Competency-Based Dynamic Curriculum for MD/ MS Unani

(PRESCRIBED BY NCISM)

Semester III-VI

Tahaffuzi wa Samaji Tib

(Unani Dietetics Lifestyle Management, Preventive Medicine and Public Health)

(SUBJECT CODE : UNIPG-TST)

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

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NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE

NEW DELHI-110026

Preface

The Unani System of Medicine, with its deep-rooted holistic approach, offers a unique perspective on health and well-being that goes beyond mere disease treatment. It emphasizes the preservation of health and the prevention of diseases as essential components of care. This philosophy is embodied in the field of Tahaffuzi wa Samaji Tib (Preventive and Social Medicine), which focuses on promoting health and preventing disease at both individual and community levels. The postgraduate syllabus for تحفظی وسماجی طب (Tahaffuzi wa Samaji Tib) provides a comprehensive understanding of the foundational principles and practices of preventive healthcare. The curriculum is structured to align with the evolving demands of public health while preserving the core principles of Unani Medicine. It integrates theoretical, practical, and experiential learning components, ensuring that students acquire in-depth knowledge and develop the skills necessary for real-world application. In the second semester, the curriculum introduces essential concepts such as Ilm Ḥifẓān-i-Ṣiḥḥat (Science of Health Preservation), exploring their historical development and relevance in modern public health discourse. The course provides an in-depth exploration of strategies for maintaining health across diverse populations. In the subsequent semesters (3rd to 6th), the syllabus includes four key papers: Epidemiological Methods and Communicable Diseases, Environmental Health, Demography, and Population Dynamics, Nutrition and Lifestyle Management, and Health Care Systems and Public Health Policies.

The paper on Epidemiological Methods and Communicable Diseases equips students with tools to assess and apply the epidemiological approaches for disease prevention and control. Students will also learn to evaluate public health data and design interventions that integrate Unani Medicine with epidemiological practices, offering a unique perspective on disease management. The Environmental Health, Demography, and Population Dynamics paper helps students understand the broader socio-economic and environmental determinants of health, enabling them to apply Unani principles to address these challenges. Emphasis on ethical leadership, professionalism, and community-centred care prepares students to tackle population health challenges, including family planning and demographic issues. Nutrition and Lifestyle Management paper will provide students with a deeper understanding of managing the nutritional problems of public health importance and non-communicable diseases through Ghidhā' (diet), Dawā' (drugs), and Ṭarz-i-Zindagī (lifestyle). The program integrates a thorough understanding of Asbāb Sitta Ḍarūriyya (the six essential factors) and Asbāb Ghayr Ḍarūriyya (non-essential factors), emphasizing their role in preventing lifestyle disorders and maintaining optimal health. Students will be trained to address the growing burden of lifestyle-related diseases through individualized, holistic care. The paper on Health Care Systems and Public Health Policies will provide an overview of India's healthcare system. Students will be able to critically assess national health strategies and explore the role of national and international health organizations in advancing Unani Medicine. This component will prepare students to become influential advocates for integrating Unani Medicine into public health frameworks, ensuring comprehensive and impactful health solutions.

This competency-based curriculum is designed to equip postgraduate students with the knowledge and skills needed to provide promotive, preventive, curative, and rehabilitative care to both individuals and communities. Upon completion of this course, students will be prepared to assume various roles, such as Community Physicians, Public Health Experts, Unani Dietitians, and Lifestyle Specialists. They will be well-equipped to address contemporary public health challenges and make significant contributions to both the Unani System of Medicine and the broader field of public health.

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(NATIONAL COMMISSION FOR INDIAN SYSTEM OF MEDICINE)

Competency-Based Dynamic Curriculum for MD/ MS Unani

Tahaffuzi wa Samaji Tib (UNIPG-TST)

Summary & Credit Framework

Semester III-VI

Module Number & Name	Credits	Notional Learning Hours	Maximum Marks of assessment of modules (Formative Assessment)
Semester No : 3			
Paper No : 1 (طریقہائے وبائیات ووبائیات امراض ساریہ Tarīqahā'y Waba'iyyāt wa Waba'iyyāt Amrāḍ Sārīya (Epidemiological Methods and Communicable Diseases))			
M 1 اساسیات علم الوبائیات Asāsiyyāt-i-'Ilm al-Waba'iyyāt (Foundations of Epidemiology)	2	60	50
M 2 علم الوبائیات میں تصامیم مطالعہ 'Ilm al-Wabā'iyyāt mēn Taṣāmīm-i Muṭāla'a (Epidemiological Study Designs)	2	60	50
Paper No : 2 (تغذیہ، طرز زندگی اور امراض غیر ساریہ Taghdhiya, Ṭarz-i-Zindagī avr Amrāḍ Ghayr Sārīyya (Nutrition, Lifestyle and Non-Communicable Diseases))			
M 9 اصول تغذیہ وغذائی ضروریات Usūl-i-Taghdhiya wa Ghidhā'ī Ḍarūriyyāt (Principles of Nutrition and Nutritional Requirements)	2	60	50
M 10 غذائی تجزیہ وتغذیہ برائے صحت عامہ Ghidhā'ī Tajziyya wa Taghdhiya barā'e Ṣiḥḥat 'Āmma (Nutritional Assessment and Public Health Nutrition)	2	60	50
Paper No : 3 (ماحولیاتی صحت، آبادیات اور حرکیات آبادی MAḤAWLIYĀTĪ ṢIḤḤAT, ĀBĀDIYYĀT AVR ḤARAKIYYĀT-I-ĀBĀDĪ (ENVIRONMENTAL HEALTH, DEMOGRAPHY AND POPULATION DYNAMICS))			

M 17 طبیعی ماحول Ṭabī'ī Maḥawl (Physical Environment)	3	90	75
M 18 سماجی ماحول Samājī Maḥawl (Social Environment)	1	30	25
Paper No : 4 (صحت عامہ کی خدمات کا نظام اور منصوبے Ṣiḥḥat 'Āmma kī Khidmāt kā Niẓām avr Manṣūbe (Public Health Care System and Policies))			
M 25 معاشرتی صحت اور صحتی خدمات کا نظام Mu'āsharatī Ṣiḥḥat avr Ṣiḥḥatī Ḵẖidmāt kā Niẓām (Health Care of Community and Health Care System)	2	60	50
M 26 صحتی منصوبہ بندی و انتظام Ṣiḥḥatī Manṣūba Bandī wa Intiẓām (Health Planning and Management)	2	60	50
Semester No : 4			
Paper No : 1 (طریقہائے وبائیات و وبائیات امراض ساریہ Tarīqahā'y Waba'iyyāt wa Waba'iyyāt Amrāḍ Sārīya (Epidemiological Methods and Communicable Diseases))			
M 3 علم الوبائیات میں پیمائشیں 'Ilm al-Wabā'iyyāt mēn Paymā'ishēn (Measures of Epidemiology)	2	60	50
M 4 علم الوبائیات میں مشارکہ و سببیّت 'Ilm al-Wabā'iyyāt mēn Mushāraka wa Sababiyyat (Association and Causation in Epidemiology)	2	60	50
Paper No : 2 (تغذیہ، طرزِ زندگی اور امراض غیر ساریہ Taghdhiya, Ṭarz-i-Zindagī avr Amrāḍ Ghayr Sārīyya (Nutrition, Lifestyle and Non-Communicable Diseases))			
M 11 اطلاقی تغذیہ برائے صحت و مرض Iṭlāqī Taghdhiyya barā'ē Ṣiḥḥat-o-Maraḍ (Applied Nutrition in Health and Disease)	2	60	50
M 12 امراض بذریعہ غذائی آلودگی و غذائی حفظان صحت Amrāḍ ba Dhari'a Ghidhā'ī Ālūdgī wa Ghidhā'ī Ḥifẓān-i-Ṣiḥḥat (Foodborne Diseases and Food Hygiene)	2	60	50
Paper No : 3 (ماحولیاتی صحت، آبادیات اور حرکیات آبادی MAḤAWLIYĀTĪ ṢIḤḤAT, ĀBĀDIYYAT AVR ḤARAKIYYAT-I-ĀBĀDĪ (ENVIRONMENTAL HEALTH, DEMOGRAPHY AND POPULATION DYNAMICS))			
M 19 حیاتیاتی ماحول Ḥayātiyātī Maḥawl (Biological Environment)	2	60	50

M 20 صحت پر موسمیاتی تبدیلی کے اثرات اور آفات کا نظم ونسق Ṣiḥḥat par Mavsamiyyātī Tabdīlī ke Atharāt avr Āfāt ka Naẓm-o-Nasq (Impacts of Climate Change on Health and Disaster Management)	2	60	50
Paper No : 4 (صحت عامہ کی خدمات کا نظام اور منصوبے Ṣiḥḥat ‘Āmma kī Khidmāt ka Niẓām avr Manṣūbe (Public Health Care System and Policies))			
M 27 صحتی تعلیمات اور ترسیلات Ṣiḥḥatī Ta‘līmāt avr Tarsīlāt (Health Education and Communication)	2	60	50
M 28 اطلاعیات برائے صحت عامہ Iṭṭilā‘īyyāt barā’e Ṣiḥḥat ‘Āmma (Public Health Informatics)	2	60	50
Semester No : 5			
Paper No : 1 (طریقہائے وبائیات و وبائیات امراض ساریہ Tarīqahā y Waba iyyāt wa Waba iyyāt Amrāḍ Sārīya (Epidemiological Methods and Communicable Diseases))			
M 5 علم الوبائیات برائے امراض متعدی Ilm al-Wabā’iyyāt barā’e Amrāḍ Muta‘add ī (Infectious Disease Epidemiology)	2	60	50
M 6 امراض ساریہ: امراض ہوائی و آبی Amrāḍ Sāriya: Amrāḍ Hawā’ī wa Ābī (Communicable Diseases: Airborne and Waterborne Diseases)	2	60	50
Paper No : 2 (تغذیہ، طرز زندگی اور امراض غیر ساریہ Taghdhiya, Ṭarz-i-Zindagī avr Amrāḍ Ghayr Sārīyya (Nutrition, Lifestyle and Non-Communicable Diseases))			
M 13 غذائی تحصین و غذائی سلامتی کے معیارات Ghidhā ī Taḥṣīn wa Ghidhā ī Salāmatī ke Mi‘yārāt (Food Fortification and Food Safety Standards)	2	60	50
M 14 طرز زندگی سے پیدا ہونے والے امراض کا تعارف Ṭarz-i-Zindagī se Paydā hone vāle Amrāḍ ka Ta‘āruf (Introduction to Lifestyle Disorders)	2	60	50
Paper No : 3 (ماحولیاتی صحت، آبادیات اور حرکیات آبادی MAḤAWLIYĀTĪ ṢIḤḤAT, ĀBĀDIYYAT AVR ḤARAKIYYAT-I-ĀBĀDĪ (ENVIRONMENTAL HEALTH, DEMOGRAPHY AND POPULATION DYNAMICS))			
M 21 صفائی اور ٹھوس فضلات کا انتظام Safā ī avr Thos Fuḍlāt ka Intiẓām (Sanitation and Solid Waste Management)	2	60	50

M 22 حیاتیاتی طبی اور برقی فضلات کا انتظام Hayātiyātī Ṭibbī avr Barqī Fuḍlāt kā Intiẓām (Biomedical and E-Waste Management)	2	60	50
Paper No : 4 (صحت عامہ کی خدمات کا نظام اور منصوبے Ṣiḥḥat ‘Āmma kī Khidmāt kā Niẓām avr Manṣūbe (Public Health Care System and Policies))			
M 29 قومی صحت کے لائحۂ اعمال اور صحتی نگہداشت کے قوانین Qawmī Ṣiḥḥat ke Lā’iḥa’-i-‘Amāl avr Ṣiḥḥatī Nighahdāsht ke Qawānīn (National Health Policies and Health Care Legislations)	2	60	50
M 30 قومی صحتی منصوبہ جات Qawmī Ṣiḥḥatī Manṣūbajāt (National Health Programmes)	2	60	50
Semester No : 6			
Paper No : 1 (طریقہائے وبائیات و وبائیات امراض ساریہ Tarīqahā’y Waba’iyyāt wa Waba’iyyāt Amrāḍ Sārīya (Epidemiological Methods and Communicable Diseases))			
M 7 امراض ساریہ: امراض بذریعہ حشرات الارض و حیوانات Amrāḍ Sāriyya: Amrāḍ ba-Dhari‘a Ḥasharāt al-Arḍ wa Ḥaywānāt (Communicable Diseases: Vector-Borne and Zoonotic Diseases)	2	60	50
M 8 اطلاقی علم الوبائیات Iṭlāqī ‘Ilm al-Wabā’iyyāt (Applied Epidemiology)	2	60	50
Paper No : 2 (تغذیہ، طرز زندگی اور امراض غیر ساریہ Taghdhiya, Ṭarz-i-Zindagī avr Amrāḍ Ghayr Sārīyya (Nutrition, Lifestyle and Non-Communicable Diseases))			
M 15 وبائیت امراض غیر ساریہ Waba’iyat-i-Amrāḍ Ghayr Sārīya (Epidemiology of Non-Communicable Diseases)	2	60	50
M 16 امراض غیر ساریہ کی نخل اور بنیادی نگہداشت Amrāḍ Ghayr Sārīya kī Nakhl avr Bunyādī Nigahdāsht (Screening and Primary Care for Non-Communicable Diseases)	2	60	50
Paper No : 3 (ماحولیاتی صحت، آبادیات اور حرکیات آبادی MAḤAWLIYĀTĪ ṢIḤḤAT, ĀBĀDIYYAT AVR ḤARAKIYYAT-I-ĀBĀDĪ (ENVIRONMENTAL HEALTH, DEMOGRAPHY AND POPULATION DYNAMICS))			
M 23 پیشہ ورانہ صحت اور خطرات Peshavarāna Ṣiḥḥat avr Khatrāt (Occupational Health and Hazards)	2	60	50

M 24 آبادیاتی اور خاندانی منصوبہ بندی کے طریقے Ābādiyyatī avr Khāndānī Manṣūbabandī ke Ṭarīqe (Demography and Family Planning Methods)	2	60	50
Paper No : 4 (صحت عامہ کی خدمات کا نظام اور منصوبے Ṣiḥḥat ‘Āmma kī Khidmāt ka Niẓām avr Manṣūbe (Public Health Care System and Policies))			
M 31 صحتی تنظیمات Ṣiḥḥatī Tanẓīmāt (Health Organizations)	2	60	50
M 32 صحتی بیمہ اور طبی سیاحت Ṣiḥḥatī Bīma avr Ṭibbī Siyāḥat (Health Insurance and Medical Tourism)	2	60	50
	64	1920	1600

Credit frame work

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

Important Note: The User Manual MD/MS Unani is a valuable resource that provides comprehensive details about the curriculum file. It will help you understand and implement the curriculum. Please read the User Manual before reading this curriculum file. The curriculum file has been thoroughly reviewed and verified for accuracy. However, if you find any discrepancies, please note that the contents related to the MSE should be considered authentic. Each paper has 16 credits and each semester covers 16 credits across 4 papers. In case of difficulty and questions regarding the curriculum, write to syllabus24uni@ncismindia.org

Credit Analysis Overview					
Sem/Paper	**Paper No 1**	**Paper No 2**	**Paper No 3**	**Paper No 4**	**Credits**
Semester 3	M-1 | 2 Crs M-2 | 2 Crs	M-9 | 2 Crs M-10 | 2 Crs	M-17 | 3 Crs M-18 | 1 Crs	M-25 | 2 Crs M-26 | 2 Crs	**16**

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

Semester VI University examination					
Theory			Practical*		
Paper	Marks	Total	Practical Heads	Marks	Total
Paper -1	100	400	Long case or procedure/Major practical as applicable	100	400
			Short case or procedure/Minor practical	50	
Paper -2	100		Spotters	50	
			Assessing teaching ability	25	
Paper -3	100		Assessing presentation skills	25	
			Viva (4 examiners: 25 marks/each examiner)#	100	
Paper -4	100		Logbook (Activity record)	25	
			Practical/Clinical Record	25	
Semester VI University examination – 800 Marks					

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

Course Code and Name of Course

Course code	Name of Course
UNIPG-TST	Tahaffuzi wa Samaji Tib (Unani Dietetics Lifestyle Management, Preventive Medicine and Public Health)

Table 1 : Course learning outcomes and mapped Program learning outcomes

CO No	A1 Course learning Outcomes (CO) UNIPG-TST At the end of the course UNIPG-TST, the students should be able to	B1 Course learning Outcomes mapped with program learning outcomes.
CO1	Apply the foundational principles of the Unani System of Medicine to promote health, prevent disease, and enhance community well-being through early interventions.	PO1,PO3,PO8
CO2	Develop and implement comprehensive strategies based on *Asbāb Sitta Ḍarūriyya* (Six Essential Factors of Life) to promote optimal health, well-being and prevent lifestyle disorders.	PO3
CO3	Utilize epidemiological methods to prevent and control communicable and non-communicable diseases, employing evidence-based Unani Medicine approaches for effective public health interventions.	PO3,PO5
CO4	Assess and manage environmental and occupational health risks, designing preventive measures in alignment with Unani Medicine principles.	PO3
CO5	Diagnose, treat, and manage nutritional and other public health problems using the Unani Medicine concepts of *Ghidhā' wa Dawā'*, providing holistic care to individuals and communities.	PO3,PO5
CO6	Plan, implement, and evaluate public health programs that serve vulnerable populations, emphasizing Unani Medicine based strategies for prevention, treatment and rehabilitation.	PO3

