4.1	Isharat (Indications)					
اصول : : : 7.4.2	مل کے اسائ Amal ke Asāsī Ụsul̄ (Basic principles of working)					
يقه کار :7.4.3	طر Tarīgah Kar (Procedure)					
۳ ۲ تشریح :7.4.4	Fashriḩ (Interpretation)					
References	: 18					
3A	3B	3C	3D	3E	3F	3G
CO4	Describe the basic principle of working of endoscopy (upper & lower Gastrointestinal (GI) Endoscopy).	1	Lecture	ск	Knows- how	DL,L&PPT ,L_VC

CO4	Demonstrate the working & indications of endoscopy.	2	Practical7.7	PSY- GUD	Shows- how	C_L,DIS,EDU,L_VC,PER
CO4	Describe the indications and learn the working of GI endoscopy.	3	Experiential- Learning7.6	PSY- ADT	Knows- how	FV,L_VC,PER,SDL
CO4	Describe the indications and interpetation of endoscopy	1	Lecture	СК	Knows- how	L&PPT ,PL
CO4	Demonstrate the interpretations of the endoscopic findings	2	Practical7.8	PSY- GUD	Shows- how	C_L,DIS,EDU,L_VC,SY
CO4	Interpret GI endoscopy findings.	3	Experiential- Learning7.7	PSY- GUD	Does	C_L,DIS,LRI,L_VC,SY
Practical Tra	aining Activity					
Practical 7.	I : Indications and interpretation of the pathological reports					
Total Learni	ng Hours (02 Hours)					
1. Introduction (20 mins): Begin with a brief lecture on the role of pathological reports in clinical practice, emphasizing their importance in diagnosis and treatment decisions. Discuss the common types of tests (e.g., biopsies, blood tests, cultures) and their indications (e.g., cancer screening, infection diagnosis, monitoring chronic diseases).						
Divide participants into small groups and provide each group with a sample pathological report. Each group will analyze the report, identifying key components such as patient history, test results, diagnostic conclusions, and recommendations. Encourage them to discuss the significance of each section and how it contributes to the clinical picture.						
3. Lab Report Interpretation (45 mins): After group discussions, ask each group to present their interpretation of the report. They should explain the pathology, potential diagnoses, and the clinical relevance of the findings. Facilitate a discussion where participants can challenge or support each other's interpretations based on evidence.						
4. Conclusion (15 mins): Conclude the activity by summarizing the key points on interpreting pathological reports accurately. Highlight the importance of integrating laboratory findings with clinical context for effective decision-making.						
Practical 7.2	Practical 7.2 : Interpretation of microbiological reports					

Total Learning Hours (02 Hours)

1. Introduction (15 mins):

Start with a brief lecture on the role of microbiological tests (e.g., blood cultures, sputum cultures, urine cultures) in diagnosing infections. Explain the common indications for these tests, such as detecting bacterial infections, identifying pathogens, and guiding antibiotic treatment.

2. Group Discussion and Report Review (45 mins):

Divide participants into small groups and provide each group with a sample microbiological report. Each group will review the report and identify key components, including the pathogen identified, its antibiotic resistance profile, and the clinical relevance of the findings. Encourage discussion on the possible indications for the test, based on patient symptoms and history.

3. Lab Report Interpretation (45 mins):

After group discussions, ask each group to present their interpretation of the report. They should explain the pathogen's identification, possible infection sites, resistance patterns, and appropriate treatment recommendations. Facilitate a class discussion where participants critique and compare their interpretations.

4. Conclusion (15 mins):

Conclude by summarizing the key points on interpreting microbiological reports. Emphasize the importance of linking lab findings with clinical information to guide effective treatment.

Practical 7.3 : Indications of biochemical reports

Total Learning Hours (02 Hours)

1. Introduction and Brief Lecture (20 mins):

Start with a short lecture on the role of biochemical tests in clinical practice, discussing their indications (e.g., detecting metabolic disorders, monitoring organ function, screening for chronic conditions). Explain key biochemical tests like liver enzymes, electrolytes, and cholesterol levels.

2. Group Work and Report Interpretation (40 mins):

Divide participants into small groups and provide each group with a set of biochemical reports. Each group will analyze the reports, identifying abnormal values and linking them to potential clinical conditions (e.g., elevated liver enzymes indicating liver disease, high blood glucose indicating diabetes).

3. Presentation (40 mins):

Groups will present their findings, explaining the biochemical tests, their indications, and how the results contribute to diagnosing specific conditions. They should also discuss how these tests are used in clinical decision-making and patient management.

4. Q&A and Conclusion (20 mins):

After the presentations, facilitate a brief Q&A session to clarify any doubts and summarize the key takeaways about interpreting biochemical reports accurately.

Practical 7.4 : Interpretation of biochemical reports

Total Learning Hours (02 Hours)

1. Introduction and Brief Lecture (20 mins):

Begin with a short lecture on the significance of biochemical tests in diagnosing and monitoring diseases. Discuss common tests like liver enzymes, renal function tests, lipid profiles, and glucose levels, emphasizing their clinical indications and what abnormal values can indicate.

2. Group Work: Lab Report Interpretation (40 mins):

Divide participants into small groups and provide them with different biochemical reports. Each group will analyze their assigned reports, identifying key components such as abnormal values, reference ranges, and possible underlying conditions (e.g., high cholesterol indicating cardiovascular risk, elevated creatinine suggesting kidney dysfunction).

3. Group Presentations (40 mins):

Each group will present their interpretation of the biochemical reports, explaining the abnormalities they identified and how these findings relate to specific clinical conditions. Encourage discussion and peer feedback to refine understanding.

4. Q&A and Conclusion (20 mins):

Conclude the activity with a Q&A session, where participants can clarify doubts and discuss any challenges they faced while interpreting the reports. Summarize the key points of biochemical report interpretation and its role in patient care.

Practical 7.5 : Indications of Ultrasonography, X-rays and Contrast Imaging

Total Learning Hours (04 Hours)

1. Demonstration: (2 hours)

Demonstrate abnormal findings of imaging reports and films of Ultrasonography, X-rays and Contrast Imaging.

2. Student Activity: (2 hours)

Divide the students into two groups. Provide each group with a set of images.

After the groups have reviewed the images, the teacher will reconvene the class for a discussion session. The images will be displayed one by one, and students will be asked to identify abnormalities in the films.

Practical 7.6 : Identification of abnormal findings in films of Computer Tomography, Magnetic Resonance and Angiography

Total Learning Hours (04 hours)

1. In this 4-hour session, students will engage in a combination of interactive lecture and hands-on interpretation of diagnostic imaging films. The activity will begin with a 1-hour PowerPoint lecture, where the instructor will introduce common abnormal findings in CT, MRI, and Angiography. The lecture will cover conditions like tumors, hemorrhages, fractures, and vascular anomalies, with a focus on how these abnormalities present in each imaging modality.

2. After the lecture, students will spend the next 2 hours in small groups, analyzing pre-provided imaging films that demonstrate both normal and abnormal cases. Each group will receive CT, MRI, and Angiography films and will be tasked with identifying abnormal findings. They will then write brief lab reports, noting key features such as size, shape, location, and possible diagnosis of the abnormality.

3. In the final hour, the instructor will guide a group discussion, where each team presents their findings. The session will conclude with a Q&A, where students can clarify any doubts and gain a deeper understanding of interpreting medical images.

 $\label{eq:practical 7.7} \textbf{Practical 7.7}: Demonstration the working and indications of the endoscopy$

Total Learning Hours (02 Hours)

1. Introduction (15 mins):

Start with a brief lecture introducing endoscopy, its types (e.g., gastrointestinal, bronchoscopic), and its uses. Use a video clip showing an endoscopic procedure in action, emphasizing how the procedure works.

2. Co-Learning and Group Discussions (30 mins):

Divide participants into small groups. Assign each group a different type of endoscopy (e.g., upper GI, colonoscopy, bronchoscopy). Ask them to research the specific indications for their assigned type using tablets/computers, providing handouts for reference. Groups will discuss among themselves and prepare a brief presentation.

3. Group Presentations (20 mins):

Each group presents their findings on the indications for their assigned endoscopic procedure. Encourage questions from other groups for a deeper understanding.

4. Edutainment Segment (20 mins):

Show a short, entertaining yet educational video that demonstrates a real-life procedure using endoscopy. Pause at key moments to explain and discuss what is happening.

5. Hands-on Practice (20 mins):

If possible, allow participants to observe or use an endoscopy model to understand the instrument's function.

6. Q&A & Conclusion (15 mins):

Conclude with a Q&A session to clarify doubts. Summarize key points about endoscopy types, uses, and practical applications.

Practical 7.8 : Intepretation of the endoscopic findings

Total Learning Hours (02 Hours)

1. Introduction and Lecture (20 mins):

Begin with a brief lecture introducing the importance of interpreting endoscopic findings. Use video clips showcasing different endoscopic procedures and highlight how specific findings (e.g., ulcers, polyps, tumors) are identified.

2. Co-Learning and Research (30 mins):

Divide participants into small groups, each assigned a set of endoscopic images or videos showing different findings. Using tablets/computers, groups research the possible interpretations (e.g., benign vs. malignant lesions, inflammatory changes). Provide handouts for reference.