CO7	Conduct, lead, and communicate impactful research initiatives and innovations to advance the Unani Medicine, facilitating its integration into both national and international health policies and programs.	PO3,PO4
CO8	Exhibit ethical and professional leadership in addressing population health concerns, including issues related to family planning and demographic management, while promoting sustainable health solutions.	PO3,PO7

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

Paper No : 1 طریقہائے وبائیات و وبائیات امراض ساریہ Tarīqahā'ȳ Wabā'iyyāt wa Wabā'iyyāt Amrāḍ Sāriya (Epidemiological Methods and Communicable Diseases)						
Semester No : 3						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
	M-1 اساسیات علم الوبائیات Asāsiyyāt-i-'Ilm al-Waba'iyyat (Foundations of Epidemiology) This module introduces the historical development of epidemiology, highlighting key figures like Hippocrates, John Graunt, Edward Jenner, and John Snow. It covers fundamental epidemiological concepts such as risk factors, causality, and disease frequency. The module also explores essential measurement tools and the application of epidemiology in public health, including disease surveillance, chronic disease prevention, health inequalities, and policy planning. **• M 1U 1 تاریخ علم الوبائیات Tārīkh-i-'Ilm al-Wabā'iyyāt (History of Epidemiology)** 1.1.1 قدیم و قبل از جدید ادوار: بقراط، جان گرانٹ *Qadīm wa Qabl az Jadīd Adwār: Buqrāṭ, John Graunt* (Ancient and Pre-Modern Periods: Hippocrates, John Graunt)	2	10	20	30	60

	1.1.2 *Jadīd ‘Ilm al-Wabā’iyyāt: Edward Jenner avr Jadarī (Chechak), John Snow avr Hayḍa* (Modern Epidemiology: Edward Jenner and Smallpox, John Snow and Cholera) جدید علم الوبائیات: ایڈورڈ جینر اور جدری (چیچک)، جان سنو اور ہیضہ **• M 1U 2 ‘Ilm al-Wabā’iyyāt kē Naẓariyyāt (Epidemiological Concepts) علم الوبائیات کے نظریات** 1.2.1 *‘Awāmil-i-Ikhtiṭār* (Risk Factors) عوامل اختطار 1.2.2 *Sababiyyat* (Causality) سببیّت 1.2.3 *Maraḍ kī Takrār* (Disease Frequency) مرض کی تکرار **• M 1U 3 ‘Ilm al-Wabā’iyyāt mēṉ Paymā’ish kē Ālāt (Tools of Measurement in Epidemiology) علم الوبائیات میں پیائش کے آلات** 1.3.1 *Sharḥ* (Rate) شرح 1.3.2 *Tanāsub* (Ratio) تناسب 1.3.3 *Nisbat* (Proportion) نسبت **• M 1U 4 Ṣiḥḥat-i ‘Āmma mēṉ ‘Ilm al-Wabā’iyyāt ke Isti‘mālāt (Applications of Epidemiology in Public Health) صحت عامہ میں علم الوبائیات کے استعمالات** 1.4.1 *Amrāḍ kī Nigrānī wa Taḥdīd* (Disease Surveillance and Control) امراض کی نگرانی و تحدید 1.4.2 *Muzmin Amrāḍ sē Taḥaffuẓ* (Chronic Diseases Prevention) مزمن امراض سے تحفظ 1.4.3 *Ṣiḥḥat mēṉ ‘Adam Masāwāt* (Health Inequalities) صحت میں عدم مساوات 1.4.4 *Ṣiḥḥatī Ḥikmat ‘Amalī wa Manṣūbabandī* (Health Policy and Planning) صحتی حکمت عملی و منصوبہ بندی					
	M-2 ‘Ilm al-Wabā’iyyāt mēṉ Taṣāmīm-i Muṭāla‘a (Epidemiological Study Designs) علم الوبائیات میں تصامیم مطالعہ This module explores various research methods used to investigate disease patterns and risk factors. It covers descriptive studies to describe disease occurrences and analytical	2	10	20	30	60

	studies to analyze associations between exposures and outcomes. This module also discusses experimental studies, including randomized controlled trials and non-randomized trials. **• M 2U 1 توصیفی مطالعات Tawṣīfī Muṭāla'āt (Descriptive Studies)** 2.1.1 کیس رپورٹس *Kēs Reports* (Case Reports) 2.1.2 کیس سلسلے *Kēs Silsile* (Case Series) 2.1.3 مستعرضی مطالعات *Musta'raḍī Muṭāla'āt* (Cross-sectional Studies) 2.1.4 وبائیاتی مطالعات *Wabā'iyyātī Muṭāla'āt* (Epidemiological Studies) **• M 2U 2 تجزیاتی مطالعات Tajziyyātī Muṭāla'āt (Analytical Studies)** 2.2.1 مستعرضی مطالعات *Musta'raḍī Muṭāla'āt* (Cross-sectional Studies) 2.2.2 کیس مقارنی مطالعات *Kēs Muqāranī Muṭāla'āt* (Case-control Studies) 2.2.3 اترابی مطالعات *Atrābī Muṭāla'āt* (Cohort Studies) **• M 2U 3 تجرباتی مطالعات Tajrībī (Experimental Studies)** 2.3.1 غیرمنظم منضبط تجربات *Ghayr Munaẓẓam Munḍabiṭ Tajrabāt* (Randomized Controlled Trials) 2.3.1.1 مطبی تجربات *Maṭabī Tajrabāt* (Clinical Trials) 2.3.1.2 تحفظی تجربات *Taḥaffuzī Tajrabāt* (Preventive Trials) 2.3.1.3 عوامل اختطاری تجربات *'Awāmil Ikhtiṭārī Tajrabāt* (Risk Factor Trials) 2.3.2 منظم منضبط تجربات *Munaẓẓam Munḍabiṭ Tajrabāt* (Non-Randomized Controlled Trials) 2.3.2.1 غیرمنضبط تجربات *Ghayr Munḍabiṭ Tajrabāt* (Uncontrolled Trials) 2.3.2.2 قدرتی تجربات *Qudratī Tajrabāt* (Natural Experiments) 2.3.2.3 قبل وبعد موازنہ جاتی مطالعات *Qabl wa Ba'd Muwāzanajātī Muṭāla'āt* (Before and After Comparison Studies)					
		4	20	40	60	120

Semester No : 4						
2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-3 علم الوبائیات میں پیمائشیں Ilm al-Wabā'iyyāt mēn Paymā'ishēn (Measures of Epidemiology) This module focuses on key metrics used to assess disease frequency and the impact of exposures. It covers measures of mortality and morbidity. The module also explores measures of association to evaluate the relationship between exposures and outcomes and measures of impact to quantify the effect of exposures on disease occurrence. **• M 3U 1 اموات وامراض کی پیمائشیں Amwāt wa Amrāḍ kī Paymā'ishēn (Measures of Mortality and Morbidity)** 3.1.1 عمومی شرح اموات، شرح کیس اموات، شرح اموات بحسب السن وغیرہ *'Umūmī Sharḥ-i Amwāt, Sharḥ-i Kēs Amwāt, Sharḥ-i Amwāt bi-Ḥasb al-Sinn waghayra* (Crude Death Rate, Case Fatality Rate, Age-Specific Mortality Rate etc.) 3.1.2 شرح وقوع مرض واشاعت مرض *Sharḥ-i Wuqū'-i Maraḍ wa Ishā'at-i Maraḍ* (Incidence and Prevalence Rate) **• M 3U 2 مُشارَکہ کی پیمائشیں Mushārakah kī Paymā'ishēn (Measures of Association)** 3.2.1 نسبت احتمال ونسبت اختطار *Nisbat-i Iḥtimāl wa Nisbat-i Ikhtiṭār* (Odds Ratio and Risk Ratio) **• M 3U 3 تاثیر کی پیمائشیں Ta'thīr kī Paymā'ishēn (Measures of Impact)**	2	10	20	30	60

	3.3.1 منسوبی اختطار و آبادیاتی منسوبی اختطار *Mansūbī Ikhtiṭār wa Ābādiyātī Mansūbī Ikhtiṭār* (Attributable Risk and Population Attributable Risk)					
	M-4 علم الوبائیات میں مشارکہ و سببیّت Ilm al-Wabā'iyyāt mēn Mushāraka wa Sababiyyat (Association and Causation in Epidemiology) This module examines the relationship between exposures and health outcomes. It covers association in epidemiology, including its definition, types, and how it's measured, as well as challenges like confounding, bias, and random error. The module also delves into causation, focusing on criteria for causality, types of causal relationships, causal inference methods, and the difficulties in establishing causality in epidemiological research. **• M 4U 1 علم الوبائیات میں مشارکہ Ilm al-Wabā'iyyāt mēn Mushāraka (Association in Epidemiology)** 4.1.1 تعریف، اقسام اور پیمائشیں *Ta'rīf, Aqsām avr Paymā'ishēn* (Definition, Types, and Measures) 4.1.2 مشارکہ کے استحکام میں تحدیات: مضطرب، متعصب، غیر منظم خطا *Mushāraka ke Istiḥkām mēn Taḥaddiyyāt: Muḍṭarib, Muta'aṣṣib,* Ghayr Munaẓẓam *Khaṭā'* (Challenges in Establishing Association: Confounding, Bias, Random Error) **• M 4U 2 علم الوبائیات میں سببیّت Ilm al-Wabā'iyyāt mēn Sababiyyat (Causation in Epidemiology)** 4.2.1 سببیّت کے معیار *Sababiyyat ke mi'yār* (Criteria for Causation) 4.2.2 سببی تعلقات کی اقسام *Sababī Ta'alluqāt kī Aqsām* (Types of Causal Relationships) 4.2.3 سببی استنباط کے طریقے *Sababī Istinbāṭ ke Ṭarīqe* (Causal Inference Methods) 4.2.4 سببیّت کے استحکام میں تحدیات *Sababiyyat ke Istiḥkām mēn Taḥaddiyyāt* (Challenges in Establishing Causality)	2	10	20	30	60

		4	20	40	60	120
Semester No : 5						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
	M-5 علم الوبائیات برائے امراض متعدی Ilm al-Wabā'iyyāt barā'e Amrāḍ Muta'add ī (Infectious Disease Epidemiology) This module explores the dynamics of infectious disease transmission and control. It covers the source and reservoir of pathogens, their modes of transmission, and the role of the susceptible host. The module also examines immunity and immunizing agents, including active and passive immunity and vaccination strategies. It discusses cold chain maintenance. Lastly, the module focuses on disease prevention and control, with strategies for controlling reservoirs, interrupting transmission, and protecting susceptible populations. **• M 5U 1 انتقال مرض کی حرکیات Intiqāl-i-Maraḍ kī Ḥarakiyyāt (Dynamics of Disease Transmission)** 5.1.1 ذرائع وذخایر *Dharā 'i' wa Dhakhā 'ir* (Sources and Reservoirs) 5.1.2 انتقال کے طریقے *Intiqā l ke Ṭarīqe* (Modes of Transmission)	2	10	20	30	60

	5.1.3 مستعد میزبان *Musta'idd Mezbān* (Susceptible Host) **• M 5U 2 قوت مدافعت اور مدافعتی عوامل Quwwat-i-Mudāfi'at avr Mudāfi'atī 'Awāmil (Immunity and Immunizing Agents)** 5.2.1 فعال مدافعت و مفعولی مدافعت *Fa''āl Mudāfi'at wa Maf'ūlī Mudāfi'at* (Active immunity and Passive Immunity) 5.2.2 اجتماعی مدافعت *Ijtimāʿī Mudāfi'at* (Herd Immunity) 5.2.3 تلقیحات، غلوبینات مناعت، مصل الدم مضادہ *Taqlīḥāt, Ghulūbīnāt-i-Manā'at, Maṣl al-Dam Muḍādda* (Vaccines, Immunoglobulins, Antisera) 5.2.4 سلسلۂ تبرید کی نگہداشت *Silsila'-i-Tabrīd kī Nigahdāsht* (Cold Chain Maintenance) 5.2.5 منفی واقعات بعد از تطعیمات *Manfī Wāqi'āt Ba'd az Taṭʿīmāt* (Adverse Events Following Immunizations) **• M 5U 3 تحفظ و تحدید مرض Taḥaffuẓ wa Taḥdīd-i-Maraḍ (Disease Prevention and Control)** 5.3.1 ذخیرہ کی تحدید *Dhakhīra kī Taḥdīd* (Control of Reservoir) 5.3.2 انتقال کا انقطاع *Intiqāl kā Inqiṭāʿ* (Interruption of Transmission) 5.3.3 مستعدین کی حفاظت *Musta'iddīn kī Ḥifāẓat* (Protection of Susceptibles) 5.3.4 نگرانی *Nigarānī* (Surveillance) 5.3.5 تطہیر *Taṭhīr* (Disinfection)					
	M-6 امراض ساریہ: امراض ہوائی و آبی Amrāḍ Sāriya: Amrāḍ Hawā'ī wa Abī (Communicable Diseases: Airborne and Waterborne Diseases) This module examines the public health burden of airborne and waterborne infections, their patterns of transmission, and effective strategies for prevention and control, including vaccination, hygiene practices, and control strategies. **• M 6U 1 امراض ہوائی Amrāḍ Hawā'ī (Airborne Diseases)**	2	10	20	30	60

	6.1.1 بار، انتقال کے انداز، تحفظ و تحدید کی حکمت عملیاں برائے *Bār, Intiqāl ke Andāz, Taḥaffuẓ wa Taḥdīd kī Ḥikmat ʻAmaliyyāṉ barā'e:* (Burden, Transmission Patterns, prevention, and control strategies of:) 6.1.1.1 حمیقاء *Ḥumayqā'* (Chicken Pox) 6.1.1.2 حصبہ *Ḥaṣba* (Measles) 6.1.1.3 نُکاف *Nukāf* (Mumps) 6.1.1.4 حُمَیراء *Ḥumayrā'* (Rubella) 6.1.1.5 خناق *Khunāq* (Diphtheria) 6.1.1.6 شہیقہ *Shaḥīqa* (Whooping Cough) 6.1.1.7 حادّ تنفّسی تعدیے *Ḥād Tanaffusī Taʻdiyāt* (Acute Respiratory Infections) 6.1.1.8 تپ دق *Tap-i-Diqq* (Tuberculosis) 6.1.1.919- کووِڈ (Covid-19) **• M 6U 2 امراض آبی Amrāḍ Ābī (Waterborne Diseases)** 6.2.1 بار، انتقال کے انداز، تحفظ و تحدید کی حکمت عملیاں برائے *Bār, Intiqāl ke Andāz, Taḥaffuẓ wa Taḥdīd kī Ḥikmat ʻAmaliyyāṉ barā'e:* (Burden, Transmission Patterns, prevention, and control strategies of:) 6.2.1.1 فالج الاطفال *Fālij al-Aṭfāl* (Poliomyelitis) 6.2.1.2 التہاب کبد وبروسی *Iltiḥāb-i-Kabid Waybrūsī* (Viral Hepatitis) 6.2.1.3 حاد زحیری امراض *Ḥādd Zaḥīrī Amrāḍ* (Acute Diarrheal Diseases) 6.2.1.4 ہیضہ *Hayḍa* (Cholera) 6.2.1.5 حمّی لمعوی *Ḥummā Miʻwī* (Typhoid) 6.2.1.6 زحیر امیبائی *Zaḥīr Amībāʼī* (Amoebiasis) 6.2.1.7 تسمم غذائی / تخمہ *Tasammum Ghidhāʼī / Tukhma* (Food Poisoning)					

	6.2.1.8 داء الصَّفَر *Dā' al-Ṣafar* (Ascariasis)					
		4	20	40	60	120
Semester No : 6						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
	M-7 امراض سار یہ:امراض بذریعہ حشرات الارض وحیوانات Amrāḍ Sāriyya: Amrāḍ ba-Dhari'a Ḥasharāt al-Arḍ wa Ḥaywānāt (Communicable Diseases: Vector-Borne and Zoonotic Diseases) This module examines the public health burden of vectorborne and zoonotic diseases, their patterns of transmission, and effective strategies for prevention and control, including vaccination, hygiene practices, and control strategies. **• M 7U 1 امراض بذریعہ حشرات الارض Amrāḍ ba-Dhari'a Ḥasharāt al-Arḍ (Vector borne Diseases)** 7.1.1 بار، انتقال کے انداز، تحفظ وتحدید کی حکمت عملیاں برائے: *Bār, Intiqāl ke Andāz, Taḥaffuẓ wa Taḥdīd kī Ḥikmat 'Amaliyyāṉ barā'e:* (Burden, Transmission Patterns, prevention, and control strategies of:) 7.1.1.1 حمّیٰ اجامیہ *Ḥummā Ajjāmiya* (Malaria) 7.1.1.2 حمّیٰ دنج *Ḥummā Danj* (Dengue) 7.1.1.3 چکن گنیا *Chikungunyā* (Chikungunya)	2	10	20	30	60