3. Group Presentations and Discussions (30 mins):

Groups present their findings and interpretations to the class, discussing the clinical significance of each case. Encourage questions and debate to ensure accurate understanding.

4. Edutainment Segment (20 mins):

Show an engaging, real-world video of an endoscopy procedure, focusing on the interpretation of key findings. Pause the video to explain the signs and their implications for diagnosis.

5. Symposium (20 mins):

Host a mini-symposium where each group presents a summary of their findings and interpretations, followed by a Q&A session to deepen understanding.

Experiential learning Activity

Experiential-Learning 7.1 : Analysis of pathological reports

Total Learning Hours (03 Hours)

1. Introduction and Overview (30 mins):

Begin with a brief lecture on the importance of pathological reports in diagnosis, discussing common tests (e.g., CBC, liver function tests, biopsies) and how these relate to disease processes. Highlight the significance of integrating multiple reports to establish a clinical diagnosis.

2. Co-Learning and Case Assignment (45 mins):

Divide participants into small groups and assign each group a set of pathological reports that may correspond to different diseases or conditions (e.g., infection, anemia, cancer, liver disease). Provide research tools (computers, textbooks) for groups to review the reports and begin forming potential diagnoses. Encourage co-learning where group members share insights and discuss findings.

3. Lab Report Interpretation (45 mins):

Groups analyze and interpret the reports, considering the clinical context. They will document the abnormal findings, compare them with normal ranges, and hypothesize a diagnosis based on the combination of data. Groups should also consider how additional tests might confirm or refine their diagnosis.

4. Group Presentations and Discussion (30 mins):

Each group presents their findings and proposed diagnosis to the class, explaining their reasoning. The class engages in a discussion, with other participants asking questions and offering alternative diagnoses based on the interpretation of the reports.

5. Conclusion and Reflection (30 mins):

Wrap up with a reflection session where the class discusses how different reports contribute to forming a diagnosis. Highlight the importance of synthesizing multiple test results to make an accurate clinical decision.

Experiential-Learning 7.2 : Diagnosis from microbiological reports

Total Learning Hours (02 Hours)

1. Introduction (20 mins):

Start with an introduction briefing the role of microbiological reports in diagnosing infections. Explain how microbiological tests (e.g., cultures, sensitivity tests) identify pathogens and guide treatment decisions. Discuss key components of microbiological reports such as bacterial identification, susceptibility patterns, and clinical significance.

2. Co-Learning and Case Assignment (30 mins):

Divide participants into small groups and assign each group a set of microbiological reports. Each group will analyze the results, identifying the pathogens, their antibiotic resistance patterns, and potential infections. Participants will discuss the clinical context (e.g., patient symptoms, medical history) and collaborate to formulate a potential diagnosis.

3. Lab Report Interpretation (40 mins):

Groups will use their reports to propose a diagnosis based on the microbiological findings. They should interpret the pathogen's characteristics (e.g., Gram stain, morphology, culture growth), resistance profile, and correlate these findings with possible clinical scenarios. Encourage further research to verify interpretations and hypothesize treatment options.

4. Group Presentations and Discussion (20 mins):

Each group presents their interpretation and diagnosis, including their rationale and treatment recommendations. The class engages in a discussion, critiquing and refining the diagnoses, considering differential diagnoses, and sharing additional insights.

5. Conclusion (10 mins):

Conclude the activity by reflecting on the role of microbiological reports in diagnostic decision-making and how accurate interpretation can impact patient outcomes.

Experiential-Learning 7.3 : Evaluation of biochemical reports

Total Learning Hours (05 Hours)

1. Case Setup: (30 mins)

The teacher provides students with anonymized biochemical reports, including normal and abnormal cases. These reports may include:

Complete blood count (CBC)

Liver function tests (LFTs)

Renal function tests (RFTs)

Lipid profiles, blood glucose, or electrolyte panels

Each case includes a brief clinical history (e.g., fatigue, jaundice, polyuria) to aid interpretation.

2. Student-Led Analysis: (3 hours)

Students independently perform the following tasks:

Review Clinical History

Understand the patient's symptoms and background to correlate the biochemical findings.

Examine Biochemical Reports

Identify abnormal values by comparing them to reference ranges.

Highlight significant deviations, such as:

Elevated liver enzymes (e.g., ALT, AST) indicate liver injury.

Abnormal creatinine or BUN levels reflect kidney dysfunction.

Electrolyte imbalances like hyperkalemia or hyponatremia.

Analyze and Interpret Abnormalities

Correlate abnormal findings with possible clinical conditions. Examples include:

High glucose levels: Diabetes mellitus or stress-induced hyperglycemia.

Elevated bilirubin: Hemolysis, liver disease, or biliary obstruction.

Low haemoglobin: Anemia due to nutritional deficiencies or chronic disease.

Categorize abnormalities as mild, moderate, or severe to guide clinical decision-making.

3. Synthesize Conclusions: (30 mins)

Formulate a possible diagnosis or list differential diagnoses based on report findings and clinical history.

4. Observation and Assessment: (1 hour)

The teacher observes students' approach to:

Identifying abnormalities in reports.

Making logical and evidence-based interpretations.

Articulating findings clearly and systematically.

Experiential-Learning 7.4 : Identification of the findings on the films of Ultrasonography, X-rays and Contrast Imaging

Total Learning Hours (05 Hours)

1. Student Activity: (30 mins)

Divide the students into two groups. Provide each group with a set of images across the three modalities (ultrasonography, X-rays, and contrast imaging). Each group will work with the following tasks:
2. Task for Each Group: (4 hours)

Identify any abnormal findings in the provided images.

Interpret the clinical significance of these findings and discuss what surgical procedures may be required.

Document and categorize the abnormalities by type (e.g., fractures, tumours, infections, obstructions, etc.).

3. Ask each group to:

Present their findings: Describe the abnormality, the organ or area affected, and the potential diagnosis.

Discuss clinical implications: How does the finding correlate with the patient's symptoms? What surgical management might be required?

Suggest further investigations: Depending on the findings, what additional imaging or tests would help confirm the diagnosis?

4. Feedback: (30 mins)

After the assessment, the teacher will give feedback to each student.

Experiential-Learning 7.5 : Identification of the findings on the films of Computer Tomography, Magnetic Resonance and Angiography

Total Learning Hours (05 hours)

1. Student Activity: (30 mins)

Divide the students into two groups. Provide each group with a set of images across the three modalities (Computer Tomography, Magnetic Resonance and Angiography). Each group will work with the following tasks:

2. Task for Each Group: (4 hours)

Identify any abnormal findings in the provided images.

Interpret the clinical significance of these findings and discuss what surgical procedures may be required.

Document and categorize the abnormalities by type (e.g., tumours, cysts, solid mass, fluid, blockage of the vessels etc.).

3. Ask each group to:

Present their findings: Describe the abnormality, the organ or area affected, and the potential diagnosis.

Discuss clinical implications: How does the finding correlate with the patient's symptoms? What surgical management might be required?

Suggest further investigations: Depending on the findings, what additional imaging or tests would help confirm the diagnosis?

4. Feedback: (30 mins)

After the activity, the teacher will give detailed feedback to individual students.

Experiential-Learning 7.6 : Indications & working of endoscopy

Total Learning Hours: (3 Hours)

1. Introduction (30 mins):

Begin with a brief introduction of gastrointestinal (GI) endoscopy, its types (e.g., upper GI, colonoscopy), and common indications (e.g., bleeding, cancer screening, ulcers, inflammation). Use a short video clip demonstrating the endoscopic procedure, emphasizing the technical aspects of the working mechanism.

2. Self-Directed Learning (45 mins):

Assign participants to independently research specific GI endoscopy indications (such as diagnostic vs. therapeutic uses, or specific diseases like Crohn's, GERD, or colorectal cancer). Provide tablets or computers with access to trusted medical sources and relevant handouts. They should note down key indications and procedural insights for their upcoming presentation.

3. Group Presentations (45 mins):

In small groups, participants will present their findings on different GI endoscopy indications. Each group will explain why the procedure is used in specific cases and how the technology aids diagnosis or treatment. Encourage open discussion and peer feedback.

4. Field Visit (45 mins):

Arrange a field visit to a nearby hospital or clinic with a functional GI endoscopy unit. Participants will observe an endoscopic procedure if possible, or engage with the medical staff to learn about the process in a real clinical setting.

5. Conclusion and Reflection (15 mins):

Conclude the activity with a short reflection session. Encourage participants to discuss what they learned and how the field visit enhanced their understanding of GI endoscopy.

Experiential-Learning 7.7 : Interpretations of the GI endoscopy findings

Total Learning Hours (03 hours)

1. Introduction and Lecture (20 mins):

Begin with a lecture on the common GI endoscopy findings (e.g., ulcers, polyps, tumors, varices) and the criteria used to interpret them. Use video clips showing endoscopic procedures with specific findings, and explain how these are linked to clinical diagnoses.

2. Co-Learning and Group Work (45 mins):

Divide participants into small groups, each tasked with analyzing different GI endoscopy images or videos. They will research and discuss the possible diagnoses based on the findings (e.g., identifying benign vs. malignant lesions, inflammatory conditions). Encourage collaboration by having them share thoughts and compare their initial interpretations.