	7.1.1.4 جاپانی حمیٰ دماغی *Jāpānī Ḥummā Dimāghī* (Japanese Encephalitis) 7.1.1.5 کالاآزار/حمیٰ اسود *Kālā Āzār / Ḥummā Aswad* (Leishmaniasis) 7.1.1.6 داءالفیل لمفاویہ *Dā' al-Fīl Limfāwiya* (Lymphatic Filariasis) **• M 7U 2 امراض بذریعہ حیوانات Amrāḍ ba-Dhari'a Ḥaywānāt (Zoonotic Diseases)** 7.2.1 بار، انتقال کے انداز، تحفظ و تحدید کی حکمت عملیاں برائے *Bār, Intiqāl ke Andāz, Taḥaffuẓ wa Taḥdīd kī Ḥikmat 'Amaliyyāṉ barā'e:* (Burden, Transmission Patterns, prevention, and control strategies of:) 7.2.1.1 داءالکلب *Dā' al-Kalb* (Rabies) 7.2.1.2 طاعون *Ṭā'ūn* (Plague) 7.2.1.3 داءالبروسیلات *Dā' al-Brūsīlāt* (Brucellosis) 7.2.1.4 داءالبریمیات *Dā' al-Barīmiyyāt* (Leptospirosis) 7.2.1.5 کیاسانور جنگلی مرض *Kiyāsānūr Jangalī Maraḍ* (Kyssanur Forest Disease) 7.2.1.6 تیفُوس اُکالی *Taifūs Ukālī* (Scrub Typhus) 7.2.1.7 حمیٰ کیو *Ḥummā qīw* (Q Fever)					
	M-8 اطلاقی علم الوبائیات Iṭlāqī 'Ilm al-Wabā'iyyāt (Applied Epidemiology) This module focuses on practical epidemiological methods for public health. It covers outbreak investigation and response and surveillance systems, discussing their purpose, types, and applications in monitoring disease trends, guiding interventions, and informing public health policy. **• M 8U 1 افشاء وباء کی تفتیش اور ردعمل Afshā'-i-Wabā' kī Taftīsh avr Radd-i-'Amal (Outbreak Investigation and Response)** 8.1.1 وباء اور عالمی وباء کا انتظام *Wabā' avr 'Ālamī Wabā' kā Intiẓām* (Epidemic and Pandemic Management)	2	10	20	30	60

	8.1.2 افشاء وباء کی تفتیش *Afshā'-i-Wabā' kī Taftīsh* (Outbreak investigation) • **M 8U 2 نظامہائے نگرانی Niẓāmhā'e Nigrānī (Surveillance Systems)** 8.2.1 مقاصد واقسام *Maqāṣid-o-Aqsām* (Purpose and Types) 8.2.2 صحتِ عامہ میں استعمالات *Ṣiḥḥat 'Āmma mēn Isti'mālāt* (Applications in Public Health)					
		4	20	40	60	120
		16	80	160	240	480

Paper No : 2 تغذیہ، طرزِ زندگی اور امراض غیرساریہ Taghdhiya, Ṭarz-i-Zindagī avr Amrāḍ Ghayr Sāriyya (Nutrition, Lifestyle and Non-Communicable Diseases)

Semester No : 3

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-9 اصول تغذیہ وغذائی ضروریات Uṣūl-i-Taghdhiya wa Ghidhā'ī Ḍarūriyyāt (Principles of Nutrition and Nutritional Requirements) This module covers core nutrition principles, essential nutrients, and their role in maintaining health. It covers food classification, Unani concepts of *Ghidha* and *Taghdhia*, dietary recommendations, and balanced diet planning. Special focus is given	2	10	20	30	60

	to nutritional needs across age, gender, pregnancy, lactation, and high-performance activities. **• M 9U 1 تغذیہ کے بنیادی نظریات Taghdhiya kē Bunyādī Naẓariyyāt (Core Concepts in Nutrition)** 9.1.1 تغذیہ سے متعلق بنیادی اصطلاحات کا تعارف: غذا، خوراک، طعام، تغذیہ، مغذی، علم تغذیہ، ماہر غذائیات، غذائے وظیفی (فعال غذا)، غذائے مطلق *Taghdhiya sē Muta'alliq Bunyādī Iṣtilāḥāt kā Ta'āruf: Ghidhā', Khorāk, Ṭa'ām, Taghdhiya, Mughadhdhī, 'Ilm-i-Taghdhiya, Māhir-i-Ghidhā'iyyāt, Ghidhā' Waẓīfī (Fa''āl Ghidhā'), Ghidhā' Mutlaq, Ghidhā' Dawā'ī, Dawā' Ghidhā'ī,* (Definitions of Key Nutritional Terms: Food, Diet, Meal, Nutrition, Nutrient, Dietetics, Dietician, Functional Food, Absolute Diet, Nutraceuticals) 9.1.2 غذا کی درجہ بندی: بلحاظ تولید اخلاط، افعال، ماخذ، ترکیب و غذائی اہمیت *Ghidhā' kī Darjabandī: ba Liḥāẓ Tawlid-i-Akhlāṭ, Af'āl, Mākhadh, Tarkīb wa Ghidhā'ī Ahammiyyat* (Classification of Foods: Based on Formation of Humours, Functions), Origin, Composition, and Nutritional Value) 9.1.3 مغذیہ کبیرہ: نشاشتہ جات، لحمیات، شحمیات کے افعال اور ان کی یومیہ ضرورت *Mughadhdhiyya Kabīra: Nashāshtajāt, Laḥamiyyāt, Shaḥmiyyāt kē Af'āl avr in kī Yavmiya Ḍarūrat* (Macronutrients: Carbohydrates, Proteins, Fats, their functions and daily requirements) 9.1.4 مغذیہ صغیرہ: حیاتین و معدنیات اور صحت کے برقرار رکھنے میں ان کا کردار *Mughadhdhiyya Ṣaghīra: Ḥayātīn-o-Ma'daniyyāt avr Ṣiḥḥat kē Barqarār Rakhnē mēn in kā Kirdār* (Micronutrients: Vitamins and Minerals, and their Roles in Maintaining Health) 9.1.5 مجوزہ خوراک: لحمیات، شحمیات، نشاشتہ جات، حیاتین و معدنیات *Mujawwaza Khorāk: Laḥamiyyāt, Shaḥmiyyāt, Nashāshtajāt, Ḥayātīn-o-Ma'daniyyāt* (Recommended Intakes: Proteins, Fats, Carbohydrates, Vitamins and Minerals) **• M 9U 2 متوازن غذا اور غذائی ضرورت Mutawāzin Ghidhā' avr Ghidhā'ī Ḍarūrat (Balanced Diet and Nutritional Needs)**					

	9.2.1 متوازن غذا کی تخطیط اور غذائی اہداف کی تفہیم *Mutawāzin Ghidhā' kī Takhṭīṭ avr Ghidhā'ī Ahdāf kī Tafhīm* (Designing a Balanced Diet and Understanding Dietary Goals) 9.2.2 نظریہ ہرم غذائی و طبق غذائی *Nazariya-i-Haram Ghidhā'ī wa Ṭabaq Ghidhā'ī* (Concept of the Food Pyramid and Food Plate) 9.2.3 عمر، جنس اور درجات حرکات جسمانی کے لحاظ سے غذائی ضرورت *Umr, Jins avr Darjāt-i-Ḥarakāt Jismanī kē Liḥāẓ sē Ghidhā'ī Ḍarūrat* (Nutritional Requirement based on Age, Gender and Physical Activity Levels) 9.2.4 حاملہ، مرضعہ اور دیگر ابدان ضعیفہ کے لحاظ سے غذائی ضرورت *Ḥāmila, Murḍi'a avr Dīgar Abdān Ḍa'īfa kē Liḥāẓ sē Ghidhā'ī Ḍarūrat* (Nutritional Requirement for Pregnant, Lactating Women and Other Vulnerable Groups) 9.2.5 تغذیہ ریاضیہ: مختلف کھیلوں کے لحاظ سے غذائی سفارشات *Taghdhiya Riyāḍiya: Mukhtalif Khelon kē Liḥāẓ sē Ghidhā'ī Sifārishāt* (Sports Nutrition: Nutritional Needs in Sports and High-Performance Activities)					
	M-10 غذائی تجزیہ وتغذیہ برائے صحت عامہ Ghidhā'ī Tajziyya wa Taghdhiya barā'ē Ṣiḥḥat 'Āmma (Nutritional Assessment and Public Health Nutrition) This module focuses on methods for assessing nutritional status at the individual and population levels, including anthropometric, biochemical, clinical, and dietary assessments. This also explores strategies for addressing malnutrition in public health settings. **• M 10U 1 غذائی احوال کا تجزیہ Ghidhā'ī Aḥwāl kā Tajziyya (Assessment of Nutritional Status)** 10.1.1 غذائی جانچ کے طریقہ کار: جسمانی پیمائش، طبی معائنہ، معملی و حیاتیاتی کیمیائی جانچ، اور غذائی خوراک کا تجزیہ *Ghidhā'ī Jānch kē Ṭarīqa-i-Kār: Jismānī Payma'ish, Ṭibbī Mu'āina, Ma'malī wa Ḥayātī Kīmiyā'ī Jānch, avr Ghidhā'ī Khurāk kā Tajziyya* (Methods of Nutritional Assessment: Anthropometry,	2	10	20	30	60

	Clinical Examination, Laboratory and Biochemical Assessment, and Dietary Intake Evaluation) غذائی احوال کے اشاریے: عوامی صحت کی کلیدی علامات کی سراغ رسانی، (پست قامتی، ہزال، نقص وزن، بی ایم آئی {جسمانی کمیت اشاریہ}، مغذیہ 10.1.2 *Ghidhā'ī Aḥwāl kē Ishāriyē: 'Awāmī Ṣiḥḥat kī Kalīdī 'Alāmāt kī Surāgh Rasānī (Past Qāmatī, Huzāl, Naqs-i-Wazan, BMI (Jismānī Kammiyyat Ishāriyya), Mughadhdhiyya Ṣaghīra kē Darjāt* (Nutritional Status Indicators: Tracking key markers of population health [Stunting, Wasting, Underweight, BMI {Body Mass Index}, Micronutrient levels]) 10.1.3 *Ghidhā'ī Nigahdāsht: 'Awāmī Tghdhiyyātī Darjāt mēn Ikhtiṭārī 'Awāmil kī Shanākht avr Mudākhilat kē Mawāqi' mēn Nigrānī kē Rujḥānāt* (Nutritional Surveillance: Monitoring trends in population-level nutrition to identify risk factors and areas for intervention) **• M 10U 2 تغذیہ برائے صحت عامہ Taghdhiya barā'ē Ṣiḥḥat 'Āmma (Public Health Nutrition)** 10.2.1 صحت عامہ کے غذائی مسائل: پیدائشی نقص وزن، نقص تغذیہ، جفاف العین، فقر الدم غذائی، اضطراب نقص الیود، تسمم متوطن فلوری، تسمم جلبانی کے اسباب، اثرات اور تحفظی تدابیر *Ṣiḥḥat 'Āmma kē Ghidhā'ī Masā'il: Paydā'ishī Naqs-i-Wazan, Naqs-i-Taghdhiyya, Jafāf al-'Ayn, Faqruddam Ghidhā'ī, Iḍṭirab-i-Naqs al-Yūd, Tasammum-i-Mutawaṭṭin Florī, Tasammum-i-Jalbānī kē Asbāb, Atharāt, avr Taḥaffuẓī Tadābīr* (Nutritional Problems in Public Health: Causes, Impact and Preventive Measures of Low Birth Weight, Undernutrition, Xerophthalmia, Nutritional Anaemia, Iodine Deficiency Disorders, Endemic Fluorosis, Lathyrism-Burden) 10.2.2 *Ghidhā'ī 'Awāmil barā'ē Amrāḍ Ghayr Sāriyya:* امراض قلب و دوران خون، ذیابیطس، سمن مفرط و سرطان غذائی عوامل برائے امراض غیر سار یہ :					

	Saṛtān (Nutritional Factors in Non-Communicable Diseases: Cardiovascular Diseases, Diabetes, Obesity and Cancer)					
		4	20	40	60	120
Semester No : 4						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
	M-11 اطلاقی تغذیہ برائے صحت ومرض Iṭlāqī Taghdhiyya barā'e Ṣiḥḥat-o-Maraḍ (Applied Nutrition in Health and Disease) This module explores the role of nutrition in health promotion and disease management, integrating Unani and contemporary dietary principles. It covers temperament-based diets, seasonal nutrition, and functional foods. Special dietary needs across life stages and health conditions are examined. The module also addresses dietary strategies for managing non-communicable diseases. **• M 11U 1 تغذیہ برائے افزائش صحت Taghdhiyya barā'e Ifzā'ish-i-Ṣiḥḥat (Nutrition for Health Promotion)** 11.1.1 *Mukhtalif al-Mizāj Afrād kī Ghidhā'ī Tadbīr* مختلف المزاج افراد کی غذائی تدبیر (Diet for Individuals of different Temperament)	2	10	20	30	60

	11.1.2 مختلف فصلی کی غذائی تدبیر *Mukhtalif Fuṣūl kī Ghidhā'ī Tadbīr* (Diet in different Seasons) 11.1.3 نتائج صحت کی بہتری میں غذائے وظیفی اور غذائے دوائی کا کردار *Natā'ij-i-Ṣiḥḥat kī Bihtarī mēn Ghidhā' Waẓīfī avr Ghidhā' Dawā'ī kā Kirdār* (Role of Functional foods and nutraceuticals in improving health outcomes) 11.1.4 فروغ صحت اور مختلف مرضی احوال کی یونانی طبی ذخائر میں مذکور مخصوص غذائیں *Farogh-i-Ṣiḥḥat avr Mukhtalif Maraḍī Aḥwāl kī Yūnānī Ṭibbī Dhakhā'ir mēn Madhkūr Makhṣūṣ Ghidhā'ēn* (Special Foods mentioned in Unani Medical Literatures for Health Promotion and Different Disease Conditions) 11.1.5 مختلف ادوار حیات اور صحتی حالات میں غذائی ترمیمات کا دستور العمل *Mukhtalif Adwār-i-Ḥayāt avr Ṣiḥḥatī Ḥālāt mēn Ghidhā'ī Tarmīmāt kā Dastūr al-'Amal* (Guidelines for dietary modifications during different life stages and health conditions) 11.1.6 تغذیہ برائے نومولود، اطفال، نوجوان، حاملہ و مرضعہ اور مشائخ *Taghdhiya barā'ē Navmawlūd, Aṭfal, Navjavān, Ḥāmila wa Murḍi'a avr Mashā'ikh* (Nutrition for infants, children, adolescents, pregnant and lactating women, and the elderly) **• M 11U 2 تغذیہ برائے مداوات امراض Taghdhiya barā'ē Madāwāt-i-Amrāḍ (Nutrition for Disease Management)** 11.2.1 غذائی تدابیر برائے امراض غیر سار یہ: امراض قلب و دوران خون، ذیابیطس، سمن مفرط و سرطان *Ghidhā'ī Tadābīr barā'ē Amrāḍ Ghayr Sāriyya: Amrāḍ-i-Qalb-o-Dawran-i-Khūn, Dhayābīṭus, Siman Mufriṭ wa Saṛṭān* (Nutrition management of non-communicable diseases: Cardiovascular Diseases, Diabetes, Obesity, and Cancer) 11.2.2 غذائی تدابیر برائے امراض مزمنہ: امراض گردہ، جگر کی خرابیاں اور امراض معدہ و امعاء *Ghidhā'ī Tadābīr barā'ē Amrāḍ Muzmina: Amrāḍ-i-Gurda, Jigar kī Kharābiyān avr Amrāḍ-i-Mi'da-o-Am'ā'* (Nutritional					

	management of chronic illnesses: Renal disease, Liver disorders, and Gastrointestinal disorders)					
	M-12 امراض بذریعہ غذائی آلودگی وغذائی حفظان صحت Amrāḍ ba Dhari'a Ghidhā'ī Ālūdgī wa Ghidhā'ī Ḥifẓān-i-Ṣiḥḥat (Foodborne Diseases and Food Hygiene) This module provides an in-depth understanding of foodborne diseases, their causes, and prevention strategies. It covers foodborne intoxications, including major toxins and their health impact, along with foodborne infections, transmission pathways, and hygiene practices. **• M 12U 1 تسمم غذائی Tasammum Ghidhā'ī (Foodborne Intoxications)** 12.1.1 تعریف ودرجہ بندی *Ta'rīf wa Darjabandī* (Definition and Classification) 12.1.2 سموم غذائی کبیرہ: افلاٹاکسین، ارگاٹ، جلودھر وبائی، استسقائے وطنی اور فیوساریم ٹاکسنس کے ماخذ، صحتی اثرات اور تحفظی تدابیر *Sumūm-i-Ghidhā'ī Kabīra: Aflatoxin, Ergot, Jalodhar Waba'ī, Istisqā' Waṭanī, avr Fusarium Toxins kē Mākhaz, Ṣiḥḥat Atharāt avr Tahaffuẓī Tdābīr* (Major Food Intoxicants: Sources, Health Impact, and Prevention of Aflatoxins, Ergot, Epidemic Dropsy, Endemic Ascites, Fusarium Toxins) **• M 12U 2 تعدیہ بذریعہ غذائی آلودگی Ta'diyya ba Dhari'a Ghidhā'ī Ālūdgī (Foodborne Infections)** 12.2.1 تعدیہ بذریعہ غذائی آلودگی کا جائزہ: عمومی جراثیم، انتقال تعدیہ کے طریقے، غذائی تعامل، معکوسی تعدیہ *Ta'diyya ba Dhari'a Ghidhā'ī Ālūdgī kā Jā'iza: 'Umūmī Jarathīm, Intiqāl-i-Ta'diyya kē Ṭarīqē, Ghidhā'ī Ta'āmul, Ma'kūsī Ta'diyya* (Overview of Foodborne Infections: Common pathogens, Transmission pathways, Food handling, Cross-contamination) 12.2.2 غذائی حفظان صحت: غذائی عُمال کی شخصی حفظان صحت، کھانے کی جگہوں کی صفائی وستھرائی، معقول صفائی اور غذائی اجناس کا تعامل۔ دودھ، گوشت، مچھلی، انڈا، اثمار و میوہ جات اور بقول *Ghidhā'ī Ḥifẓān-i-Ṣiḥḥat: Ghidhā'ī 'Ummāl kī Shakhṣī Ḥifẓān-i-Ṣiḥḥat, Khānē kī Jaghon kī Ṣafā'ī-o-Suthrā'ī, Ma'qūl Ṣafā'ī avr Ghidhā'ī Ajnās kā Ta'āmul*	2	10	20	30	60

	- Dūdh, Gosht, Machlī, Anda, Athmār-o-Mevajāt avr Buqūl (Food Hygiene: Personal hygiene of food handlers, Sanitation of eating Places, Proper cleaning and handling of Food Items - Milk, Meat, Fish, Egg, Fruits and Vegetables)					
		4	20	40	60	120
Semester No : 5						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
	M-13 غذائی تحصین وغذائی سلامتی کے معیارات Ghidhā'ī Taḥṣīn wa Ghidhā'ī Salāmatī ke Mi'yārāt (Food Fortification and Food Safety Standards) This module explores food fortification as a public health strategy, its objectives, and its role in addressing micronutrient deficiencies. It covers commonly fortified foods, national and international guidelines, and their health impact. Additionally, it examines food safety standards, food adulteration, its consequences, and regulatory frameworks like Codex Alimentarius, (Food Standards*:* Codex Alimentarius, Prevention of Food Adulteration Act (PFA) Standards, Agmark Standards, FSSAI (Food Safety and Standards Authority of India) and Bureau of Indian Standards (BIS) .	2	10	20	30	60

	• M 13U 1 غذائی تحصین وصحت عامہ Ghidhā'ī Taḥṣīn wa Ṣiḥḥat 'Āmma (Food Fortification and Public Health) 13.1.1 غذائی تحصین: تعریف ومقاصد *Ghidhā'ī Taḥṣīn: Ta'rif-o-Maqāṣid* (Food Fortification: Definition and Objectives) 13.1.2 عمومی محصّن غذائیں: نمک، آٹا، اناج، دودھ اور زیوت الطبخ *'Umūmī Muḥaṣṣan Ghidhā'eṉ: Namak, Āṭā, Anāj, Dūdh avr Zuyūt al-Ṭtabakh* (Commonly Fortified Foods: Salt, Flour, Grains, Milk and Cooking Oils) 13.1.3 غذائی تحصین کے قومی وبین الاقوامی ضوابط *Ghidhā'ī Taḥṣīn kē Qawmī wa Bayn al-Aqwāmī Ḍawābiṭ* (National and International Guidelines for Food Fortification) 13.1.4 غذائی تحصین کے اثرات صحت عامہ پر: فولاد، یود، حیاتین الف، اور فولک ایسڈ کے نقص کو دور کرنا *Siḥḥat 'Āmma par Ghidhā'ī Taḥṣīn kē Atharāt: Favlād, Yūd, Ḥayātīn Alif avr Folic Acid kē Naqṣ ko Dūr Karnā* (Public Health Impact of Food Fortification: Addressing Iron, Iodine, Vitamin A, and Folic Acid Deficiencies) **• M 13U 2 غذائی سلامتی اور اس کے معیارات Ghidhā'ī Salāmatī avr us kē Mi'yārāt (Food Safety and Standards)** 13.2.1 غذائی آمیزش: تعریف، تقسیم، اسباب، صحت عامہ پر اس کے اثرات، تحفظی وتحدیدی اقدامات *Ghidhā'ī Āmēzish: Ta'rīf, Taqsī, Asbāb, Ṣiḥḥat 'Āmma par us kē Atharāt, Taḥaffuẓī wa Taḥdīdī Iqdāmāt* (Food Adulteration: Definitions, Types, Causes, Impact on Public Health, Prevention, and Control Measures) 13.2.2 غذائی معیارات: کوڈیکس الیمنٹاریئس، پی ایف اے (پریوینشن آف فوڈ ایڈلٹریشن ایکٹ) اسٹینڈرڈس، ایگمارک اسٹینڈرڈس، بیورو آف انڈین اسٹینڈرڈس (بی آئی ایس)، ایف ایس ایس اے آئی (ادارۂ تحفظِ خوراک ومعیارات، بھارت) *Ghidhā'ī Mi'yārāt: Codex Alimentarius, PFA [Prevention of Food Adulteration Act] Standards, Agmark standards, BIS [Bureau of Indian Standards], FSSAI (Bhāratī Idāra' barāe Taḥaffuẓ-i-Khurāk-o-*					

	Mi'yārāt) (Food Standards*:* Codex Alimentarius, PFA [Prevention of Food Adulteration Act] Standards, Agmark standards, BIS [Bureau of Indian Standards], FSSAI [Food Safety and Standards Authority of India])					
	M-14 طرز زندگی سے پیدا ہونے والے امراض کا تعارف Ṭarz-i-Zindagī se Paydā hone vāle Amrāḍ kā Ta'āruf (Introduction to Lifestyle Disorders) This module introduces lifestyle disorders, their risk factors, and prevention strategies. It explores the Unani perspective on chronic diseases (*Amrāẓ-i-Muzmina*), including their classification, etiopathogenesis, and temperament-based interventions. It also includes the practical applications of *Asbāb-i-Sitta Zarooriya* in managing lifestyle disorders . **• M 14U 1 عوامل طرز زندگی و امراض غیر سار یہ Awāmil-i-Ṭarz-i-Zindagī wa Amrāḍ Ghayr Sāriya (Lifestyle Factors and Non-Communicable Diseases)** 14.1.1 مبادیاتِ طرز زندگی: تعریف، جہات، غیر صحت مندانہ طرز زندگی کے مجموعی صحت پر اثرات *Mabādiyyat-i-Ṭarz-i-Zindagī: Ta'rīf, Jihāt, Ghyar Ṣiḥḥatmandāna, Ṭarz-i-Zindagī kē Majmū'ī Ṣiḥḥat par Atharāt* (Basics of Lifestyle: Definition and dimensions, Impact of unhealthy lifestyle on overall health) 14.1.2 اہم امراضِ غیر سار یہ کا جائزہ: امراض قلب و عروق، ذیابیطس اور سرطان کی بڑھتی ہوئی شرح، اختطاری عوامل، حکمت عملی برائے مداخلت طرز زندگی *Aham Amrāḍ Ghayr Sāriya kā Jā'iza: Amrāḍ-i-Qalb-o-'Urūq, Dhayābīṭus avr Saṛtān kī Barhtī hu'ī Sharḥ, Ikhtiṭārī 'Awāmil, Ḥikmat 'Amalī barā'ē Mudākhilat-i-Ṭarz-i-Zindagī wa Samājī Saṭaḥ par kiyē jānē vālē Taḥaffuẓī Iqdāmāt* (Overview of Major NCDs: Cardiovascular Diseases, Diabetes and Cancer Burden, Risk factors, Strategies for lifestyle interventions and community-based preventive Measures) **• M 14U 2 امراض غیر سار یہ کا یونانی طبی نقطۂ نظر Amrāḍ Ghayr Sāriya kā Unānī Ṭibbī Nuqta Naẓar (Unani Medicine Approach to Non-Communicable Diseases)**	2	10	20	30	60

	14.2.1 امراض مزمنہ کا یونانی طبی نظریہ *Amrāḍ Muzmina kā Ūnānī Ṭibbī Naẓariya* (Unani Medicine Perspective on Chronic Diseases) 14.2.1.1 یونانی نظام طب میں امراض مزمنہ کی تعریف و درجہ بندی *Unani Niẓam-i-Ṭibb mēn Amrāḍ Muzmina kī Ta'rīf wa Darjabandī* (Definition and Classification of Chronic Diseases in Unani System of Medicine) 14.2.1.2 امراض مزمنہ کے ماہیت المرضی اسباب مزاجی نقطۂ نظر سے، اور اس کی متعلقہ علامات و نشانیاں *Amrāḍ Muzmina kē Māhiyat al-Maraḍī Asbāb Mizājī Nuqta Naẓar sē, avr us kī Muta'alliqa 'Alāmāt-o-Nishāniyān* (Etiopathogenesis based on *Mizāj* and Associated Signs and Symptoms of Chronic Diseases) 14.2.1.3 یونانی طبی اصول کے مطابق امراض مزمنہ سے تحفظ و تحدید کے اقدامات *Unani Ṭibbī Uṣūl kē Muṭābiq Amrāḍ Muzmina sē Taḥaffuẓ-o-Taḥdīd kē Iqdāmāt* (Prevention and Control Measures using Unani Medicine Principles) 14.2.2 طرز زندگی کو بہتر بنانے کی حکمتِ عملی *Tarz-i-Zindagī kō Bihtar banānē kī Ḥikmat 'Amalī* (Practical Lifestyle Management Strategies) 14.2.2.1 ثلاثیات (غذا، ریاضت و نوم) ابن سینا برائے حفظِ صحت *Thalathiyyat (Ghidhā', Riyāḍat wa Nawm) Ibn Sīnā barā'ē Ḥifẓ-i-Ṣiḥḥat* (Ibn Sīnā's Trilogy [Diet, Exercise and Sleep] for Health Preservation) 14.2.2.2 طرز زندگی سے پیدا ہونے والے امراض میں اسباب ستہ ضروریہ کا اطلاق: غذائی ضوابط، ریاضتی سفارشات، دماغی استراحتی تکنیکات اور نوم جید *Tarz-i-Zindagī sē Paydā honē vālē Amrāḍ mēn Asbāb Sitta Ḍarūriyya kā Iṭlāq: Ghidhā'ī Ḍawābiṭ, Riyāḍatī Sifārishāt, Dimāghī Istirāḥatī Taknīkāt avr Nawm Jayyid* (Application of *Asbāb Sitta Ḍarūriyya* in Lifestyle Disorders: Dietary guidelines, Exercise recommendations, Mental relaxation techniques and Sound sleep practices)					
		4	20	40	60	120

Semester No : 6						
2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-15 وبائیت امراض غیر ساریہ Waba'iyat-i-Amrāḍ Ghayr Sārīya (Epidemiology of Non-Communicable Diseases) This module provides an epidemiological perspective on major Non-Communicable Diseases, including cardiovascular diseases, stroke, hypertension, diabetes, and obesity. It covers disease burden, modifiable and non-modifiable risk factors, clinical features, complications, and prevention strategies. **• M 15U 1 وبائیت امراض قلب و دوران خون و سکتہ Waba'iyat-i-Amrāḍ-i-Qalb-o-Dawrān-i-Khūn wa Sakta (Epidemiology of Cardiovascular Diseases and Stroke)** 15.1.1 امراض قلب و دوران خون: بار، اختطاری عوامل (قابل ترمیم و غیر ترمیم)، تحفظی و تحدیدی حکمت عملی *Amrāḍ-i-Qalb-o-Dawrān-i-Khūn: Bār, Ikhṭitārī 'Awāmil (Qābil-i-Tarmīm-o-Ghayr Tarmīm), Taḥaffuẓī wa Taḥdīdī Ḥikmat 'Amalī* (Cardiovascular Diseases: Burden, Risk Factors [Modifiable and Non-Modifiable], Prevention and Control Strategies) 15.1.2 سکتہ دماغی: بار، اختطاری عوامل (قابل ترمیم و غیر ترمیم)، تحفظی و تحدیدی حکمت عملی *Sakta Dimāghī: Bār, Ikhṭitārī 'Awāmil (Qābil-i-Tarmīm-o-Ghayr Tarmīm), Taḥaffuẓī wa Taḥdīdī Ḥikmat 'Amalī* (Stroke:	2	10	20	30	60

	Burden, Risk Factors [Modifiable and Non-Modifiable], Prevention and Control Strategies) 15.1.3 ضغط الدم قوی: تعریف، درجہ بندی، بار، اختطاری عوامل (قابل ترمیم و ناقابل ترمیم)، سریریاتی ظواہر، عوارضات، تحفظی و تحدیدی حکمت عملی *Ḍaght al-Dam Qawī: Ta'rīf, Darjabandī, Bār, Ikhṭitārī 'Awāmil (Qābil-i-Tarmīm-o-Ghayr Tarmīm), Saririyyātī Ẓawāhir, 'Awāriḍāt, Taḥaffuẓī wa Taḥdīdī Ḥikmat 'Amalī* (Hypertension: Definition, Classification, Burden, Risk Factors [Modifiable and Non-Modifiable], Clinical Features, Complications, Prevention and Control Strategies) **• M 15U 2 وبائیت ذیابیطس و سمن مفرط Waba'iyat-i-Dhayābīṭus wa Siman Mufṛit (Epidemiology of Diabetes and Obesity)** 15.2.1 ذیابیطس: درجہ بندی، بار، اختطاری عوامل (قابل ترمیم و ناقابل ترمیم) سریریاتی ظواہر، عوارضات، تحفظی و تحدیدی حکمت عملی *Dhayābīṭus: Darjabandī, Bār, Ikhṭitārī 'Awāmil (Qābil-i-Tarmīm-o-Ghayr Tarmīm), Saririyyātī Ẓawāhir, 'Awāriḍāt, Taḥaffuẓī wa Taḥdīdī Ḥikmat 'Amalī* (Diabetes: Classification, Burden, Risk Factors [Modifiable and Non-Modifiable], Clinical features, Complications, Prevention and Control Strategies) 15.2.2 سمن مفرط: درجہ بندی، بار، تجزیہ، خطرات، تحفظی و تحدیدی حکمت عملی *Siman Mufṛit: Darjabandī, Bār, Tajziya, Khatrāt, Taḥaffuẓī wa Taḥdīdī Ḥikmat 'Amalī* (Obesity: Classification, Burden, Assessment, Hazards, Prevention and Control Strategies) **• M 15U 3 وبائیت سرطان Waba'iyat-i-Saṛtān (Epidemiology of Cancers)** 15.3.1 سرطان: بیان مسئلہ، وقتی رجحانات، اسباب و عوامل، سرطان کی مختلف اقسام کی تحفظی و تحدیدی تدابیر *Saṛtān: Bayān-i-Mas'ala, Waqtī Rujḥānāt, Asbāb-o-'Awāmil, Saṛtān kī Mukhtalif Aqsām kī Taḥaffuẓī wa Taḥdīdī Tadābīr* (Cancers: Problem statement, time trends, causes, prevention and control measures for different type of cancers)					

	M-16 امراض غیر سار یہ کی نخل اور بنیادی نگہداشت Amrāḍ Ghayr Sāriya kī Nakhl avr Bunyādī Nigahdāsht (Screening and Primary Care for Non-Communicable Diseases) This module focuses on screening and primary care strategies for NCDs. It covers screening principles, criteria, evaluation methods, and major screening programs for conditions like cancer and diabetes. The primary healthcare approach emphasizes community-level prevention, including primordial, primary, and secondary prevention strategies. **• M 16U 1 نظریۂ نخل Naẓariya'-i-Nakhl (Concept of Screening)** 16.1.1 تعریف، اصول وضوابط، استعمالات، نخل کے معیارات (مرض وامتحان) نخل کا جائزہ اور نخلی پروگرام *Ta'rīf, Uṣūl-o-Ḍawābiṭ, Isti'mālāt, Nakhl kē Mi'yārāt (Maraḍ-o-Imtiḥān), Nakhl kā Jā'iza avr Nakhlī Program* (Definition, Principles, Uses, Types, Criteria for Screening [Disease and Tests], Evaluation of Screening Tests, and Screening Programmes) 16.1.2 نخل برائے سرطان (سرطانِ فمِ رحم، سرطانِ ریہ، سرطانِ ثدی)، ذیابیطس و دیگر امراض غیر سار یہ *Nakhl barā'ē Saṛtān (Saṛtān-i-Fam-i-Raḥim, Saṛtān-i-Riya, Saṛtān-i-Thadī), Dhayābīṭus wa Dīgar Amrāḍ Ghayr Sāriya* (Screening for cancer [Ca cervix, Ca lung, Ca breast], Diabetes, and Other NCDs) **• M 16U 2 امراض غیر سار یہ میں بنیادی صحت کی نگہداشت کے مناہج Amrāḍ Ghayr Sāriya mēn Bunyādī Ṣiḥḥat kī Nigahdāsht kē Manāhij (Primary Healthcare Approach to NCDs)** 16.2.1 امراض غیر سار یہ کے لیے سماجی سطح پر کی جانے والی تحفظی تدابیر *Amrāḍ Ghayr Sāriya kē liyē Samājī Saṭaḥ par kī jānē vālī ī Tadābīr* (Community-Level Prevention Measures for NCDs) 16.2.1.1 اساسی تحفظ: سماجی تعلیمی پروگرام کے ذریعہ صحت مند طرز زندگی کی ترویج واشاعت، جسمانی سرگرمی اقدامات وغذائی رہنمائی *Asāsī Taḥaffuẓ: Samājī Ta'līmī Program kē Dhari'a Ṣiḥḥatmand Ṭarz-i-Zindagī kī Tarwīj-o-Isha'at, Jismānī Sargarmī Iqdāmāt wa Ghidh Rahnuma'ī* (Primordial Prevention:	2	10	20	30	60