3. Lab Report Preparation (45 mins):

Each group prepares a lab report summarizing their findings, including a diagnosis, interpretation of the images/videos, and possible treatment recommendations. They will use the provided handouts to support their conclusions and ensure evidence-based reasoning.

4. Group Presentations (45 mins):

Groups present their lab reports to the class, explaining their interpretations and justifications. After each presentation, open the floor for questions and debates, allowing for constructive critique and refinement of interpretations.

5. Symposium (25 mins):

Conclude with a mini-symposium where participants engage in a discussion about the nuances and challenges of interpreting GI endoscopy findings. Experts or instructors will act as panelists, guiding the discussion and providing additional insights.

Modular Assessment	
Assessment method	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	4
Assessment of a given specific case. The assessment will be based on:	4
Prescription of required specific investigations for that particular condition. (20 Marks)	

and

Interpretation of some laboratory reports and radiological/sonological films. (30 Marks)

or

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

and

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

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical/experiential) learning session, the students should be able to)	3C Notional Learning Hours	3D Lecture/ Practical/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/ Shows how/ Knows how/ Know)	3G Teaching Learning Methods
Module 8 : براحت کاتعارف وجائزه ومصنوگی فهانت بر احت کاتعارف وجائزه ومصنوگی فهانت Introduction and Review of classical Surgical Books and Artificial Intelligence)						
Module Learning Object (At the end of the modu	tives le, the students should be able to)					
1. Describe the indication	ons, contraindications, and dosage of the specific antibiotic	S.				
2. Illustrate the specific	Classical literature mentioning the surgical diseases and C	lassical Sur	gical Procedure	S.		
2. Discuss the Ilmul Jar	ahat in Classical Books.					
3 Identify the managem	ent and surgical procedures mentioned in Classical books.					
Jaraبراتیم تش ادویات Unit 1	seem kush Adviat (Antibiotics)					
Umūm عمومی ملاحظات :8.1.1	ī Mulāḥizāt (General Considerations)					
بوانع استعال، اور خوراک :8.1.2	lshārāt, Mawāni'-e-Isti'māl, aur Khurāk (Indications انثارات، •	s, Contraind	ications, & dosa	ge of:		
Sulphor سلفوناما <i>نڈ</i> ز:8.1.2.1	8.1.2.1:سلفوناما كَدُّز:Sulphonamides,					
Cotrimaxazole كوثر يموكسازول :8.1.2.2						
Quinolor كوئنولونز :8.1.2.3	nes					
بيٹا ليکٹم اينٹی بائيونکس :8.1.2.4	Beta-Lactum Antibiotics					

Aminoglycosides امىنوكلىكوسائىڭەز :8.1.2.5

Antiamoebic اینٹی امیسی :8.1.2.6

Other Antiprotozoal Drugs د يگر اينٹی پروٹوزو ئيل ادويات: 8.1.2.7

References: 19,20,21

3A	3В	3C	3D	3E	3F	3G
CO4,CO5,CO6,CO8	Describe the indications of specific antibiotics	1	Lecture	CAN	Know	L&PPT ,PL,SDL
CO4,CO5,CO6,CO8	Describe the factors affecting drug dosage	1	Lecture	CAN	Knows- how	L&PPT ,LS,PL,SDL
CO4,CO5,CO6,CO8	Demonstrate the indications and contraindications of different antibiotics	2	Practical8.1	PSY- ADT	Shows- how	BL,CBL,DIS,DA,L_VC
CO4,CO5,CO6,CO8	Display the guidelines for determining the appropriate dosage of antibiotics in different clinical scenarios.	2	Practical8.2	PSY- GUD	Shows- how	DA,EDU,JC,PL,PER
CO4,CO5,CO6,CO8	Identify the drug and enlist the side effects and any new update found in any clinical research. Also calculate the correct dosage based on patient weight, drug concentration, and prescribed regimen.	4	Experiential- Learning8.1	CS	Knows- how	JC,LS,ML,PL
CO4,CO5,CO6,CO8	Frame a list of indications & uses of Jraseemkush adviaat. (Unani drugs)	2	Experiential- Learning8.2	CS	Knows- how	DA,JC,LS,ML
CO4,CO5,CO6,CO8	Describe the contraindications of specific antibiotics.	1	Lecture	CAN	Knows- how	BL,BS,DIS,DA,GBL,L&GD,L&PPT ,LS
CO4,CO5,CO6,CO8	Describe the different ways of calculating drug dosages.	1	Lecture	CAN	Knows- how	FC,L&GD,L&PPT
CO4,CO5,CO6,CO8	Demonstrate the identification, indications, and uses of different <i>Jaraseemkush Adviaat</i> (Unani Adviaat)	2	Practical8.3	PSY- ORG	Shows- how	BL,CBL,DIS,DA,PER
CO4,CO5,CO6,CO8	Calculate the dosage of specific antibiotics in clinical scenarios and infections.	2	Practical8.4	PSY- GUD	Shows- how	DIS,EDU,PER,PBL

CO4,CO5,CO6,CO8	Describe the contribution of Unani surgeons in the evolution of Surgery (Ilmul Jarahat)	1	Lecture	сс	Knows- how	BL,LS,PL,REC,SDL
CO4,CO5,CO6,CO8	Describe the identification, indications, and uses of different <i>Jaraseemkush Adviaat</i> (Unani Adviaat)	1	Lecture	сс	Knows- how	FV,L&PPT ,L_VC
CO4,CO5,CO6,CO8	Frame a list of indications and contraindications of antibiotics with recent advances	2	Experiential- Learning8.3	СК	Knows- how	DA,JC,LS,ML

Unit 2 مصادركتب جراحت كالخارف وجائزه Maṣādir Kutub Jarāḥat kā Taʻāruf wa Jā'iza (Introduction and Review of classical Unani Books)

8.2.1: علم الجراحت ك مختلف بنيادى مصادر: Ilm ul-Jarāḥat ke Mukhtalif Bunyādī Masādir (Various classical sources of Ilmul Jarahat)

ا المعناني سرجنز کی خدمات :Jarāḥat mein Unānī Surgeons kī Khidmat (Unani surgeons and their contributions in Surgery) جراحت میں یونانی سرجنز کی خدمات :8.2.2

8.2.3: علاج کے تصورات اور اصول المقا ke Tasawwurāt aur Uṣūl (Concepts and principles of treatment)

References: 26,27,28,29

3A	3В	3C	3D	3E	3F	3G
CO4,CO5,CO6,CO8	Describe in deatail the classical sources of Ilmul Jarahat.	1	Lecture	сс	Knows- how	BL,FV,LS,PL,REC,SDL
CO4,CO5,CO6,CO8	Describe the surgical procedures mentioned in classical Unani literature.	1	Lecture	сс	Knows- how	FV,FC,LS,PL,REC
CO4,CO5,CO6,CO8	Display & demonstrate the sources of classical literature mentioning different classical surgical precedures.	4	Practical8.5	PSY- GUD	Shows- how	JC,KL,LS,ML
CO4,CO5,CO6,CO8	Identify the pathogenesis and clinical features of surgical diseases mentioned in classical sources of Unani books.	4	Practical8.6	PSY- GUD	Shows- how	DIS,LS,ML,PER
CO4,CO5,CO6,CO8	Prepare a detailed chart of classical surgical procedures mentioned in Classical Unani Literature	6	Experiential- Learning8.4	PSY- ORG	Shows- how	DIS,PL,PER,TPW
CO4,CO5,CO6,CO8	Display the chart of classical procedures of Jarahat mentioned by Abū al-Qāsim Khalaf ibn al-'Abbās al- Zahrāwī	6	Experiential- Learning8.5	PSY- ORG	Shows- how	DIS,PER,TPW,TBL

Unit 3 Artificial Intelligence (AI)معنوىذبانت:Masnūʻī Zihānat

ا جراحت کی مشق میں مصنوعی ذھانت :Jarahat kī Mashq mein Masnū'ī Zihānat (Artificial intelligence in surgical simulation) جراحت کی مشق میں مصنوعی ذھانت :8.3.1

8.3.2: يوناني سرجنز کے لیے مصنوعی ذہانت کے مضمرات Unānī Surgeons ke liye Masnū'ī Zihānat ke Muḍmirāt (Implications for Unani Surgeons)

8.3.3: طبى تشخيص ميں مصنوعى ذہانت Țibbī Tashkhīṣ mein Masnū'ī Zihānat (Al in Medical Diagnostics)

References: 26,27,28,29

3A	3В	3C	3D	3E	3F	3G
CO4,CO5,CO6,CO8	Describe Artificial Intelligence and its applications in diagnosis	1	Lecture	СК	Knows- how	L&PPT ,PL,REC
CO4,CO5,CO6,CO8	Demonstrate the applications & current status of Artificial Intelligence in surgery.	2	Practical8.7	PSY- GUD	Shows- how	LS,ML,PER,SDL
CO4,CO5,CO6,CO8	Demonstrate familiarity with the applications of Artificial Intelligence in surgery	3	Experiential- Learning8.6	PSY- ADT	Does	CBL,DIS,SDL,SIM,W
CO4,CO5,CO6,CO8	Describe applications of Artificial Intelligence in surgery	1	Lecture	СК	Knows- how	BL,L&PPT ,L_VC,LS,ML
CO4,CO5,CO6,CO8	Demonstrate the applications of Artificial Intelligence in diagnosis of various surgical diseases.	2	Practical8.8	PSY- GUD	Shows- how	DIS,EDU,LS,ML,PER,SDL
CO4,CO5,CO6,CO8	Communicate the applications of Artificial Intelligence in the diagnosis of surgical diseases.	3	Experiential- Learning8.7	PSY- ADT	Does	DIS,SDL,W
Practical Training Activ	ity					
Practical 8.1 : Indicatio	ns and contraindications of antibiotics					
Total Learning Hours (2 Hours)					
Blended Learning Mod	ule (30 minutes):					

Provide an online module or pre-recorded lecture covering essential topics on antibiotics commonly used in surgery (e.g., prophylactic antibiotics, treatment of surgical site infections). The module should focus on appropriate drug selection, dosing, and the indications and contraindications in surgical contexts (e.g., renal dysfunction, allergies, resistance).