	Promotion of Healthy Lifestyles through Community Education Programs, Physical Activity Initiatives, and Nutritional Guidance) 16.2.1.2 ابتدائی تحفظ: اختطاری عوامل کی شناخت اور خصوصی مشورے/تحفظ *Ibtidāʾī Taḥaffuẓ: Ikhtiṭārī ʻAwāmil kī Shanākht avr Khuṣūṣī Mashwarē/Taḥaffuẓ* (Primary Prevention-Identifying Risk and Specific Advice/Protection) 16.2.1.2.1 عوامی سطحی حکمت عملی *ʻAwāmī Saṭaḥī Ḥikmat ʻAmalī* (Population Strategy) 16.2.1.2.2 اعلیٰ خطری حکمت عملی *Aʻlā Khatrī Ḥikmat ʻAmalī* (High-Risk Strategy) 16.2.1.3 ثانوی تحفظ: تشخیص مبکر و علاج *Thānwī Taḥaffuẓ: Tashkhīṣ Mubakkir-o-ʻIlāj* (Secondary Prevention: Early Diagnosis and Treatment)					
		4	20	40	60	120
		16	80	160	240	480

Paper No : 3 ماحولیاتی صحت، آبادیات اور حرکیات آبادی MĀḤAWLIYĀTĪ ṢIḤḤAT, ĀBĀDIYYĀT AVR ḤARAKIYYĀT-I-ĀBĀDĪ (ENVIRONMENTAL HEALTH, DEMOGRAPHY AND POPULATION DYNAMICS)

Semester No : 3

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-17 طبعی ماحول Ṭabīʻī Maḥawl (Physical Environment)	3	15	30	45	90

	This module covers the fundamental aspects of the physical environment and its role in health. Topics include air, water, soil quality, pollution sources, and environmental health interventions. **• M 17U 1 ماحولیاتی صحت کی اساسیات Maḥawliyātī Ṣiḥḥat kī Asāsiyāt (Foundations of Environmental Health)** 17.1.1 ماحولیاتی صحت کا جائزہ *Maḥawliyātī Ṣiḥḥat kā Jā'iza* (Overview of Environmental Health) 17.1.1.1 تعریف، دائرۂ کار و اہمیت *Ta'rīf, Dā'ira'-i-Kār-o-Ahammiyat* (Definition, Scope and Importance) 17.1.1.2 اہم تصورات و اصول *Aham Taṣawwurāt-o-Uṣūl* (Key Concepts and Principles) 17.1.2 ماحول کے اجزاء *Maḥawl kē Ajzā'* (Components of Environment) 17.1.3 ماحولیاتی عوامل اور نتائج صحت کے مابین باہمی تعاملات *Maḥawliyyātī 'Awāmil avr Ṣiḥḥat kē Mābayn Bāhamī Ta'āmulāt* (Interactions between Environmental Factors and Health Outcomes) **• M 17U 2 خوبیٔ آب و صحت Khūbi'-i-Āb wa Ṣiḥḥat (Water Quality and Health)** 17.2.1 محفوظ اور صحت بخش پانی کے خواص *Maḥfūẓ avr Ṣiḥḥat Bakhsh Pānī kē Khawāṣ* (Characteristics of Safe and Wholesome Water) 17.2.2 آبی ضروریات *Ābī Ḍarūriyyāt* (Water Requirements) 17.2.3 ذرائع آب و استعمالات *Dharā'i'-i-Āb wa Isti'mālāt* (Uses and Sources of Water) 17.2.4 آبی آلودگی و متعلقہ امراض *Ābī Ālūdgī wa Muta'alliqa Amrāḍ* (Water Pollution and Related Diseases) 17.2.5 آبی صفائی کے طریقے *Ābī Ṣafā'ī kē Ṭarīqē* (Water Purification Techniques) 17.2.5.1 وسیع پیمانے پر *Wasī' Paymānē par* (On large Scale) 17.2.5.2 محدود پیمانے پر *Maḥdūd Paymānē par* (On Small Scale) 17.2.6 جراثیمی تصفیۂ آب *Jarāthīmī Tasfiyya'-i-Āb* (Water Disinfection)					

	17.2.7 تصفیۂ آب اطریقہائے جراثیم کشی بحوالہ یونانی طبی کتب *Tasfiyya'-i-Āb/Ṭarīqahā'ē Jarāthīm Kushī ba Ḥawāla Unānī Ṭibbī Kutub* (Water Purification/Disinfection Methods in Classical Unani Books) 17.2.8 خوبیٔ آب:اصول ومعیارات *Khūbi'-i-Āb: Uṣūl-o-Mi'yārāt* (Water Quality: Criteria and Standards) 17.2.8.1 قبولیت کے پہلو *Qubūliyyat kē Pahlū* (Acceptability Aspects) 17.2.8.2 قصیر حیاتیاتی پہلو *Qaṣīr Ḥayātiyātī Pahlū* (Microbiological Aspects) 17.2.8.3 کیمیائی پہلو *Kīmiyāʾī Pahlū* (Chemical Aspects) 17.2.8.4 شعاعی پہلو *Shu'ā'ī Pahlū* (Radiological Aspects) 17.2.9 خوبیٔ آب شرب کی نگہداشت *Khūbi'-i-Āb-i-Shurb kī Nigahdāsht* (Drinking Water Quality Surveillance) **• M 17U 3 خوبیٔ ہواء وصحت Khūbi'-i-Hawā' wa Ṣiḥḥat (Air Quality and Health)** 17.3.1 ترکیب ہواء *Tarkīb-i-Hawā'* (Composition of Air) 17.3.2 حرارتی تسکین کے اشاریے *Ḥarārati Taskin kē Ishāriyē* (Indicators of Thermal Comfort) 17.3.3 ہوائی آلودگی *Hawāʾī Ālūdgī* (Air Pollution) 17.3.3.1 ہوائی آلودگی کے ذرائع *Hawāʾī Ālūdgī kē Dharā'i'* (Sources of Air Pollution) 17.3.3.2 ہوائی عناصر آلودگی *Hawāʾī 'Anāṣir-i-Ālūdgī* (Air Pollutants) 17.3.3.3 نگرانی واثرات *Nigrānī-o-Atharāt* (Monitoring and Effects) 17.3.3.4 تحفظ وانسداد کی حکمت عملی *Taḥaffuẓ-o-Insidād kī Ḥikmat 'Amalī* (Prevention and Control Strategies) 17.3.4 تصفیۂ ہوا کے طریقے *Taṣfiya'-i-Hawāʾ kē Ṭarīqē* (Methods of Air Purification) 17.3.4.1 روایتی تقنیات *Ravāyatī Taqniyyāt* (Traditional Techniques) 17.3.4.2 جدید تقنیات *Jadīd Taqniyyāt* (Recent Techniques)					

	17.3.5 خوبیٔ ہواء کے انسانی صحت پر اثرات *Khūbi'-i-Hawā' kē Insānī Ṣiḥḥat par Atharāt* (Impacts of Air Quality on Human Health) 17.3.5.1 قلیل مدتی اثرات *Qalīl Muddatī Atharāt* (Short-Term Effects) 17.3.5.2 طویل مدتی اثرات *Ṭawīl Muddatī Atharāt* (Long-Term Effects) 17.3.6 خوبیٔ ہواء کے معیارات *Khūbi'-i-Hawā' kē Mi'yārāt* (Air Quality Standards) 17.3.7 تہویہ *Tahviyya* (Ventilation) 17.3.7.1 تعریف *Ta'rīf* (Definition) 17.3.7.2 معیارات *Mi'yārāt* (Standards) 17.3.7.3 طریقے *Ṭarīqē* (Methods)					
	M-18 سماجی ماحول Samājī Māḥawl (Social Environment) This module focuses on the social determinants of health, including the impact of socio-economic status, culture, community, education, and social support systems on public health and well-being. **• M 18U 1 صحت کے سماجی عوامل Ṣiḥḥat kē Samājī 'Awāmil (Social Determinants of Health)** 18.1.1 صحت کے سماجی عوامل کی تفہیم *Ṣiḥḥat kē Samājī 'Awāmil kī Tafhīm* (Understanding Social Determinants of Health) 18.1.2 صحت پر سماجی طبقے کے اثرات *Ṣiḥḥat par Samājī Ṭabqē kē Atharāt* (Influences of Social Class on Health) 18.1.3 ثقافتی عوامل اور صحت *Thaqāfatī 'Awāmil avr Ṣiḥḥat* (Cultural Factors and Health) 18.1.4 سماجی امدادی شبکات کی اہمیت *Samājī Imdādī Shabakāt kī Ahammiyat* (Importance of Social Support Networks) 18.1.5 صحتی مساوات و سماجی انصاف *Ṣiḥḥatī Masāwat wa Samājī Inṣāf* (Health Equity and Social Justice)	1	5	10	15	30

	18.1.6 صحت پر سماجی ذرائع ابلاغ کے اثرات *Ṣiḥḥat par Samājī Dharā'i' Iblāgh kē Atharāt* (Impacts of Social Media on Health) **• M 18U 2 صحت اور مساکن Ṣiḥḥat avr Masākin (Housing and Health)** 18.2.1 مساکن کے سماجی اہداف *Masākin kē Samājī Ahdāf* (Social Goals of Housing) 18.2.2 مساکن کے معیارات وضوابط *Masākin kē Mi'yārāt-o-Ḍawābiṭ* (Housing Standards and Regulations) 18.2.3 صحت مند مساکن کے معیارات *Ṣiḥḥatmand Masākin kē Mi'yārāt* (Criteria for Healthful Housing) 18.2.4 حالاتِ مساکن اور مسائل صحت *Ḥālāt-i-Masākin avr Masā'il-i-Ṣiḥḥat* (Housing Conditions and Health Problems) 18.2.5 معیاری مساکن کے اشاریے *Mi'yārī Masākin kē Ishāriyē* (Indicators of Quality Housing)					
		4	20	40	60	120

Semester No : 4

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-19 حیاتیاتی ماحول Ḥayātiyātī Maḥawl (Biological Environment)	2	10	20	30	60

	This module explores the interaction between biological factors and the environment, including medical entomology, zoonoses, microbial ecology, and their implications for health and disease control. **• M 19U 1 مفصلیات/حشرات سے پیدا ہونے والے امراض کا جائزہ Mafṣalīyyāt/Hasharāt se Paydā hone wāle Amrāḍ kā Jā'iza (Overview of Arthropods/Insects-Borne Diseases)** 19.1.1 مفصلیات/حشرات سے پیدا ہونے والے امراض کا تعارف *Mafṣalīyyāt/Hasharāt se Paydā hone wāle Amrāḍ kā Ta'āruf* (Introduction to Arthropods/Insects-Borne Diseases) 19.1.2 انسداد مفصلیات/حشرات کے اصول *Insidād-i-Mafṣalīyyāt/Hasharāt ke Uṣūl* (Principles of Arthropods/Insects Control) **• M 19U 2 اہم مفصلیات/حشرات اور ان کا انسداد Ahamm Mafṣalīyyāt/Hasharāt avr un kā Insidād (Key Arthropods/Insects and their Control)** 19.2.1 بعوضہ (مچھر): دورۂ حیات، تولیدی طرز عمل، انتقال مرض اور انسداد کی تدابیر *Ba'ūḍa (Machchar): Dawra'-i-Ḥayāt, Tawlīdī Tarz-i-'Amal, Intiqāl-i-Maraḍ avr Insidād kī Tadābīr* (Mosquitoes: Life Cycle, Breeding Habits, Disease Transmission and Control Measures) 19.2.2 ذبابہ (گھریلو مکھی): دورۂ حیات، تولیدی طرز عمل، انتقال مرض اور انسداد کی تدابیر *Dhubāba (Gharaylū Makhkhī): Dawra'-i-Ḥayāt, Tawlīdī Tarz-i-'Amal, Intiqāl-i-Maraḍ avr Insidād kī Tadābīr* (Housefly: Life Cycle, Breeding Habits, Disease Transmission and Control Measures) 19.2.3 فاصدہ (ریت مکھی): دورۂ حیات، تولیدی طرز عمل، انتقال مرض اور انسداد کی تدابیر *Fāṣida (Rēt Makhkhī): Dawra'-i-Ḥayāt, Tawlīdī Tarz-i-'Amal, Intiqāl-i-Maraḍ avr Insidād kī Tadābīr* (Sandfly: Life Cycle, Breeding Habits, Disease Transmission and Control Measures) 19.2.4 قُملہ (جوئیں)، بُرغُوث (پسو)، قُرادَہ (چیچڑ) اور سُوسَہ (گھُن): دورۂ حیات، تولیدی طرز عمل، انتقال مرض اور انسداد کی تدابیر *Qumla (Jū'iṇ), Burghūth (Pissū), Qurāda (Chīchaṛ) avr Sosa (Ghun): Dawra'-i-Ḥayāt, Tawlīdī*					

	Tarz-i-'Amal, Intiqāl-i-Maraḍ avr Insidād kī Tadābīr (Louse, Flea, Tick, and Mite: Life Cycle, Breeding Habits, Disease Transmission and Control Measures) **• M 19U 3 قَارِض (چوہا) اور حشرات کش ادویہ Qāriḍ (Chūhā) avr Hasharāt Kush Adwiya (Rodents and Insecticides)** 19.3.1 *Qāriḍ (Chūhā): Intiqāl-i-Maraḍ avr Insidād kī Tadābīr* قَارِض (چوہا): انتقال مرض اور انسداد کی تدابیر (Rodent: Disease Transmission and Control Measures) 19.3.2 *Hasharāt Kush Adwiya: Darja Bandī, 'Amal kē Ṭarīqa'-i-Kār, Māḥawliyātī Atharāt wa Ḥifāẓatī Khadshāt, Nabātī Ṭāridāt wa Mudakhkhināt (Dhūniyān)* حشرات کش ادویہ: درجہ بندی، عمل کے طریقۂ کار، ماحولیاتی اثرات و حفاظتی خدشات، نباتی طاردات و مُدَخِّنات (دھونیاں) (Insecticides: Classification, Mechanisms of Action, Environmental Impacts and Safety Concerns, Herbal Repellents and Fumigants)					
	M-20 صحت پر موسمیاتی تبدیلی کے اثرات اور آفات کا نظم و نسق Ṣiḥḥat par Mavsamiyyātī Tabdīlī kē Atharāt avr Āfāt kā Naẓm-o-Nasq (Impacts of Climate Change on Health and Disaster Management) This module examines the effects of climate change on public health, the rise of climate-sensitive diseases, and disaster preparedness strategies, including risk assessment and mitigation measures. **• M 20U 1 موسمیاتی تبدیلی اور اس کے انسانی صحت پر اثرات Mavsamiyyātī Tabdīlī avr us kē Insānī Ṣiḥḥat par Atharāt (Climate Change and its Effects on Human Health)** 20.1.1 *Mavsamiyyātī Tabdīlī: Vujūhāt wa Muḍmirāt* موسمیاتی تبدیلی: وجوہات و مضمرات (Climate Change: Causes and Implications) 20.1.2 *Khatrē sē Dochār Girohon kī Shanākht: Aṭfāl, Mashā'ikh wa Ḥāliya Amrāḍ kē Shikār Afrād par* خطرے سے دوچار گروہوں کی شناخت: اطفال، مشائخ و حالیہ امراض کے شکار افراد پر موسمیاتی تبدیلی کے اثرات	2	10	20	30	60

	Mavsamiyyātī Tabdīlī kē Atharāt (Identifying At-Risk Groups: Impacts of Climate Change on Children, Elderly and Those with Pre-existing Conditions) 20.1.3 فصول اربعہ اور مزاج *Fuṣūl Arba'a avr Mizāj* (Four Seasons and their Relations to *Mizāj*) 20.1.4 موسمی امراض بلحاظ مزاج *Mavsamī Amrāḍ ba Liḥāẓ-i-Mizāj* (Seasonal Diseases with Reference to *Mizāj*) 20.1.5 تدابیر برائے مختلف موسمیات *Tadābīr barā'ē Mukhtalif Mavsamiyyāt* (Regimens in Different Seasons) **• M 20U 2 آفات کا نظم ونسق اور صحتی اقدامات (ردعمل) Āfāt kā Naẓm-o-Nasq avr Ṣiḥḥatī Iqdāmāt (Radd-i-'Amal) (Disaster Management and Health Response)** 20.2.1 آفات کی اقسام، آفات اور ہنگامی حالات کے مابین فرق *Āfāt kī Aqsām, Āfāt avr Hangāmī Ḥālāt kē Mābayan Farq* (Types of Disasters, Differences between Disasters and Emergencies) 20.2.2 آفات کے خطرات میں کمی کے طریقے *Khatrāt-i-Āfāt Mēn Kamī kē Tarīqē* (Disaster Risk Reduction Methods) 20.2.3 آفات کے لیے پیشگی تیاری *Āfāt kē liyē Pēshgī Tayyārī* (Disaster Preparedness) 20.2.4 ہنگامی طبی خدمات *Hangāmī Tibbī Khidmāt* (Emergency Medical Care) 20.2.5 وبائے امراض کی نگرانی اور انسداد *Wabā'-i-Amrāḍ kī Nigrānī avr Insidād* (Monitoring and Controlling of Disease Outbreaks) 20.2.6 صحتی فروغ وتعلیم *Ṣiḥḥatī Farogh-o-Ta'līm* (Health Promotion and Education) 20.2.7 حکومت اور غیر حکومتی تنظیموں کا کردار *Ḥukūmat avr Ghayr Ḥukūmatī Tanẓīmon kā Kirdār* (Role of Government and NGOs)					
		4	20	40	60	120
Semester No : 5						

2A Module Number	2B Modules & units	2C Number of Credits	Notional Learning hours			
			2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-21 صفائی اور ٹھوس فضلات کا نظام Ṣafā'ī avr Thos Fuḍlāt kā Intiẓām (Sanitation and Solid Waste Management) This module addresses sanitation systems, waste management techniques, public health impacts of inadequate sanitation, and sustainable methods of solid waste disposal and recycling in urban and rural areas. **• M 21U 1 صفائی کے معمولات اور صحت عامہ Ṣafā'ī kē Ma'mūlāt avr Ṣiḥḥat 'Āmma (Sanitation Practices and Public Health)** 21.1.1 صفائی کی تفہیم *Ṣafā'ī kī Tafhīm* (Understanding Sanitation) 21.1.2 ہندستان میں صفائی کے درپیش مسائل *Hindustān mēn Ṣafā'ī kē Darpēsh Masā'il* (Sanitation Challenges in India) 21.1.3 ناقص صفائی سے صحت کے خطرات *Nāqiṣ Ṣafā'ī sē Ṣiḥḥat kē Khaṭrāt* (Health Risks from Poor Sanitation) 21.1.4 صفائی کی رکاوٹیں اور ان کا کردار *Ṣafā'ī kī Rukāvatēn avr un kā Kirdār* (Sanitary Barriers and Their Role) 21.1.5 مسائل متعلقۂ صحت *Masā'il Muta'alliqa'-i-Ṣiḥḥat* (Associated Health Issues) 21.1.6 اندفاع فضلات کے طریقے *Indifā'-i-Fuḍlāt kē Ṭarīqē* (Excreta Disposal Methods)	2	10	20	30	60

	21.1.6.1 *Ghayr Nikāsi-i-Āb ‘Ilāqon mēn* غیر نکاسیٔ آب علاقوں میں (In Un-sewered Areas) 21.1.6.2 *Nikāsi-i-Āb ‘Ilāqon mēn* نکاسیٔ آب علاقوں میں (In Sewered Areas) **• M 21U 2 ٹھوس فضلات کا انتظام Thos Fuḍlāt kā Intiẓām (Solid Waste Management)** 21.2.1 *Jāmid Fuḍlāt: Ta‘rīf-o-Dharā’i‘* جامد فضلات: تعریف و ذرائع (Solid Waste: Definition and Sources) 21.2.2 *Fuḍlāt ki Dhakhīra Andozī kā Mu’aththir Ḥal* فضلات کی ذخیرہ اندوزی کا مؤثر حل (Effective Waste Storage Solutions) 21.2.3 *Jāmid Fuḍlāt Ikaththā karnē kā Niẓām* جامد فضلات اکٹھا کرنے کا نظام (Solid Waste Collection Systems) 21.2.4 *Indifā‘-i-Fuḍlāt kē Ṭarīqē avr Bihtarīn Ṭarīqa’-i-Kār* اندفاع فضلات کے طریقے اور بہترین طریقۂ کار (Waste Disposal Methods and Best Practices) 21.2.5 *Ghayr Munāsib Indifā‘-i-Fuḍlāt kē Ṣiḥḥat par Atharāt* غیر مناسب اندفاع فضلات کے صحت پر اثرات (Health Implications of Improper Waste Disposal)					
	M-22 حیاتیاتی طبی اور برقی فضلات کا انتظام Ḥayātiyātī Ṭibbī avr Barqī Fuḍlāt kā Intiẓām (Biomedical and E-Waste Management) This module deals with the management of biomedical and electronic waste, focusing on health risks, environmental impacts, regulatory guidelines, and safe disposal methods to minimize hazards. **• M 22U 1 حیاتیاتی طبی فضلات کا انتظام Ḥayātiyātī Ṭibbī Fuḍlāt kā Intiẓām (Biomedical Waste Management)** 22.1.1 *Ḥayātiyātī Ṭibbī Fuḍlāt: Ta‘rīf, Darjabandī-o-Dharā’i‘* حیاتیاتی طبی فضلات: تعریف، درجہ بندی و ذرائع (Biomedical Waste: Definition, Classification and Sources)	2	10	20	30	60

	22.1.2 صحت کے خدشات بسبب غیر مناسب انتظام *Ṣiḥḥat kē Khadshāt ba Sabab Ghayr Munāsib Intiẓām* (Health Concerns Linked to Improper Management) 22.1.3 علیحدگی و بندوبست *'Ilaḥidgī-o-Bandobast* (Segregation and Handling) 22.1.4 اندفاع فضلات کے طریقے *Indifā'-i-Fuḍlāt kē Ṭarīqē* (Waste Disposal Methods) 22.1.5 اصول و ضوابط *Uṣūl-o-Dhawābiṭ*)Guidelines and Regulations) **• M 22U 2 برقی فضلات کا انتظام Barqī Fuḍlāt kā Intiẓām (E-Waste Management)** 22.2.1 برقی فضلات: تعریف، اقسام و ذرائع *Barqī Fuḍlāt: Ta'rīf, Aqsām-o-Dharā'i'* (E-Waste: Definition, Types and Sources) 22.2.2 برقی فضلات کے صحتی خطرات *Barqī Fuḍlāt kē Ṣiḥḥatī Khatrāt* (Health Risks from E-Waste Exposure) 22.2.3 جمع آوری اور دوبارہ کارآمد بنانے کے طریقے *Jama' Āvarī avr Dobāra Kārāmad Banānē kē Ṭarīqē* (Collection and Recycling Practices) 22.2.4 محفوظ اندفاع کے اختیارات *Maḥfūẓ Indifā' kē Akhtiyārāt* (Safe Disposal Options) 22.2.5 برقی فضلات کے بندوبست کے حفاظتی اقدامات *Barqī Fuḍlāt kē Bandobast kē Ḥifāẓatī Iqdāmāt* (Protective Measures for Handling E-Waste) 22.2.6 اصول و ضوابط *Uṣūl-o-Dhawābiṭ*)Guidelines and Regulations) 22.2.7 آگاہی و تعلیمی حکمت عملی *Āgāhī wa Ta'līmī Ḥikmat 'Amalī* (Awareness and Education Strategies)					
		4	20	40	60	120
Semester No : 6						
2A	**2B**	**2C**	**Notional Learning hours**			

Module Number	Modules & units	Number of Credits	2D Lectures	2E Practical Training	2F Experiential Learning including Modular Assessment	2G Total
	M-23 پیشہ ورانہ صحت اور خطرات Pēshavarāna Ṣiḥḥat avr Khatrāt (Occupational Health and Hazards) This module covers workplace health and safety, occupational hazards (chemical, physical, biological), ergonomics, risk assessment, and preventive strategies to ensure health in occupational settings. **• M 23U 1 پیشہ ورانہ صحت کی بنیادیں Pēshavarāna Ṣiḥḥat kī Bunyādēn (Foundations of Occupational Health)** 23.1.1 پیشہ ورانہ صحت: تعریف، دائرہ کار و اہمیت *Pēshavarāna Ṣiḥḥat: Ta'rīf, Dā'ira'-i-Kār wa Ahammiyyat* (Occupational Health: Definition, Scope and Importance) 23.1.2 پیشہ ورانہ صحت کے معیارات میں تاریخی سنگ میل *Pēshavarāna Ṣiḥḥat kē Mi'yārāt mēn Tārīkhī Sang-i-Mīl* (Historical Milestones in Occupational Health Standards) 23.1.3 پیشہ ورانہ صحت کے معیارات میں سنگ میل و اہم تبدیلیاں *Pēshavarāna Ṣiḥḥat kē Mi'yārāt mēn Sang-i-Mīl wa Aham Tabdīliyan* (Milestones and significant changes in occupational health standards) 23.1.4 پیشہ ورانہ خطرات: طبیعی، کیمیائی، حیاتیاتی، مشینی و نفسیاتی سماجی *Pēshavarāna Khatrāt: Tabī'ī, Kīmiya'ī, Ḥayātiyātī, Mashīnī wa Nafsiyātī Samājī* (Occupational Hazards: Physical, Chemical, Biological, Mechanical, and Psychosocial)	2	10	20	30	60

	• M 23U 2 پیشہ ورانہ امراض اور صحت کے تحفظ کی حکمت عملی Pēshavarāna Amrāḍ avr Ṣiḥḥat kē Taḥaffuẓ kī Ḥikmat ʻAmalī (Occupational Diseases and Health Protection Strategies) 23.2.1 پیشہ ورانہ امراض کا جائزہ: امراض بسبب طبیعی، کیمیائی، حیاتیاتی عوامل، پیشہ ورانہ جلدی التہاب، پیشہ ورانہ سرطان *Pēshavarāna Amrāḍ kā Jāʾiza: Amrāḍ ba Sabab Tabīʿī, Kīmiyāʾī, Ḥayātiyātī, ʻAwāmil, Pēshavarāna Jildī Iltihāb, Pēshavarāna Saṛtān* (Overview of Occupational Diseases: Diseases due to Physical, Chemical and Biological Agents, Occupational Dermatitis, Occupational Cancers) 23.2.2 کارکنوں کے لیے صحت کے تحفظ کے اقدامات: طبی، قانونی اور دیگر اقدامات *Kārkunon kē liyē Ṣiḥḥat kē Taḥaffuẓ kē Iqdāmāt: Ṭibbī, Qānūnī avr Dīgar Iqdāmāt* (Health Protection Measures for Workers: Medical, Legislative and Other Measures)					
	M-24 آبادیاتی اور خاندانی منصوبہ بندی کے طریقے Ābādiyyātī avr Khāndānī Manṣūbabandī kē Ṭarīqē (Demography and Family Planning Methods) This module focuses on population studies, demographic transitions, fertility, mortality, migration, and the importance of family planning in controlling population growth and improving maternal health. • M 24U 1 آبادیاتی Ābādiyyātī (Demography) 24.1.1 آبادیاتی: تعارف، تعریف و دائرۂ کار *Ābādiyyātī: Taʻāruf, Taʻrīf-o-Dāʾira'-i-Kār* (Demography: Introduction, Definition and Scope) 24.1.2 بنیادی آبادیاتی تصورات اور اشاریے *Bunyādī Ābādiyyātī Taṣawwurāt avr Ishāriyē* (Basic Demographic Concepts and Indicators) 24.1.3 آبادیاتی اعداد و شمار کے ذرائع *Ābādiyyātī Aʻdād-o-Shumār kē Dharāʾiʻ* (Sources of Demographic Data)	2	10	20	30	60

	24.1.4 ہندستان میں آبادیاتی رجحانات *Hindustān mēn Ābādiyyātī Rujḥānāt* (Demographic Trends in India) 24.1.5 آبادیاتی اعداد و شمار کا اطلاق *Ābādiyyātī A'dād-o-Shumār kā Iṭlāq* (Application of Demographic Data) **• M 24U 2 خاندانی منصوبہ بندی Khāndānī Manṣūbabandī (Family Planning)** 24.2.1 خاندانی منصوبہ بندی: تعارف، تعریف، اغراض و مقاصد *Khāndānī Manṣūbabandī: Ta'āruf, Ta'rīf, Aghrāḍ-o-Maqāṣid* (Family Planning: Introduction, Definition, Goals and Objectives) 24.2.2 خاندانی منصوبہ بندی کے صحتی پہلو *Khāndānī Manṣūbabandī kē Ṣiḥḥatī Pahlū* (Health Aspects of Family Planning) 24.2.3 زرخیزی سے متعلق اشاریے *Zarkhēzī sē Muta'alliq Ishāriyē* (Fertility Related Indicators) 24.2.4 خاندانی منصوبہ بندی کے پروگراموں کا ارتقاء *Khāndānī Manṣūbabandī kē Parogrāmon kā Irtiqā'* (Evolution of Family Planning Programs) 24.2.5 خاندانی منصوبہ بندی کے شماریات *Khāndānī Manṣūbabandī kē Shumāriyyāt* (Statistics on Family Planning) 24.2.6 خاندانی منصوبہ بندی کے فوائد *Khāndānī Manṣūbabandī kē Fawā'id* (Benefits of Family Planning) 24.2.7 مؤثر مشاورت کے اصول *Mu'aththir Mushāwirat kē Uṣūl* (Effective Counselling Principles) 24.2.7.1 مریض کی ضروریات و ترجیحات *Marīḍ kī Dharūriyyāt-o-Tarjīḥāt* (Patient Needs and Preferences) 24.2.7.2 غلط تصورات اور ثقافتی عقائد *Ghalaṭ Taṣawwurāt avr Thaqāfatī 'Aqā'id* (Misconceptions and Cultural Beliefs) 24.2.7.3 ابلاغ کے خطرات و فوائد *Iblāgh kē Khatrāt-o-Fawā'id* (Communicating Risks and Benefits) 24.2.7.4 خدمت فراہمی کے نمونے *Khidmat Farāhmī kē Namūnē* (Models of Service Delivery)					

	• M 24U 3 مانع حمل طریقے Māni‘-i-Ḥamal Ṭarīqē (Contraceptive Methods) 24.3.1 فاصلے کے طریقے *Faṣilē kē Ṭarīqē* (Spacing Methods) 24.3.1.1 رکاوٹ کے طریقے: طبیعی، کیمیائی و مشترکہ طریقے *Rukāvat kē Ṭarīqē: Tabī‘ī, Kīmiyā‘ī wa Mushtarka Ṭarīqē* (Barrier Methods: Physical, Chemical, and Combined Methods) 24.3.1.2 آلات درون رحم *Ālāt Darūn-i-Raḥim* (Intrauterine Devices [IUDs]) 24.3.1.3 ہارمونی طریقے *Hārmonī Ṭarīqē* (Hormonal Methods) 24.3.1.4 بعد استقرار حمل کے طریقے *Ba‘d Istiqrār-i-Hamal kē Ṭarīqē* (Post-Conceptional Methods) 24.3.1.5 دیگر طریقے *Dīgar Ṭarīqē* (Other Methods) 24.3.2 حتمی طریقے *Ḥatmī Ṭarīqē* (Terminal Methods) 24.3.2.1 مردانہ نس بندی *Mardāna Nasbandī* (Male Sterilization) 24.3.2.2 زنانہ نس بندی *Zanāna Nasbandī* (Female Sterilization) 24.3.3 یونانی نظام طب میں تحدید تولید کے طریقے *Yūnānī Niẓām-i-Ṭibb mēn Taḥdid-i-Tawlīd kē Ṭarīqē* (Birth Control Methods in Unani System of Medicine) 24.3.4 مانع حمل طریقوں کا تجزیہ *Māni‘-i-Ḥamal Ṭarīqon kā Tajziya* (Evaluation of Contraceptive Methods)					
		4	20	40	60	120
		16	80	160	240	480

Paper No : 4 صحت عامہ کی خدمات کا نظام اور منصوبے Ṣiḥḥat ‘Āmma kī Khidmāt kā Niẓām avr Manṣūbe (Public Health Care System and Policies)

Semester No : 3

2A	2B Modules & units	2C	Notional Learning hours			
			2D	2E	2F	2G

Module Number		Number of Credits	Lectures	Practical Training	Experiential Learning including Modular Assessment	Total
	M-25 معاشرتی صحت اور صحتی خدمات کا نظام Mu'āsharatī Ṣiḥḥat avr Ṣiḥḥatī Ḵẖidmāt kā Niẓām (Health Care of Community and Health Care System) This module explores the structure and function of healthcare systems at local, national, and global levels, focusing on the organization and delivery of health services in community settings. **• M 25U 1 معاشرتی صحتی نگہداشت Mu'āsharatī Ṣiḥḥatī Nighahdāsht (Community Health Care)** 25.1.1 *Ṣiḥḥatī Nighahdāsht kā Naẓariyya* صحتی نگہداشت کا نظریہ (Concept of Health Care) 25.1.2 *Ṣiḥḥatī Nighahdāsht ke Madārij* صحتی نگہداشت کے مدارج (Levels of Health Care) 25.1.3 Bhārat mēn Ibtidā'ī Ṣiḥḥatī Nighahdāsht بھارت میں ابتدائی صحتی نگہداشت (Primary Health Care in India) 25.1.4 *Ibtidā'ī Ṣiḥḥatī Nighahdāsht ke Ajzā' avr Uṣūl* ابتدائی صحتی نگہداشت کے اجزاء اور اصول (Elements and Principles of Primary Health Care) 25.1.5 *Mu'āsharatī Ṣiḥḥatī Nighahdāsht mēn Āyush* معاشرتی صحتی نگہداشت میں آیوش (Ayush in Community Health Care) 25.1.6 *Ṣiḥḥat Sab ke Liye* صحت سب کے لیے (Health for All) 25.1.7 *Hazār Sāla Taraqqī ke Ahdāf* ہزار سالہ ترقی کے اہداف (Millennium Development Goals) 25.1.8 *Pā'īdār Taraqqī ke Ahdāf* پائیدار ترقی کے اہداف (Sustainable Development Goals) **• M 25U 2 صحتی نگہداشت کی فراہمی کا نمونہ Ṣiḥḥatī Nighahdāsht kī Farāhamī kā Namūna (Health Care Delivery Services)**	2	10	20	30	60