Case-Based Learning/ video (40 minutes):

Divide participants into small groups. Assign each group a surgical case that requires antibiotic treatment, such as:

A patient undergoing elective colorectal surgery needs prophylaxis for surgical site infection.

A diabetic patient undergoing foot surgery with an existing bacterial infection. Each group will identify the antibiotic choice, its indications, and any contraindications specific to the patient's medical history.

Group Discussion (20 minutes):

Groups will present their case solutions, focusing on the rationale behind their antibiotic choice and how contraindications (e.g., renal impairment, drug allergies) affect their decision. Encourage peer feedback.

Drug Analysis (30 minutes):

Assign participants to research and present on specific antibiotics used in surgical patients (e.g., cefazolin, vancomycin). They will analyze the drug's spectrum, side effects, dosing regimens, and its role in preventing post-operative infections.

Practical 8.2 : Demonstration of guidlines for dosage formation

Total Learning Hours (2 Hours)

1. Peer Learning & Journal Club (40 min):

Participants are divided into small groups. Each group is assigned a clinical scenario (e.g., renal impairment, pediatric dosing, ICU patient with sepsis). They review a recent guideline or journal article on antibiotic dosing related to their case. Groups then present key findings and dosing considerations to their peers.

2. Drug Analysis Activity (30 min):

Students work in pairs to analyse the pharmacokinetics, dosage ranges, and contraindications of selected antibiotics using drug monographs. They apply this data to hypothetical patient cases provided by the facilitator.

3. Edutainment Segment (30 min):

Groups create a short skit, role-play, or infographic showcasing common dosing errors and how to prevent them, based on their case study. Emphasis is placed on creativity and the correct application of guidelines.

4. Wrap-up & Reflection (20 min):

The teacher summarises key takeaways and leads a discussion on the clinical relevance and challenges of antibiotic dosing.

Practical 8.3 : Identification, Indications and uses of different Jaraseemkush Adviaat (Unani Adviaat)

Total Learning Hours (02 Hours)

Blended Learning Module (30 minutes):

Begin with an e-learning module or pre-recorded lecture on Jaraseemkush Adviaat (antimicrobial Unani formulations). The module should cover the history, pharmacological properties, identification, and therapeutic indications of these Unani medicines. Focus on their role in wound healing, and post-surgical care.

Case-Based Learning/ presentation (40 minutes):

Divide participants into small groups and assign a case study where Jaraseemkush Adviaat could be used, such as:

Each group will identify the appropriate Jaraseemkush Adviaat, its indications, and discuss how these formulations would be integrated into the patient's treatment plan.

A patient recovering from surgery requiring an antimicrobial Unani formulation to for a better scar formation or early healing.

A diabetic patient with surgical wounds requiring Unani herbal support for faster healing.

Discussion (20 minutes):

Facilitate a group discussion where each group presents their case and rationale for selecting the specific Jaraseemkush Adviaat. Discuss potential contraindications, interactions with conventional medicines, and evidence supporting their use in surgery.

Drug Analysis (30 minutes):

Assign participants to analyze specific Jaraseemkush Adviaat by researching their composition, therapeutic properties, and uses in surgical recovery. Present findings on safety, dosage, and integration with modern surgical care.

Practical 8.4 : Drug dosage calculation

Total Learning Hours (02 hours)

Introduction (20 minutes):

Begin with a short presentation on the principles of calculating antibiotic dosages based on patient-specific factors (age, weight, renal function) and infection severity.

Introduce common dosing calculations and how to use dosage charts or clinical guidelines for various antibiotics.

Problem-Based Learning (40 minutes):

Present students with detailed case scenarios (e.g., a 75-year-old with a UTI or a 5-year-old with pneumonia). Each group receives a different scenario.

Students will calculate the correct antibiotic dose, taking into account factors like drug clearance, patient age, and the infection's severity.

Groups discuss their approach to solving the problem and share the rationale behind their calculations.

Discussions (40 minutes):

The teacher bleads a class-wide discussion on the different approaches used by each group. Clarify any misconceptions and provide further insights into dosing considerations.

Edutainment (20 minutes):

Conclude with an interactive quiz using Kahoot or Quizizz, where students answer real-life dosing questions based on the scenarios discussed.

Practical 8.5 : Revision of classical procedures.

Total Learning Hours (4 Hours)

Library Session – Literature Exploration (60 min):

Students work in small groups in the medical library to explore classical texts such as *Sushruta Samhita* or *Charaka Samhita*. Each group selects a surgical procedure (e.g., rhinoplasty, wound suturing, lithotomy) and notes its description, instruments used, and indications.

Journal Club – Comparative Analysis (45 min):

Groups review and discuss modern journal articles or case studies comparing classical surgical methods with current techniques. Each group presents how ancient procedures influenced or differed from modern practices.

Kinaesthetic Learning – Hands-on Demonstration (75 min):

Using surgical models or dummies, students perform simplified demonstrations of classical techniques (e.g., bandaging, suturing) as per ancient descriptions. Emphasis is on understanding the technique, not clinical perfection.

Mobile Learning – Digital Exploration & Quiz (60 min):

Students use mobile apps or platforms to access videos, 3D visuals, and virtual dissections related to classical procedures. They complete a short interactive quiz to reinforce learning.

After assessment teacher will provide feedback to each of the students.

Practical 8.6 : Identification of the pathogenesis and clinical features

Total Learning Hours (4 Hours)

1. Case-Based Learning with Classical Texts: (90 mins)

Provide students access to classical Unani sources (e.g., Kitab al-Tasrif by Al-Zahrawi or Al-Qanoon fi al-Tibb by Avicenna) in translated or summarized formats.

Assign specific surgical diseases for study, focussing on their described pathogenesis, clinical features, and associated treatments.

2. Chart and Summary Preparation: (90 mins)

Students create a comparative chart documenting:

Disease Name: Classical and modern terminologies.

Pathogenesis: Pathogenesis is mentioned in the classical literature and correlated with modern pathophysiology.

Clinical Features: Symptoms described in classical sources and their relevance today.

Include diagrams or flowcharts to visually represent disease progression.

3. Group Presentation and Discussion: (30 mins)

Groups present their findings, comparing pathogenesis mentioned in classical literature and clinical features with modern surgical understanding.

Facilitate discussions on how historical perspectives align or differ from current medical approaches.

4. Feedback and Reflection: (30 mins)

The teacher will provide feedback on the student's understanding and ability to connect classical and contemporary concepts.

Practical 8.7 : Artificial Intelligence in Surgery

Total Learning Hours (2 Hours)

Introduction (20 minutes):

Begin with a brief presentation introducing AI in surgery, covering key applications like robotic surgery, AI in diagnosis (e.g., imaging analysis), predictive analytics, and personalized treatment plans.

Highlight the current status of AI integration in surgical practice, including recent innovations and ongoing research.

Self-Directed Learning (30 minutes):

Assign each student or group a specific aspect of AI in surgery (e.g., AI in robotic surgery, AI in post-surgical care, AI in preoperative diagnostics).

Students will use mobile learning tools to conduct independent research on their assigned topic, focusing on recent developments and real-world applications in surgical practice.

Library Session (30 minutes):

Students will access the library to consult scholarly journals and resources for deeper insights into AI's evolving role in surgery. This will help them refine their understanding and gather additional supporting evidence.

Group Presentation (40 minutes):

Each group synthesizes their findings into a brief presentation, highlighting the application, current status, benefits, and challenges of AI in their assigned area of surgery.

The session ends with a group discussion, allowing students to compare findings and engage in a Q&A about future trends in AI technology.

Practical 8.8 : Diagnosis by AI (Aritificial Intelligence)

Total Learning Hours: (02 hours)

Activity Breakdown:

Introduction (20 minutes):

Begin with a brief presentation explaining the role of AI in diagnosing surgical diseases, such as cancer detection, imaging interpretation, and predicting surgical outcomes.

Discuss AI's capacity for analyzing large datasets, assisting in early detection, and improving diagnostic accuracy.

Self-Directed Learning (30 minutes):

Assign students specific surgical diseases (e.g., colorectal cancer, liver diseases, cardiac surgery, etc.). Each student/group will explore AI applications in the diagnosis of their assigned disease.