	25.2.1 *Ṣiḥḥatī Masā'il* صحتی مسائل (Health Problems) 25.2.2 *Ḵẖidmāt barā'e Ṣiḥḥatī Nighahdāsht* خدمات برائے صحتی نگہداشت (Health Care Services) 25.2.3 *Ṣiḥḥatī Nighahdāsht kā Niẓām* صحتی نگہداشت کا نظام (Health Care System) 25.2.4 *Afrādī Quwwat barā'e Ṣiḥḥat* افرادی قوت برائے صحت (Health Manpower) 25.2.5 *PHC, CHC avr Āyush Haspatāl ke liye Ṣiḥḥat-i-'Āmma ke Mi'yār* پی ایچ سی، سی ایچ سی اور آیوش ہسپتال کے لیے صحت عامہ کے معیار (Public Health Standard for PHC, CHC, and Ayush Hospital)					
	M-26 *Ṣiḥḥatī Manṣūba Bandī wa Intiẓām* صحتی منصوبہ بندی وانتظام (Health Planning and Management) This module covers the principles of health planning and management, including resource allocation, leadership in health care, and the design and implementation of health programs. **• M 26U 1 *Ṣiḥḥatī Manṣūba Bandī wa Intiẓām kī Asāsiyyāt* صحتی منصوبہ بندی وانتظام کی اساسیات (Foundations of Health Planning and Management)** 26.1.1 *Tajzīya barā'e Ṣiḥḥatī Ẓarūriyyāt wa Muṭālibāt* تجزیہ برائے صحتی ضروریات ومطالبات (Health Needs and Demands Assessment) 26.1.2 *Dharā'i' Takhṣīṣ wa Intiẓām* ذرائع تخصیص وانتظام (Resource Allocation and Management) 26.1.3 *Maqāṣid, Ahdāf wa 'Azā'im kā Ta'ayyun* مقاصد، اہداف وعزائم کا تعین (Setting Objectives, Targets and Goals) 26.1.4 *Manṣūba Bandī ke Dawrāniye, Intiẓāmī Ṭarīqa'-i Kār avr Taknīkoṉ kī Tafhīm* منصوبہ بندی کے دورانیے، انتظامی طریقۂ کار اور تکنیکوں کی تفہیم (Understanding the Planning Cycle, Management Process and Techniques) **• M 26U 2 *Bhārat meṉ Ṣiḥḥatī Manṣūba Bandī kā Dhāṉcha* بھارت میں صحتی منصوبہ بندی کا ڈھانچہ (Health Planning Framework in India)**	2	10	20	30	60

	26.2.1 بھارت میں صحتی منصوبہ بندی کے لیے تشکیل کی گئی کلیدی مجلس کا عمومی جائزہ *Bhārat mēn Ṣiḥḥatī Manṣūba Bandī ke liye Tashkīl kī gaī Kalīdī Majlis kā 'Umūmī Jā'iza* (Overview of Key Committee Constituted in India for Health Planning) 26.2.2 پلاننگ کمیشن سے نیتی آیوگ تک کا سفر *Plānning Kamīshan se Nītī Āyog tak kā Safar* (Evolution of the Planning Commission and Niti Aayog) 26.2.3 پنج سالہ منصوبوں میں صحتی منصوبہ بندی کا انضمام *Panj Sāla Manṣūbōn mēn Ṣiḥḥatī Manṣūba Bandī kā Inẓimām* (Integration of Health Planning in Five-Year Plans)					
		4	20	40	60	120
Semester No : 4						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
	M-27 صحتی تعلیمات اور ترسیلات Ṣiḥḥatī Ta'līmāt avr Tarsīlāt (Health Education and Communication) This module examines strategies for promoting health education and encouraging behavioural change through effective communication, focusing on health literacy and community engagement.	2	10	20	30	60

	• **M 27U 1 صحتی تعلیمات کے اصول ومعمولات Ṣiḥḥatī Ta'līmāt ke Uṣūl-o-Ma'mūlāt (Principles and Practices of Health Education)** 27.1.1 صحتی تعلیمات کی تعریف، اغراض و مقاصد اور حصول *Ṣiḥḥatī Ta'līmāt kī Ta'rīf, Aghrāḍ-o-Maqāṣid avr Ḥuṣūl* (Definition, Aims and Objectives, Approach to Health Education) 27.1.2 صحتی تعلیمات کا نمونہ *Ṣiḥḥatī Ta'līmāt kā Namūna* (Models of Health Education) 27.1.3 صحتی تعلیمات کے اجزاء *Ṣiḥḥatī Ta'līmāt ke Ajzā'* (Contents of Health Education) 27.1.4 صحتی تعلیمات کے اصول وطریقے *Ṣiḥḥatī Ta'līmāt ke Uṣūl-o-Ṭarīqe* (Principles of Health Education) 27.1.5 صحتی تعلیمات کے معمولات *Ṣiḥḥatī Ta'līmāt ke Ma'mūlāt* (Practices of Health Education) 27.1.6 درجات آئی ای سی (معلومات، تعلیمات وترسیلات): منصوبہ بندی، نفاذ اور تجزیہ *Darjāt-i-*IEC *(Ma'lūmāt, Ta'līmāt wa Tarsīlāt): Manṣūba Bandī, Nifādh avr Tajzīya* (Steps in IEC (Information, Education and Communication): Planning, Implementation and Evaluation) • **M 27U 2 صحتی ترسیلات کے لوازم Ṣiḥḥatī Tarsīlāt ke Lawāzim (Essentials of Health Communication)** 27.2.1 ترسیلات کے طریقے *Tarsīlāt ke Ṭarīqe* (Communication Process) 27.2.2 ترسیلات کی اقسام *Tarsīlāt kī Aqsām* (Types of Communication) 27.2.3 صحتی ترسیلات کے افعال *Ṣiḥḥatī Tarsīlāt ke Afʿāl* (Functions of Health Communication)					
	M-28 اطلاعیات برائے صحت عامہ Iṭṭilā'īyyāt barā'e Ṣiḥḥat 'Āmma (Public Health Informatics) This module focuses on the use of data, technology, and informatics in public health to improve decision-making, track health trends, and optimize health outcomes in populations. • **M 28U 1 اطلاعیات صحت کے بنیادی اصول Iṭṭilā'īyyāt-i-Ṣiḥḥat ke Bunyādī Uṣūl (Fundamentals of Health Informatics)**	2	10	20	30	60

	28.1.1 *Iṭṭilā ʿiyyāt-i-Ṣiḥḥat kā ʿUmūmī Jāʾiza* اطلاعیات صحت کا عمومی جائزہ (Overview of Health Informatics) 28.1.2 *Iṭṭilā ʿiyyāt barāʾe Ṣiḥḥat ʿĀmma ke Ajzāʾ avr Uṣūl* اطلاعیات برائے صحت عامہ کے اجزاء اور اصول (Principles and Components of Public Health Informatics) 28.1.3 *Iṭṭilā ʿiyyāt barāʾe Ṣiḥḥat ʿĀmma mēn̲ Asāsī Istiʿdād* اطلاعیات برائے صحت عامہ میں اساسی استعداد (Core Competencies in Public Health Informatics) 28.1.4 *Maʿlūmātī Niẓām avr Software kī Taraqqī kī Qadr kā Jāʾiza* معلوماتی نظام اور سافٹ ویئر کی ترقی کی قدر کا جائزہ (Assessment of the Value of Information System and Software Development) 28.1.5 *Bayānāt, Maʿlūmāt avr ʿIlm* بیانات، معلومات اور علم (Data, Information and Knowledge) 28.1.6 *Ṣiḥḥatī Maʿlūmātī Niẓām* صحتی معلوماتی نظام (Health Information Systems) 28.1.7 *Barqī Ṣiḥḥatī Dastāwīzāt* برقی صحتی دستاویزات (Electronic Health Records) 28.1.8 *Bayānāt kī Ahammiyyat* بیانات کی اہمیت (Importance of Data) 28.1.9 اے-ایچ ایم آئی ایس (آیوش صحتی انتظامی معلوماتی نظام)، تطبیب بُعادی و رعایت صحت بُعادی، رعایت صحت بذریعہ موبائل (ایم ہیلتھ) آیوش میں صحتی اطلاعیات (ای-سنجیونی) *A-HMIS (Āyush Ṣiḥḥatī Intiẓāmī Maʿlūmātī Niẓām), Taṭbīb Buʿādī wa Riʿāyat-i-Ṣiḥḥat Buʿādī, Riʿāyat-i-Ṣiḥḥat ba-Dhariʿa'-i-Mobāʾil (M-Health), Āyush mēn̲ Ṣiḥḥatī Iṭṭilāʿiyyāt (E-Sanjīvanī)* (A-HMIS [Ayush-Health Management Information System], Telemedicine and Telehealth, Mobile Health [m-Health], Health Informatics in Ayush [e-Sanjeevani]) 28.1.10 *Barqī Ābādiyyātī Indirājāt* برقی آبادیاتی اندراجات (Electronic Population Registries) 28.1.11 *Qawmī Ḥaywī Shumāriyyātī Niẓām* قومی حیوی شماریاتی نظام (National Vital Statistics System) 28.1.12 *Intiẓāmī Niẓām barāʾe Makhzan-i-Bayānāt* انتظامی نظام برائے مخزن بیانات (Database Management System)					

	28.1.13 مخزن بیانات کی اقسام *Makhzan-i-Bayānāt kī Aqsām* (Types of Databases) 28.1.14 تخزین بیانات واستخراج بیانات *Takhzīn-i-Bayānāt wa Istikhrāj-i-Bayānāt* (Data Warehousing and Data Mining) **• M 28U 2 صحت عامہ کے عملی اقدامات میں صحتی اطلاعیات Ṣiḥḥat ʻĀmma ke ʻAmalī Iqdāmāt mēn Ṣiḥḥatī Iṭṭilāʻiyyāt (Health Informatics in Public Health Practice)** 28.2.1 امراض کی نگرانی، تتبع اور اس کے انتظام میں صحتی اطلاعیات کا کردار *Amrāḍ kī Nighrānī, Tatabboʻavr is ke Intiẓām mēn Ṣiḥḥatī Iṭṭilāʻiyyāt kā Kirdār* (Role of Health Information in Disease Surveillance, Disease Tracking and Management) 28.2.2 صحتی معلومات کی ترسیل *Ṣiḥḥatī Maʻlūmāt kī Tarsīl* (Health Information dissemination) 28.2.3 معلومات صحت عامہ کی رازداری، اعتماد اور تحفظ *Maʻlūmāt-i-Ṣiḥḥat ʻĀmma kī Rāzdārī, Iʻtimād avr Taḥaffuẓ* (Privacy, Confidentiality and Security of Public Health Information) 28.2.4 معلومات صحت عامہ کے نظام کا اطلاق *Maʻlūmāt-i-Ṣiḥḥat ʻĀmma ke Niẓām kā Iṭlāq* (Application of Public Health Information System)					
		4	20	40	60	120

Semester No : 5

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

	M-29 قومی صحت کے لائحہ اعمال اور صحتی نگہداشت کے قوانین Qawmī Ṣiḥḥat ke Lā'iḥa'-i-'Amāl avr Ṣiḥḥatī Nighahdāsht ke Qawānīn (National Health Policies and Health Care Legislations) This module explores key national health policies, legal frameworks, and regulations governing healthcare, including ethical issues, patient rights, and government health initiatives. **• M 29U 1 بھارت میں صحت عامہ کے قوانین Bhārat mēn Ṣiḥḥat 'Āmma ke Qawānīn (Public Health Legislation in India)** 29.1.1 قانون برائے مرکزی اندراج موت و پیدائش *Qānūn barā'e Markazī Indirāj-i-Mawt wa Paydā'ish* (Central Birth and Death Registration Act) 29.1.2 قانون برائے امراض وبائی *Qānūn barā'e Amrāḍ Wabā'ī* (The Epidemic Disease Act) 29.1.3 قانون برائے غذائی آمیزش کا تحفظ *Qānūn barā'e Ghidhā'ī Āmezish kā Taḥaffuẓ* (Prevention of Food Adulteration Act) 29.1.4 قانون برائے طبی اسقاط حمل *Qānūn barā'e Ṭibbī Isqāṭ-i-Ḥaml* (The Medical Termination of Pregnancy Act) 29.1.5 قانون برائے تنصیب اعضائے انسانی *Qānūn barā'e Tanṣīb A'ḍā' Insānī* (Transplantation of Human Organs Act) 29.1.6 قانون برائے بھارتی مصانع *Qānūn barā'e Bhāratī Maṣānī'* (Indian Factories Act) **• M 29U 2 قومی صحتی لائحہ اعمال Qawmī Ṣiḥḥatī Lā'iḥa'-i-'Amal (National Health Policies)** 29.2.1 *Qawmī Shahrī Ṣiḥḥatī Muhim* قومی شہری صحتی مہم (National Urban Health Mission) 29.2.2 *Qawmī Dīhī Ṣiḥḥatī Muhim* قومی دیہی صحتی مہم (National Rural Health Mission) 29.2.3 *Qawmī Āyush Muhim* قومی آیوش مہم (National Ayush Mission) 29.2.4 *Qawmī Muhim barā'e Dawā'ī Pavdē* قومی مہم برائے دوائی پودے (National Mission on Medicinal Plants)	2	10	20	30	60

	29.2.5 *Sāf Bhārat Muhim* صاف بھارت مہم (Swachh Bharat Mission) 29.2.6 *Qawmī Taḥaffuẓ-i-Ṣiḥḥat Muhim (Āyushmān Bhārat Manṣūba / Wazīr Aʿẓam ʻAwāmī Ṣiḥḥat Manṣūba)* قومی تحفظ صحت مہم (آیوشمان بھارت منصوبہ/وزیر اعظم عوامی صحت منصوبہ) (National Health Protection Mission [Ayushman Bharat Yojana/Pradhan Mantri Jan Arogya Yojana]) 29.2.7 *Qawmī Majlis barāʾe Bhāratī Niẓām-i-Ṭibb* قومی مجلس برائے بھارتی نظام طب (National Commission for Indian System of Medicine) 29.2.8 *Qawmī Ṣiḥḥatī Manṣūba* قومی صحتی منصوبہ (National Health Policy) 1983, 2002, 2017 29.2.9 *Qawmī Ābādiyyātī Manṣūba* قومی آبادیاتی منصوبہ (National Population Policy) 29.2.10 *Qawmī Taghdhiyyātī Manṣūba* قومی تغذیاتی منصوبہ (National Nutrition Policy) 29.2.11 *Qawmī Manṣūba barāʾe Buzurg Shahrī* قومی منصوبہ برائے بزرگ شہری (National Policy for Senior Citizen)					
	M-30 قومی صحتی منصوبہ جات Qawmī Ṣiḥḥatī Manṣūbajāt (National Health Programmes) This module provides an overview of major national health programs, focusing on their design, implementation, and evaluation, with an emphasis on public health impact and sustainability. **• M 30U 1 تحدیدی منصوبے برائے امراض متعدی Taḥdīdī Manṣūbe barāʾe Amrāḍ Mutaʻaddī (Communicable Disease Control Programmes)** 30.1.1 *Qawmī Taḥdīdī Manṣūba barāʾe Amrāḍ ba-Dhariʻa Ḥasharāt al-Arḍ* قومی تحدیدی منصوبہ برائے امراض بذریعہ حشرات الارض (National Vector-Borne Disease Control Programme) 30.1.2 *Qawmī Manṣūba barāʾe Tansīkhī'-i-Diqq* قومی منصوبہ برائے تنسیخی دق (National Tuberculosis Elimination Programme)	2	10	20	30	60

	30.1.3 قومی منصوبہ برائے تحدید ایڈز (علت نقص مناعت مکسوبہ) *Qawmī Manṣūba barā'e Taḥdīd AIDS ('Illat Naqṣ Manā'at Maksūba)* (National AIDS (Acquired Immunodeficiency Syndrome) Control Programme) 30.1.4 قومی منصوبہ برائے خاتمۂ جذام *Qawmī Manṣūba barā'e Khātima'-i-Judhām* (National Leprosy Eradication Programme) **• M 30U 2 منصوبہ جات برائے انسداد امراض غیر متعدی Manṣūbajāt barā'e Insidād-i-Amrāḍ Ghayr Muta'addī (Non-Communicable Disease Control Programmes)** 30.2.1 قومی منصوبہ برائے تحفظ و تحدید سرطان، ذیابیطس، امراض قلب و دوران خون اور سکتہ *Qawmī Manṣūba barā'e Taḥaffuẓ wa Taḥdīd-i-Saraṭān, Dhayābīṭus, Amrāḍ-i-Qalb wa Dawrān-i-Khūn avr Sakta* (National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke) 30.2.2 قومی منصوبہ برائے تحدید تمباکو *Qawmī Manṣūba barā'e Taḥdīd-i-Tambākū* (National Tobacco Control Programme) 30.2.3 قومی منصوبہ برائے دماغی صحت *Qawmī Manṣūba barā'e Dimāghī Ṣiḥḥat* (National Mental Health Programme) **• M 30U 3 منصوبہ جات برائے صحت زچہ و بچہ Manṣūbajāt barā'e Ṣiḥḥat-i-Zachcha-o-Bachcha (Maternal and Child Health Programmes)** 30.3.1 منصوبہ برائے صحت دوران تولید و زچگی، نومولود، اطفال و مراھق *Manṣūba barā'e Ṣiḥḥat Dawrān-i-Tawlīd wa Zachgī, Nav-Mawlūd, Aṭfāl-o-Murāhiq* (Reproductive and Maternal, New-born, Child, and Adolescent Health [RMNCH+A] Programmes) 30.3.2 منصوبہ برائے مادرانہ تحفظ *Manṣūba barā'e Mādarāna Taḥaffuẓ* (Janani Suraksha Yojana [JSY])					