Students will research recent AI advancements using mobile devices, including machine learning algorithms for diagnostic imaging, predictive models, and clinical decision support systems.

Library Session (30 minutes):

Students will visit the library to consult academic journals, research papers, and books on Al's role in diagnosing surgical diseases. This will help them gather comprehensive evidence and understand the broader clinical impact.

Group Presentation (40 minutes):

Each group synthesizes their findings into a presentation, showcasing how AI is applied to diagnose specific surgical diseases. Presentations should include key benefits, challenges, and future potential of AI in improving diagnostic accuracy.

Experiential learning Activity

Experiential-Learning 8.1 : Side effects of drugs and drug dosage

Total Learning Hours (4 Hours)

Library Session & Drug Identification (60 min):

Students use digital and physical library resources to select one commonly used drug (assigned or chosen) in clinical practice. They document its mechanism of action, indications, and pharmacological class.

Journal Club & Research Updates (60 min):

In small groups, students review a recent clinical research article related to their chosen drug. Each group summarizes new findings, especially on side effects, black box warnings, or emerging therapeutic uses. Presentations are followed by peer discussion.

Peer Learning & Dosage Calculation (60 min):

Each group is given patient profiles (age, weight, renal function, etc.) and must calculate the correct dosage using the drug's pharmacokinetics and standard regimen. Groups exchange and review each other's calculations for accuracy.

Mobile Learning & Interactive Quiz (60 min):

Using mobile apps or online platforms (like Medscape or UpToDate), students explore additional drug details and complete a gamified quiz assessing knowledge on drug identification, side effects, and dosing.

Experiential-Learning 8.2 : Indications & uses of Jraseemkush adviaat. (Unani drugs)

Total Learning Hours (2 Hours)

1. Introduction (20 minutes): Brief introduction to *Jraseemkush Adviaat*, its role in Unani medicine, and its traditional uses. Discuss its primary ingredients and historical significance in treating various ailments.

Outline the goals of the session: to research and compile a detailed list of its indications and therapeutic uses.

2. Drug Analysis (30 minutes): Divide students into small groups. Assign each group to research a specific component of *Jraseemkush Adviaat* (e.g., its primary herbs or active ingredients).

Using mobile learning tools, students will analyze research articles, online resources, and Unani pharmacopoeias to gather information.

3. Journal Club (30 minutes): Each group will present their findings in a journal club format, discussing the evidence, therapeutic uses, and scientific support for each indication.

The facilitator will guide the discussion, highlighting any clinical studies or traditional knowledge related to the drug.

- 4. Library Session (30 minutes): Students visit the library to consult relevant books and journals. They will refine their list of indications and uses, ensuring they include both traditional and modern perspectives.
- 5. Wrap-up and Presentation (10 minutes):

Groups present their finalized list of indications and uses of Jraseemkush Adviaat on the whiteboard for class discussion and feedback.

Experiential-Learning 8.3 : Indications and contraindications of antibiotics

Total Learning Hours (02 hours)

1. Introduction (20 minutes):

Begin with a brief presentation on the importance of understanding the indications and contraindications of antibiotics in modern clinical practice, including emerging trends and antibiotic resistance.

Introduce recent research, including studies on new antibiotic classes and advancements in resistance mechanisms.

2. Drug Analysis (30 minutes):

In small groups, students are assigned specific antibiotics (e.g., Penicillin, Ciprofloxacin, Amoxicillin). They will use mobile learning tools to research up-to-date indications, contraindications, and recent findings or controversies related to their assigned antibiotics.

Students will focus on new developments such as changes in dosing regimens, updated contraindications, and emerging resistance patterns.

3. Journal Club (30 minutes):

Groups present their findings in a journal club format, citing recent studies or clinical trials that provide insights into the evolving use and limitations of their assigned antibiotic.

The discussion focuses on how recent advances influence clinical decision-making.

4. Library Session (30 minutes):

Students use library resources to access more comprehensive data on their antibiotics. They will refine their list of indications and contraindications, considering the latest guidelines and evidence.

5. Wrap-up and Presentation (10 minutes):

Each group presents their final list of indications and contraindications, highlighting the most significant recent advances.

Experiential-Learning 8.4 : Classical Unani Surgical procedures

Total Learning Hours (6 Hours)

1. Resource-Based Research: (2 Hours)

Provide access to classical Unani texts, translated excerpts, and academic resources related to Jarahat.

Assign groups to research specific procedures, such as incision and drainage, cauterization (Kay), suturing techniques, or surgical management of fractures.

2. Chart Preparation: (140 Mins)

Each group will document their assigned procedure, including:

Description: Steps of the procedure.

Indications: Conditions treated using the procedure.

Tools Used: Classical surgical instruments.

Underlying Principles: Theoretical foundations from Unani texts.

Encourage the use of illustrations, diagrams, and comparisons with modern surgical techniques.

3. Presentation and Peer Review: (70 Mins)

Groups present their charts to the class, explaining the procedures and their historical significance.

Peer review ensures constructive feedback and the identification of overlapping themes or modern parallels.

4. Feedback and Discussion: (30 Mins)

The teacher provides feedback on the content, accuracy, and presentation quality.

Facilitate a discussion on how classical *Jarahat* principles can inform modern surgical practices.

Experiential-Learning 8.5 : Classical procedures of Jarahat mentioned by Abū al-Qāsim Khalaf ibn al-'Abbās al-Zahrāwī

Total Learning Hours: (6 Hours)

1. Research and Group Work: (130 Mins)

Divide students into small groups and assign each group specific topics or procedures (e.g., wound suturing, abscess drainage, bone setting). Provide access to translated Unani texts or summaries to guide their research.

2. Chart Preparation: (130 Mins)

Students will compile information on their assigned procedures, including descriptions, indications, tools used, and principles underlying the techniques.

Each group creates a detailed, illustrated chart showcasing their findings, integrating historical methods with modern surgical parallels, where applicable.

3. Presentation and Discussion: (70 Mins)

Each group presents their chart to the class, explaining the procedure and its significance in Unani medicine. Encourage questions and discussions about how these practices influenced or align with current surgical techniques.

4. Feedback and Reflection: (30 Mins)

The teacher provides feedback on each chart's accuracy, creativity, and presentation. Students reflect on the evolution of surgical practices and the enduring principles of Unani surgery.

Experiential-Learning 8.6 : Uses of Artificial Intelligence in surgery

Total Learning Hours (3 Hours)

1. Robotic Surgery Simulation / Video Demonstration: (60 mins)

Provide students access to robotic surgery training modules (if available) to experience how AI assists in surgical precision and visualization.

2. AI-Based Diagnostics: (30 mins)

Use AI-powered diagnostic software to analyze medical imaging or patient data, demonstrating how AI helps in identifying patterns, predicting complications, or planning surgeries.

3. Case-Based Problem Solving: (30 mins)

Present students with surgical scenarios where AI tools play a critical role, such as selecting optimal surgical approaches or managing intraoperative challenges. Students will evaluate the AI recommendations and compare them with traditional approaches.

4. Group Discussion on Ethical Considerations: (30 mins)

In small groups, students will discuss the ethical implications of AI in surgery, including patient safety, data privacy, and the role of surgeons in an AI-driven environment.

5. Reflection and Feedback: (30 mins)

Students will write their observations and share their perspectives on how AI is transforming surgical practice. The instructor provides feedback on their understanding of AI's capabilities, limitations, and future potential.

Experiential-Learning 8.7 : Diagnosis of surgical diseases by Artificial Intelligence

Total Learning Hours (03 hours)

1. Introduction (30 mins)

Begin with a brief lecture on the evolution of AI in healthcare, focusing on its application in diagnosing surgical diseases.

Introduce key AI concepts (machine learning, neural networks, data analysis) and real-world examples of AI tools in surgery (e.g., robotic surgery, diagnostic imaging tools).

2. Self-Directed Learning (60 mins)

Provide participants with a curated list of resources (articles, videos, case studies, and research papers) on AI applications in surgery.

Allow participants time to study the materials independently, encouraging them to take notes and prepare questions.	
Afterwards, each participant shares a key takeaway or insight from their self-study with the group	
3. Workshop: Al in Surgical Diagnosis (60 min)	
Divide participants into small groups. Each group is assigned a surgical disease (e.g., cancer, heart disease) and tasked with analyzing how AI could improve diagno treatment outcomes.	sis and
Groups will brainstorm AI tools or applications that could aid in diagnosis, discussing data sources, accuracy, and integration into clinical practice.	
4. Discussion and Debrief (30 mins)	
Reconvene as a larger group to share group insights.	
Discuss potential challenges and othical considerations of using AL in clinical sottings	
Discuss potential chanenges and ethical considerations of dsing Arm clinical settings.	
Wrap up with Q&A, providing additional resources for continued learning.	
Wrap up with Q&A, providing additional resources for continued learning. Modular Assessment	
Discuss potential channeliges and ethical considerations of using AFM clinical settings. Wrap up with Q&A, providing additional resources for continued learning. Modular Assessment Assessment method	
Discuss potential challenges and ethical considerations of using AFM clinical settings. Wrap up with Q&A, providing additional resources for continued learning. Modular Assessment Assessment method Instructions - Conduct a structured Modular assessment. The assessment will be for 50 marks. Keep a structured marking pattern. Use different assessment	
Discuss potential challenges and enrical considerations of using AFIII clinical settings. Wrap up with Q&A, providing additional resources for continued learning. Modular Assessment Assessment method 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.	
Discuss potential challenges and entical considerations of using Arm clinical settings. Wrap up with Q&A, providing additional resources for continued learning. Modular Assessment Assessment method 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. Class Presentation (20 Marks)	4
Wrap up with Q&A, providing additional resources for continued learning. Modular Assessment Assessment method 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. Class Presentation (20 Marks) Any topic for a class presentation on any "Surgical procedure mentioned in Unani Classical Book and its recent modifications" (20 Marks)	4

Any topic for a class presentation on "Indications, contraindications and dosage calculations of certain drugs" (20 Marks)	
OR	
Any topic for a class presentation on "Artificial Intelligence and its application in Surgery" (20 Marks)	
And	
Quiz (15X2=30 Marks)	
A list of 15 questions for the quiz will be framed (5 questions from each unit)	
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	Ethics & Responsibilities of a surgeon	2
1.2	Application of ethical principles in surgical practice	2
1.3	OT attire- Demonstration and Hands-On Practice	2
1.4	Methods of Sterilization	2

1.5	Preoperative assessment.	2
1.6	Preparation of surgical site	2
1.7	Handling of instruments.	2
1.8	Surgical knot tying, and suturing.	2
1.9	Cauterisation procedure	2
1.10	Demonstration of bandaging techniques	2
2.1	Chief complaints and history of present illness in Ilmul Jarahat	3
2.2	Mastering History Collection of Immunization, Past Medical, and Drug History	3
2.3	Symptoms in the diagnosis of surgical conditions.	2
2.4	Sign and symptoms of Sū'-e Mizāj, and Ghalba Akhlāț.	2
2.5	Demonstration of signs	2
2.6	Categorisation of features of Tafarruq-e-Ittiṣāl	2
2.7	Recording general survey in surgery	3
2.8	General physical examination	3
3.1	Diagnosis of disease of head and face	2
3.2	Diagnosis of diseases of neck	2
3.3	Evaluation of Diseases of Thyroid Gland	2
3.4	Demonstration and Practice of Breast Disease Evaluation	4
4.1	Demonstration of differential diagnosis and investigation of swelling and lump.	3
4.2	Evaluation of swelling and lump	3
4.3	Evaluation of abdominal lump	2
4.4	Interpretation of investigations, & differential diagnosis in abdominal lump	2
4.5	History taking and physical examination in acute and chronic conditions of abdomen	4

4.6	Investigations and differential diagnosis for acute and chronic conditions of abdomen	4
4.7	History recording in hernia	3
4.8	Physical Examination of Hernia	3
4.9	Differential diagnosis in hernia	2
4.10	History taking and physical examination in inguino-scrotal swelling	2
4.11	Differential diagnostic points in inguino-scrotal swelling	2
5.1	History taking in a case of ano-rectal diseases	2
5.2	Ano-Rectal Examination and interpretation of investigations	4
5.3	Evaluation of Sinus and Fistula	2
5.4	History Taking in Scrotal and Penile Diseases	3
5.5	Physical Examination of the Scrotum and Penis	3
5.6	History taking in urinary case	2
5.7	Evaluation of urinary case using physical examination and investigations	4
6.1	History Taking and Interpretation of Specific Investigations in Arterial Diseases (Gangrene and Aneurysm)	4
6.2	Detailed physical examination in case of arterial diseases	4
6.3	History taking and laboratory interpretation	3
6.4	Detailed physical examination in a case of varicose vein and venous thrombosis	3
6.5	Physical examination and interpretation of laboratory findings/reports in lymphatic diseases	4
6.6	History Taking, Physical Examination, and Interpretation of Investigations in wounds/ulcers	2
7.1	Indications and interpretation of the pathological reports	2
7.2	Interpretation of microbiological reports	2
7.3	Indications of biochemical reports	2
7.4	Interpretation of biochemical reports	2

7.5	Indications of Ultrasonography, X-rays and Contrast Imaging	4
7.6	Identification of abnormal findings in films of Computer Tomography, Magnetic Resonance and Angiography	4
7.7	Demonstration the working and indications of the endoscopy	2
7.8	Intepretation of the endoscopic findings	2
8.1	Indications and contraindications of antibiotics	2
8.2	Demonstration of guidlines for dosage formation	2
8.3	Identification, Indications and uses of different Jaraseemkush Adviaat (Unani Adviaat)	2
8.4	Drug dosage calculation	2
8.5	Revision of classical procedures.	4
8.6	Identification of the pathogenesis and clinical features	4
8.7	Artificial Intelligence in Surgery	2
8.8	Diagnosis by AI (Aritificial Intelligence)	2

Table 5 : Experiential learning Activity

(*Refer table 3 of similar activity number)

Experiential learning No*	Experiential name	Hours
1.1	Ethics and responsibilities of a surgeon	3
1.2	Responsibilities of a surgeon mentioned in classical literature	2
1.3	Demonstration of OT attire, and scrubbing	2
1.4	Sterilisation	3
1.5	Negotiation of preoperative assessment techniques	3
1.6	Skin preparation in Ilmul Jarahat (surgery)	3
1.7	Handling of surgical instruments and application of drainage tubes	4
1.8	Mastering Knot Tying and Suturing Techniques	3
1.9	Technique for dressing and cauterization	3
2.1	Recording patient particulars and chief complaints	2
2.2	Patient history overview	2
2.3	Recording history of present illness.	2
2.4	Recording Medical History.	2
2.5	Ddiagnosis of surgical diseases using symptoms	3
2.6	Diagnosis of surgical diseases based on of S $ar{u}$ '-e Miz $ar{a}$ j, and Ghalba Akhl $ar{a}$ ț,	3
2.7	Diagnosis of surgical diseases using signs	2
2.8	Diagnosis of surgical diseases based on of Tafarruq-e-Ittiṣāl	2
2.9	General survey in surgery	4
2.10	General physical examination in surgery	4

3.1	Diagnosis of Congenital Lesions, Traumatic Lesions, Inflammatory Lesions, Ulcers, Tumours, Cysts and Characteristic Facies	3
3.2	Comprehensive Evaluation of Neck Diseases	3
3.3	Evaluation of Thyroid Gland Diseases	2
3.4	History recording and physical examination in diseases of breast	3
3.5	Differential diagnosis and investigations in diseases of breast	2
4.1	History recording in a case of lump and swelling	3
4.2	Dfferential diagnosis in case of lump and swelling	2
4.3	Interpretation of investigations and differential diagnosis in acute abdomen and chronic abdominal conditions	3
4.4	Physical examination in the case of lump and swelling	2
4.5	Investigations in case of lump and swellings	2
4.6	History recording and physical examination of abdominal lump	3
4.7	Investigation, their interpretation and differential diagnosis in abdominal lump	3
4.8	Diagnosis of acute and chronic abdominal conditions from history taking	3
4.9	Physical examination in acute and chronic abdominal conditions	4
4.10	History taking and physical examination to different cases of hernia.	5
4.11	Differential points of diagnosis in hernia	4
4.12	History Taking and Physical Examination for Inguino-Scrotal Swelling	3
4.13	Differential diagnosis in inguino-scrotal swelling	2
5.1	History taking in ano-rectal cases	4
5.2	Diagnosis of Ano-Rectal Cases through Physical Examination	4
5.3	Evaluation of the case of sinus and fistula	3
5.4	Evaluation of diseases of scrotum and penis	3
5.5	Interpretation of investigations in the diagnosis of scrotum and penis diseases	4

5.6	History taking in Urinary cases	4
5.7	Evaluation of Urinary case	4
6.1	Provisional diagnosis of arterial diseases by taking proper history and physical examination.	5
6.2	Interpretation of investigations/lab reports of arterial disease	4
6.3	Method of history taking and physical examination of venous system	4
6.4	Diagnosis of varicose vein and venous thrombosis by interpretation of investigation and differential points.	4
6.5	History taking of lymphatic diseases	3
6.6	Physical examination in lymphatic diseases	3
6.7	Diagnosis of Ulcer/Wound	3
7.1	Analysis of pathological reports	3
7.2	Diagnosis from microbiological reports	2
7.3	Evaluation of biochemical reports	5
7.4	Identification of the findings on the films of Ultrasonography, X-rays and Contrast Imaging	5
7.5	Identification of the findings on the films of Computer Tomography, Magnetic Resonance and Angiography	5
7.6	Indications & working of endoscopy	3
7.7	Interpretations of the GI endoscopy findings	3
8.1	Side effects of drugs and drug dosage	4
8.2	Indications & uses of Jraseemkush adviaat. (Unani drugs)	2
8.3	Indications and contraindications of antibiotics	2
8.4	Classical Unani Surgical procedures	6
8.5	Classical procedures of Jarahat mentioned by Ab ${ar{ m u}}$ al-Q ${ar{ m a}}$ sim Khalaf ibn al-'Abb ${ar{ m a}}$ s al-Zahr ${ar{ m a}}$ w ${ar{ m l}}$	6
8.6	Uses of Artificial Intelligence in surgery	3
8.7	Diagnosis of surgical diseases by Artificial Intelligence	3

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-AB-IJ	1	100	200	300

6 B : Scheme of Assessment (Formative and Summative Assessment)

Credit frame work

UNIPG-AB-IJ consists of 8 modules totaling 16 credits, which correspond to 480 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 II.

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
M1. سرجنونغرفة العمليات Surgeon wa Ghurfat al-'Amaliyyāt (Surgeon and Operation Theatre)	2	60		50		
M2. دوداداورعمو کې جسمانۍ معائنه, Moodaad wa Umoomi Jismani Muʿāʾina (History Taking and General Physical Examination)	2	60		50		
M3. اراس،وجَدْق اور تُدَعَين Head, Face, Neck, Thyroid Gland and Breast)	1	30		25		
M4. اورام عامة وبطن Awrām-e-'Āmma wa Baṭn (General) Swellings and Abdomen)	3	90		75		
M5. نظام مقعدی۔ سمس ^{تی} یں و تناکل یولNizām-e-Maqʻadī-Mustaqīmī wa Tanāsulī Bawlī (Ano-Rectal and Genitourinary system)	2	60		50		
M6. اطرافی عروق ولمغادییة جرح و قرحAṭrāfī 'Urūq wa Lymphāwīyah wa Jarah wa Qarah (Peripheral Vessels, Lymphatic, Wounds and Ulcers)	2	60		50		
M7 . جت میں شخصی طریقے اوران کی توقیق Jarāḥat meinTashkhīsī Tareeqay aur Un kī Tawzīḥ (Diagnostic Methods in Jarahat and their Interpretation)	2	60		50		
M8. براثيم كش ادويات ومعمادر كتب جراحت كالعارف وجائزه ومصنوعى ذبائت. Jaraseem kush Adviat wa Maṣādir Kutub Jarāḥat kā Ta'āruf wa Jā'iza wa Masnoyi zehanat (Antibiotics and Introduction and Review of classical Surgical Books and Artificial Intelligence)	2	60		50		

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

A S.No	B Module number and Name	C MGP
1	M1. سرجن ونغرفة العمليات. M1 مرجن ونغرفة العمليات. M1 (Surgeon and Operation Theatre)	C 1
2	M2.وداداورعمومیجسمانی معائنه.Roodaad wa Umoomi Jismani Muʿāʾina (History Taking and General Physical Examination)	C 2
3	M3.راس، وجَمْقَ اور تَدْنَى بِن. Rās, Wajh, 'Unuq aur Sadyayn (Head, Face, Neck, Thyroid Gland and Breast)	C 3
4	M4.ورام عامة وبطن Awrām-e-'Āmma wa Baṭn (General Swellings and Abdomen)	C 4
5	Mizām-e-Maq'adī-Mustaqīmī waنظام مقعدی۔ مستقیمی و تناکل بولی.Mizām-e-Maq'adī-Mustaqīmī wa Tanāsulī Bawlī (Ano-Rectal and Genitourinary system)	C 5
6	M6.لطرافی عروق دلمفادیة جرت دقر المار الی عروق دلمفادیة جرت دقر تا Aṭrāfī 'Urūq wa Lymphāwīyah wa Jarah wa Qarah (Peripheral Vessels, Lymphatic, Wounds and Ulcers)	C 6
7	M7 جامت میں شخصی طریقے اوران کی تو تیتے. Jarāḥat meinTashkhīsī Tareeqay aur Un kī Tawzīḥ (Diagnostic Methods in Jarahat and their Interpretation)	C 7
8	M8. براتيم كش دويات و مصادر كتب جراحت كاتعارف وجائز و ومصنوعى ذبائت. kush Adviat wa Maṣādir Kutub Jarāḥat kā Ta'āruf wa Jā'iza wa Masnoyi zehanat (Antibiotics and Introduction and Review of classical Surgical Books and Artificial Intelligence)	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-AB-IJ Sem II 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		
ىليات (M- 1)	(Marks: Range 5-20) سرجن وغرفة العمليات (M- 1) Surgeon wa Ghurfat al-'Amaliyyāt (Surgeon and Operation Theatre) (Marks: Range 5-20)					
1	(U-1) سرجن کی ذمه داریال اوراخلاقیات (U-1) Surgeon ki Zimmedāriyān aur Akhlaqiyāt. (Responsibilities and Ethics of a Surgeon).	No	Yes	Yes		
2	(U-2) ^{غر} فة العمليات كالباس: مقصد اورمناسب لباس كا اجزاء (U-2) Maqsad aur Munāsib Libās ke Ajzā (Surgical Room Attire: Purpose & Components of appropriate attire)	Yes	Yes	Yes		
3	(U-3) بل <i>از جراحت تيا</i> رياں (Qabl az Jrahat Tayārīyan (Pre-operative بل <i>از جراحت تيا</i> رياں (preparation)	No	Yes	Yes		
4	(U-4) آلات (Instruments)	Yes	Yes	Yes		
معائنہ (M- 2) Examinatio	روداداورعمومیجسمالیRoodaad wa Umoomi Jismani Mu'ā'ina (History Taking and کاروداداورعمومی دسمال (Marks: Range 5-20)	l General Pr	nysical			
1	(U-1) روداد (History Taking)	No	Yes	Yes		
2	(U-2) تسخيص امراض جراحيه ميس معاون علامات اورنشانيال (U-2) mein muawin Alāmāt w nishaniyan (Symptoms and signs helpful in diagnosis of surgical diseases)	No	Yes	Yes		
3	(U-3) احت می رعمومی ^{جس} مالی معائنہ (Jarahat Mein Umoomi Jismani Muʻā'ina (General physical examination in Surgery)	Yes	Yes	Yes		
ثر^{نی}ن (M- 3) 20)	ران، وعين اور Rās, Wajh, 'Unuq aur Sadyayn (Head, Face, Neck, Thyroid Gl	and and Bre	east) (Marks	: Range 5-		
1	(U-1) دائلووجہ, Rās wa Wajh (Head and Face)	No	Yes	Yes		
2	(U-2) ^{عن}ق دغدددر قیه Unuq wa Ghudad Daraqiyyah (Neck and Thyroid Gland)	Yes	Yes	Yes		
3	(U-3) ثدين Sadyayn (Breast)	Yes	Yes	Yes		
ي ^{وبط} ن (M- 4)	اورام عامAwrām-e-'Āmma wa Baṭn (General Swellings and Abdomen) (Ma	rks: Range	5-20)	·		
1	(U-1) وسلعات اورام (Awram wa Sal'at (General Swellings)	Yes	Yes	Yes		
2	(U-2) کتل ^{ياط} ن (Kutla Baṭn) Abdominal Lump	Yes	Yes	Yes		
3	(U-3) ^{بط} ن (Abdomen)	Yes	Yes	Yes		
4	(U-4) تَنَ Fatq (Hernia):	Yes	Yes	Yes		
5	(U-5) ورم اَربی۔ صفنی یافخدی Waram-e-Urbī-Ṣafnī ya Fakhazī (Inguino-scrotal or Groin Swelling)	Yes	Yes	Yes		

(M- 5) نظام متعدی۔ سیسی و تزاکل بول Nizām-e-Maqʻadī-Mustaqīmī wa Tanāsulī Bawlī (Ano-Rectal and Genitourinary system) (Marks: Range 5-20)

. , ,				
1	(U-1) مقعدومعاً معدومعاً معدومعاً Maq'ad wa Ma'ā' Mustaqīm (Ano-Rectal Case)	Yes	Yes	Yes
2	(U-2) ناصورنافذة وغيرنافذة (Sinus and Fistula)	No	Yes	No
3	صفن (A'zā' Tanāslīyah Ṭāhirīyah (External Genitalia) اعضاء تناسليه ظاهريه (U-3) وتضيب Ṣafan wa Qazīb) Scrotum and Penis	Yes	Yes	Yes
4	(U-4) نظام بوليه Nizam-e- Bawliya (Urinary system)	No	Yes	Yes

(M- 6) طرانى عروق ولمغاوية جرت قرت (Aṭrāfī 'Urūq wa Lymphāwīyah wa Jarah wa Qarah (Peripheral Vessels, Lymphatic, Wounds and Ulcers) (Marks: Range 5-20)

1	(U-1) نظام شریایی(Nizam-e-Shiryani (Arterial system)	Yes	Yes	Yes
2	(U-2) نظام دريد (Venous system)	Yes	Yes	Yes
3	(U-3) لمفاوية نظام (Lymphatics system)	No	Yes	Yes
4	(U-4) جرتر Jarḥ wa Qarḥ (wound & Ulcer)	No	Yes	Yes

(M- 7) جراحت میں سخیصی طریقے اوران کی تو تی Jarāḥat meinTashkhīsī Tareeqay aur Un kī Tawzīḥ (Diagnostic Methods in Jarahat and their Interpretation) (Marks: Range 5-15)

1	(U-1) م مَتَكْذَارِتْتَ اور خُرد حياتيانى يورْس كى تَوَتَّى (U-1) Hayatiyati reports ki Tawzīḥ (Interpretation of Pathological & Microbiological reports)	No	Yes	No
2	طابی کیمیانی رپورٹس کی تثریخ (U-2)جیانی کیمیانی رپورٹس کی تثریخ (U-2) (Interpretation of Biochemical reports)	No	Yes	Yes
3	(U-3) تصويرطبى Taṣwīr –e-ṭibbī (Imaging)	No	Yes	Yes
4	(U-4) تظیر داخلی Tanzir-Dakhli (Endoscopy)	No	Yes	Yes

(M- 8) جائزہ دومعنوی ذہابت. Jaraseem kush Adviat wa Maṣādir Kutub Jarāhat kā Taʻāruf wa Jā'iza wa Masnoyi zehanat (Antibiotics and Introduction and Review of classical Surgical Books and Artificial Intelligence) (Marks: Range 5-20)

1	(U-1) المحم الشيم الشياد ويات (Jaraseem kush Adviat (Antibiotics)	No	Yes	Yes
2	(U-2) مصادر كتب جراحت كاتعارف وجائزه (Maṣādir Kutub Jarāḥat kā Taʻāruf wa Jā'iza (Introduction and Review of classical Unani Books)	No	Yes	Yes
3	Masnūʻī Zihānat مصنوعیٰذہانت:(U-3) Artificial Intelligence (AI)	Yes	Yes	No

6 G : Instruction for the paper setting & Blue Print for Summative assessment (University Examination)

Instructions for the paper setting.

- 1. 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. Use the Blueprint provided in 6G or similar Blueprint created based on instructions 1 to 7

Blueprint			
Question No	Type of Question	Question Paper Format	
Q1	Application based Questions 1 Question 20 marks All compulsory	M1.U2 Or M1.U4 Or M2.U3 Or M3.U2 Or M3.U3 Or M4.U1 Or M4.U2 Or M4.U3 Or M4.U4 Or M4.U5 Or M5.U1 Or M5.U3 Or M6.U1 Or M6.U2 Or M8.U3 Or	
Q2	Short answer Questions Eight Questions 5 Marks Each All compulsory	1. M1.U1 Or . M1.U2 Or . M1.U3 Or . M1.U4 2. M2.U1 Or . M2.U2 Or . M2.U3 3. M3.U1 Or . M3.U2 Or . M3.U3 4. M4.U3 Or . M4.U5 Or . M4.U1 Or . M4.U2 Or . M4.U4 5. M5.U2 Or . M5.U3 Or . M5.U1 Or . M5.U4 6. M6.U1 Or . M6.U3 Or . M6.U2 Or . M6.U4 7. M7.U1 Or . M7.U2 Or . M7.U4 Or . M7.U3 8. M8.U1 Or . M8.U3 Or . M8.U2	
Q3	Analytical Based Structured Long answer Questions Four Questions 10 marks each All compulsory	1. M1.U3 Or . M1.U2 Or . M2.U1 Or . M2.U2 Or . M2.U3 2. M3.U2 Or . M3.U3 Or . M4.U1 Or . M4.U2 Or . M4.U3 Or . M4.U4 Or . M3.U1 Or . M4.U5 3. M5.U1 Or . M5.U4 Or . M6.U2 Or . M6.U4 Or . M5.U2 Or . M5.U3 Or . M6.U1 Or . M6.U3 4. M7.U2 Or . M7.U3 Or . M8.U1 Or . M8.U2 Or . M1.U4 Or . M7.U4	

6 H : Distribution of Practical Exam (University Examination)

S.No	Heads	Marks
1	 Major Practical: Long case evaluation of a given case The candidate will conduct a comprehensive evaluation of an assigned patient. The assessment will based on the following criteria: 1. Detailed history taking (10 marks) 2. General and Physical Examination. (10 marks) 3. Local Examination- Inspection, Palpation, Percussion and Auscultation. (20 marks) 4. Differential diagnosis (10 marks) 5. Provisional and Final diagnosis (5 marks) 6. Relevant investigations (5 marks) 7. Management- Both conservative & surgical (20 marks) 	80
2	 Short case or procedure or minor practical and Spotting. 1. Short case or procedure or minor practical: Demonstration of a minor procedure or write a minor procedure or a note on any given case or investigation technique (30 marks) 2. Spotting of: Instruments (5 spots) 10x2=20 Marks X-rays/USG/CT/MRI/Angiography films (5 spots) 5x2=10 Marks 	60
3	Viva (2 examiners: 20 marks/each examiner)	40
4	Logbook (Activity record)	10
5	Practical/Clinical Record- 2 reocords of 5 Marks each	10
Total Mai	ks	200

Reference Books/ Resources

S.No	References			
1	Razi AMZ. Kitab Alhavi. part 23rd. (Urdu Translation) New Delhi: CCRUM.			
2	Bughdadi ABHKitaab Al Mukhtraat Fil-Altib. (Urdu translation). New Delhi: CCRUM.			
3	Mccullough LB , Jones JW and Brody BA. Surgical Ethics. Oxford University Press; 1998			
4	Cardenas D. Surgical ethics: a framework for surgeons, patients, and society. Rev Col Bras Cir. 2020 Jun 15;47			
5	Gomez L M. Manual of operation room Techniques. 12th ed. New Delhi: Jaypee Brothers Medical Publishers; 2007.			
6	Phillips N. Berry & Kohn's Operating Room Technique. 13th ed. Amsterdam: Elsevier;2016.			
7	Pye W, Carson H W. Pye's Surgical Handicraft: A Manual of Surgical Manipulations, Minor Surgery, and Other Matters Connected With the Work of House Surgeons and Surgical Dressers. Forgotten books; 2018			
8	Yagnik V D. Fundamentals of operative surgery. 2nd ed. Wolters Kluwer; 2018			
9	Spink M S and Lewis G L. Albucasis on surgery and Instruments. 1st ed. California: University of California Publications; 2023			
10	Shenoy KR, Shenoy A. Manipal manual of Instruments. 2nd ed.CBC Publishers & Distributors; ebook 2023.			
11	Saha M L. Bedside Clinics in Surgery. 4th ed. New Delhi: Jaypee Brothers Medical Publishers; 2023.			
12	Das S. A manual on clinical surgery. 16th ed. Kolkata: Jaypee Brothers Medical Publishers; 2022			
13	Ibn Kuf. Kitab-ul-Umda fil Jarahat. (Urdu Translation). Vol 2. New Delhi: CCRUM			
14	Sriram B M. SRB Clinical Methods in Surgery. 4th ed. New Delhi: Jaypee Brothers Medical Publishers; 2023			
15	Kawthalkar S M. Essentials of Clinical Pathology. 3rd ed. New Delhi: Jaypee Brothers Medical Publishers; 2023			
16	Ashwani C Appaji, Roop Kulkarni.Surface and radiological anatomy with a clinical perspective. 1st ed. The Health Sciences Publisher; 2017.			
17	Rajesh Raman, HN Pradeep. Essentials of Radiology.1st ed. Paras Medical Publisher; 2021.			
18	Debora M Grange. Endoscopy and endoscopic procedure. Nova Biomedicals ;2014			
19	Brunton LL, Knollmann BC. Goodman & Gilman's the pharmacological basis of therapeutics. 14th ed. New York: McGraw Hill; 2023.			
20	Katzung BG. Basic & clinical pharmacology. 14th ed. New York: Mcgraw-Hill Education; 2018.			
21	Ritter J, Flower RJ, Henderson G, Yoon Kong Loke, Rang HP. Rang and Dale's Pharmacology. 9th ed. Edinburgh: Elsevier; 2024.			
22	Al- sheikh ul- Rayees Abu Ali Al - Husain Bin Abdullah Ibn Sina . Al -Qanoon Fit Tib . Translated by Hakeem Ghulam Muhammad Kisoori , Idarah kitab al-shifa. 2012			
23	Ahmed A H. Muʻālijāt-e Buqrātiyah. (Urdu translation). Vol 1-3. New Delhi: CCRUM.			
24	Jurjani I. Zakhīrah Khwārizm Shāhī. (Urdu translation). New Delhi: CCRUM.			
25	Zuhravi A. Jarahiyath-e-Zuravi. (Urdu translation). New Delhi: CCRUM.			

26	Mugahed A. Al-Antari. Artificial Intelligence for Medical Diagnostics—Existing and Future AI Technology! Diagnostics 2023; 13: 688.
27	Kai Siang Chan, Nabil Zary. Applications and Challenges of Implementing Artificial Intelligence in Medical Education: Integrative Review. JMIR Med Educ 2019;5(1)
28	Ahmad Guni, Piyush Varma, Joe Zhang, Matyas Fehervari, Hutan Ashrafian. Artificial Intelligence in Surgery: The Future Is Now. Eur Surg Res 2024;65:22–39.
29	Jay J. Park, Jakov Tiefenbach, Andreas K. Demetriades. The role of artificial intelligence in surgical simulation. Frontiers in Medical Technology 2022; 1-8.
30	Spink M S & Lewis G L, ALBUCASIS On Surgery and Instruments, A definitive edition of the arabic text with english translation and commentory. London: The wellcome Institute of the History Medicine; 1973

Abbreviations

Domain		T L Method		Level	
СК	Cognitive/Knowledge	L	Lecture	к	Know
сс	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	кн	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				