	30.3.3 قومی منصوبہ برائے صحت اطفال *Qawmī Manṣūba barā'e Ṣiḥḥat-i-Aṭfāl* (Rashtriya Bal Swasthya Karyakram [RBSK]) 30.3.4 عالمی منصوبہ برائے تحصین *Ālamī Manṣūba barā'e Taḥṣīn* (Universal Immunization Programme) 30.3.5 قومی منصوبہ برائے خاندانی فلاح و بہبود *Qawmī Manṣūba barā'e Khāndānī Falāḥ-o-Bahbūd* (National Family Welfare Programme) 30.3.6 ہم آہنگ منصوبہ برائے نگرانی امراض *Ham Āhang Manṣūba barā'e Nigrānī'-i-Amrāḍ* (Integrated Disease Surveillance Programme) **• M 30U 4 قومی تغذیاتی منصوبے Qawmī Taghdhiyyātī Manṣūbey (National Nutrition Programmes)** 30.4.1 ہم آہنگ خدمات برائے نموءِ اطفال *Ham Āhang Khidmāt barā'e Numū'-i-Aṭfāl* (Integrated Child Development Services [ICDS]) 30.4.2 قومی تغذیاتی مہم *Qawmī Taghdhiyyātī Muhim* (National Nutrition Mission [Poshan Abhiyān]) 30.4.3 وسط یومیہ خوراک منصوبہ *Wasṭ Yawmiyya Khorāk Manṣūba* (Mid-Day Meal Scheme) 30.4.4 حیاتین الف کی اضافی فراہمی منصوبہ *Ḥayātīn Alif kī Iḍāfī Farāhamī Manṣūba* (Vitamin A Supplementation Programme) 30.4.5 تحدیدی منصوبہ برائے اضطراب نقص الیود *Taḥdīdī Manṣūba barā'e Iḍṭirāb Naqṣ al-Yūd* (Iodine Deficiency Disorder Control Programme) 30.4.6 قومی منصوبہ برائے تحفظ و تحدید تسمم فلوری *Qawmī Manṣūba barā'e Taḥaffuẓ-o-Taḥdīd Tasammum Falorī* (National Programme for Prevention and Control of Fluorosis) 30.4.7 مرکز تغذیاتی بحالی *Markaz Taghdhiyyātī Baḥālī* (Nutritional Rehabilitation Centre) 30.4.8 فقر الدم آزاد بھارت *Faqr al-Dam Āzād Bhārat* (Anaemia Mukt Bharat)					

		4	20	40	60	120
Semester No : 6						
2A Module Number	**2B Modules & units**	**2C Number of Credits**	**Notional Learning hours**			
			2D Lectures	**2E Practical Training**	**2F Experiential Learning including Modular Assessment**	**2G Total**
	M-31 صحتی تنظیمات Ṣiḥḥatī Tanẓīmāt (Health Organizations) This module studies the role and functions of national and international health organizations, such as WHO, UNICEF, and health ministries, in shaping global and local health policy. **• M 31U 1 بین الاقوامی صحتی تنظیمات Bayn al-Aqwāmī Ṣiḥḥatī Tanẓīmāt (International Health Organizations)** 31.1.1 بھارت میں صحتی نگہداشتی شراکت داری اور آیوش شعبے کی ترقی *Bhārat mēṉ Ṣiḥḥatī Nighahdāshtī Sharākat Dārī avr Āyush Sho'be kī Taraqqī* (Contributions to Health Care in India and Development of Ayush Sector) 31.1.1.1 عالمی ادارۂ صحت 'Ālamī Idāra'-i- Ṣiḥḥat (World Health Organization) (WHO) 31.1.1.2 اقوامِ متحدہ کا فنڈ برائے اطفال Aqwām Muttaḥida kā Fund barā'e Aṭfāl United Nations Children's Fund (UNICEF)	2	10	20	30	60

	31.1.1.3 اقوامِ متحدہ کا ترقیاتی منصوبہ Aqwām-e-Muttaḥidah kā Taraqqiyātī Prugrām United Nations Development Programme (UNDP) 31.1.1.4 ادارۂ بین الاقوامی ترقی، ریاست ہائے متحدہ Idāra'-i-Bayn al-Aqwāmī Taraqqī, Riyāsathā'e Muttaḥida (United States Agency for International Development [USAID]) 31.1.1.5 ادارۂ خوراک وزراعت Idāra'-i-Khurāk-o-Zarā'at (Food and Agriculture Organization [FAO]) 31.1.1.6 بین الاقوامی ادارۂ محنت Bayn al-Aqwāmī Idāra'-i-Miḥnat (International Labour Organization [ILO]) 31.1.1.7 عالمی بینک *'Ālamī Baynk* (World Bank) 31.1.1.8 ڈینش بین الاقوامی ترقیاتی ادارہ Ḍanish Bayn al-Aqwāmī Taraqqiyyātī Idāra (Danish International Development Agency [DANIDA]) 31.1.1.9 سویڈش بین الاقوامی ترقیاتی تعاون کا ادارہ Swedish Bayn al-Aqwāmī Taraqqiyyātī Ta'āwun kā Idāra (Swedish International Development Cooperation Agency [SIDA]) 31.1.1.10 تعاونی ادارۂ راحت وامداد برائے ہمہ جا *Ta'āwunī Idāra'-i-Rāḥat-o-Imdād barā'e Hama Jā* (Cooperative for Assistance and Relief Everywhere [CARE]) 31.1.1.11 ادارۂ راک فیلر *Idāra'-i-Rockefeller* (Rockefeller Foundation) 31.1.1.12 ادارۂ فورڈ *Idāra'-i-Forḍ* (Ford Foundation) 31.1.1.13 بین الاقوامی ریڈ کراس *Bayn al-Aqwāmī Red Cross* (International Red Cross) **• M 31U 2 بھارت میں قومی صحتی تنظیمات Bhārat mēṉ Qawmī Ṣiḥḥatī Tanẓīmāt (National Health Organizations in India)** 31.2.1 بھارت میں صحتی نگہداشتی شراکت داری اور آیوش شعبے کی ترقی *Bhārat mēṉ Ṣiḥḥatī Nighahdāshtī Sharākat Dārī avr Āyush Sho'be kī Taraqqī* (Contributions to Health Care in India and Development of Ayush Sector)					

	31.2.1.1 بھارتی ریڈ کراس *Bhāratī Red Cross* (Indian Red Cross) 31.2.1.2 ہیلپ ایج انڈیا *Helpej Indiā* (HelpAge India) 31.2.1.3 ادارہ اکشیا پاترا *Idāra Akshaya Pātrā* (Akshaya Patra Foundation) 31.2.1.4 ادارہ اسمائل *Idāra Ismā'il* (Smile Foundation) 31.2.1.5 آکسفورڈ مجلس برائے قحط سے راحت، بھارت *Oxford Majlis barā'e Qaḥaṭ se Rāḥat* (Oxford Committee for Famine Relief India, [Oxfam India]) 31.2.2 غیر حکومتی تنظیمیں (NGOs) و صحتی شعبوں، خصوصاً آیوش میں کام کرنے والے ادارے این جی اوز *Ghayr Ḥukūmatī Tanẓīmēn (NGOs) wa Ṣiḥḥatī Sho'boṇ, Khuṣūṣan Āyush mēṇ Kām Karne Vāle Idāre* (NGOs [Non-Government Organizations] and Foundations in Health Sector, Especially in Ayush)					
	M-32 صحتی بیمہ اور طبی سیاحت Ṣiḥḥatī Bīma avr Ṭibbī Siyāḥat (Health Insurance and Medical Tourism) This module examines the concepts of health insurance, financing of healthcare, and the growing trend of medical tourism, exploring both its opportunities and challenges in global health. **• M 32U 1 صحتی بیمہ اور طبی سیاحت کا تعارف Ṣiḥḥatī Bīma avr Ṭibbī Siyāḥat kā Ta'āruf (Introduction to Medical Tourism and Health Insurance)** 32.1.1 عمومی جائزہ اور اہمیت *'Umūmī Jā'iza avr Ahammiyyat* (Overview and Significance) 32.1.2 اقسام صحتی بیمہ برائے طبی سیاحت *Aqsām-i-Ṣiḥḥatī Bīma barā'e Ṭibbī Siyāḥat* (Types of Health Insurance for Medical Tourism) 32.1.3 صحتی بیمہ کے نمونے *Ṣiḥḥatī Bīmā ke Namūne* (Health Insurance Models) **• M 32U 2 ضابطہ جاتی ڈھانچہ اور آیوش شعبے کا انضمام Ḍābiṭajātī Dhāṇcha avr Āyush Shobe kā Inḍimām (Regulatory Framework and Ayush Sector Integration)**	2	10	20	30	60

	32.2.1 بھارتی بیمہ ضابطہ جاتی و ترقیاتی محکمہ *Bhāratī Bīma Ḍābiṭajātī wa Taraqqiyyātī Muḥakma* (Insurance Regulatory and Development Authority of India [IRDAI]) 32.2.2 صحتی بیمہ میں آیوش شعبے کی شمولیت *Ṣiḥḥatī Bīma mēn Āyush Shobe kī Shumūliyyat* (Coverage of Ayush Sector in Health Insurance) 32.2.3 طبی سیاحت میں صحتی بیمہ کے اقتصادی جہات *Ṭibbī Siyāḥat mēn Ṣiḥḥatī Bīma ke Iqtiṣādī Jihāt* (Economic Aspects of Health Insurance in Medical Tourism)					
		4	20	40	60	120
		16	80	160	240	480
		64	320	640	960	1920

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

Paper No : 1(طریقہائے وبائیات و وبائیات امراض ساریہ Tarīqahā'ȳ Wabā'iyyāt wa Wabā'iyyāt Amrāḍ Sāriya (Epidemiological Methods and Communicable Diseases))

Semester No : 3

Module 1 : اساسیات علم الوبائیات Asāsiyyāt-i-'Ilm al-Waba'iyyat (Foundations of Epidemiology)

Module Learning Objectives

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

- Analyze the historical development of epidemiology and the contributions of key figures.
- Apply epidemiological measurement tools to analyze disease frequency in populations.
- Assess public health issues and propose evidence-based policy recommendations.

Unit 1 تاریخ علم الوبائیات Tārīkh-i-'Ilm al-Wabā'iyyāt (History of Epidemiology)

1.1.1 قدیم و قبل از جدید ادوار: بقراط، جان گرانٹ *Qadīm wa Qabl az Jadīd Adwār: Buqrāṭ, John Graunt* (Ancient and Pre-Modern Periods: Hippocrates, John Graunt)

1.1.2 جدید علم الوبائیات: ایڈورڈ جینر اور جدری (چیچک)، جان سنو اور ہیضہ *Jadīd 'Ilm al-Wabā'iyyāt: Edward Jenner avr Jadarī (Chechak), John Snow avr Hayḍa* (Modern Epidemiology: Edward Jenner and Smallpox, John Snow and Cholera)

References: 1,2,3,26,34,70

3A Course Outcome	3B Learning Objective (At the end of the (lecture/practical training /experiential learning) session, the students should be able to)	3C Notional learning	3D Lecture/ Practical Training/ Experiential Learning	3E Domain/ Sub Domain	3F Level (Does/Shows how/Kno	3G Teaching Learning Methods

		Hours			ws how/Know w)	
CO3	Disuss and articulate the historical milestones and foundational concepts that shaped the field of epidemiology.	2	Lecture	CK	Knows-how	L,L_VC,L&PPT
CO1,CO3	Identify and explain significant milestones in the history of epidemiology, assessing their influence on modern public health practices.	2	Practical1.1	PSY-SET	Shows-how	PT,IBL,DIS
CO2,CO3	Identify and critique how historical epidemiological methods are reflected in current practices.	2	Practical1.2	PSY-SET	Shows-how	PT,TBL
CO3	Identify and sequence major milestones in the history of epidemiology and understand their impact on public health practices.	1	Experiential-Learning1.1	CAN	Does	TBL,PER,TPW
CO3	Analyze the portrayal of epidemiological concepts in film, drawing connections to real historical events and the development of epidemiological theories.	1	Experiential-Learning1.2	AFT-RES	Does	BL,EDU
CO3	Demonstrate the evolution of epidemiological approaches by simulating historical perspectives on public health crises.	2	Experiential-Learning1.3	PSY-ORG	Does	RP,PL,PER

Unit 2 علم الوبائیات کے نظریات ʻIlm al-Wabāʼiyyāt kē Naẓariyyāt (Epidemiological Concepts)

1.2.1 عوامل اختطار *ʻAwāmil-i-Ikhtiṭār* (Risk Factors)

1.2.2 سببیّت *Sababiyyat* (Causality)

1.2.3 مرض کی تکرار *Maraḍ kī Takrār* (Disease Frequency)

References: 2,3,4,5,6

3A	3B	3C	3D	3E	3F	3G
CO1,CO3	Describe key concepts in epidemiology, including risk factors, causality, and disease frequency.	3	Lecture	CC	Knows-how	L&PPT ,L
CO3	Apply various epidemiological models to calculate disease frequency and interpret the relationship between risk factors and health outcomes.	3	Practical1.3	CAP	Shows-how	PT,PSM
CO3	Apply principles of causality to real-life public health scenarios, determining which factors are most likely to contribute to the spread of disease.	3	Practical1.4	CAP	Shows-how	DIS,PT
CO3	Perform real-life decision-making regarding risk factors and their implications for public health practice.	2	Experiential-Learning1.4	PSY-MEC	Does	PER,PBL,PSM
CO3	Design a simple epidemiological study to investigate a specific health issue in the community.	4	Experiential-Learning1.5	CS	Does	SIM,RLE
CO3	Assess the relationships between risk factors and disease using concept maps.	3	Experiential-Learning1.6	CAP	Does	SY,PER

Unit 3 علم الوبائیات میں پیمائش کے آلات ʻIlm al-Wabāʼiyyāt mēn̲ Paymāʼish kē Ālāt (Tools of Measurement in Epidemiology)

1.3.1 شرح *Sharḥ* (Rate)

1.3.2 تناسب *Tanāsub* (Ratio)

1.3.3 نسبت *Nisbat* (Proportion)

References: 1,2,3,6

3A	3B	3C	3D	3E	3F	3G
CO2,CO3	Describe the fundamental tools of measurement used in epidemiology, including rates, ratios, and proportions.	2	Lecture	CC	Knows-how	L&PPT ,L,L&GD
CO3	Calculate rates, ratios, and proportions in a variety of real-world public health data scenarios.	2	Practical1.5	CAP	Shows-how	PSM,PT,PBL
CO3	Apply rates, ratios, and proportions in public health settings and assess the burden of disease and health outcomes.	2	Practical1.6	CC	Shows-how	TPW,PT
CO3	Describe the use of simulated data to explore the epidemiological tools to inform public health interventions and policy decisions.	2	Experiential-Learning1.7	CAP	Does	PER,BL
CO3	Analyze public health data sets to perform hands-on calculations of disease rates, ratios, and proportions.	2	Experiential-Learning1.8	CAN	Does	PER,PBL,W
CO3	Calculate and interpret rates, ratios, and proportions from simulated data to assess disease patterns.	2	Experiential-Learning1.9	CAP	Does	PSM,SIM,TBL

Unit 4 Ṣiḥḥat-i ʻĀmma mēn ʻIlm al-Wabāʼiyyāt ke Istiʻmālāt صحت عامہ میں علم الوبائیات کے استعمالات (Applications of Epidemiology in Public Health)

1.4.1 *Amrāḍ kī Nigrānī wa Taḥdīd* امراض کی نگرانی و تحدید (Disease Surveillance and Control)

1.4.2 *Muzmin Amrāḍ se Taḥaffuẓ* مزمن امراض سے تحفظ (Chronic Diseases Prevention)

1.4.3 *Ṣiḥḥat mēn ʻAdam Masāwāt* صحت میں عدم مساوات (Health Inequalities)

1.4.4 *Ṣiḥḥatī Ḥikmat ʻAmalī wa Manṣūbabandī* صحتی حکمت عملی و منصوبہ بندی (Health Policy and Planning)

References: 3,5,7

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

CO1,CO3	Identify and evaluate the various applications of epidemiology in designing public health interventions and policies.	3	Lecture	CK	Knows-how	L_VC,L&PPT ,L,L&GD
CO3	Design a public health intervention based on epidemiological principles to address a simulated health crisis, incorporating prevention and evaluation strategies.	3	Practical1.7	PSY-SET	Shows-how	PT,PBL,RP,SIM
CO3	Evaluate an existing public health policy using epidemiological data, recommending improvements for policy effectiveness.	3	Practical1.8	PSY-SET	Shows-how	PT,PBL,PrBL,PAL
CO3	Assess public health policies informed by epidemiological data and understand their implications for community health.	3	Experiential-Learning1.10	CAN	Shows-how	PER,PBL,SDL
CO3	Conduct a mock community health assessment and develop evidence-based public health recommendations.	2	Experiential-Learning1.11	PSY-GUD	Does	RLE,PER,FV,SIM
CO3	Analyze the application of epidemiology in managing public health crises and evaluate the effectiveness of interventions.	2	Experiential-Learning1.12	CE	Shows-how	FV,CBL,PER

Practical Training Activity

Practical Training 1.1 Milestones of Epidemiology

Total Learning Hours = 2

1. Students will review significant events in the history of epidemiology (e.g., John Snow's cholera study) and create a timeline highlighting these milestones. [1 Hour]
2. They will then present the timeline and discuss how each event contributed to the development of modern epidemiology. [1 Hour]

Practical Training 1.2 Epidemiological Methods
Total Learning Hours = 2 1. Under the teacher's guidance, students will review the contributions of Hippocrates, Graunt, Jenner, and Snow to epidemiology. [1 Hour] 2. They will then prepare a presentation showcasing how these historical methods are applied in modern epidemiology. [1 Hour]
Practical Training 1.3 Incidence and Prevalence
Total Learning Hours = 3 1. Using provided data on a specific disease, students will calculate incidence and prevalence rates. [1 Hour] 2. Students will then interpret the results and discuss the relevance of these measures for public health policy and planning. [2 Hours]
Practical Training 1.4 Principles of Causality
Total Learning Hours = 3 1. Students will access national health databases to analyze trends in morbidity and mortality over a 5-year period. [1 Hour] 2. Students will prepare a report identifying the main causes of death and disease and assess their implications for public health. [2 Hours]
Practical Training 1.5 Rates, Ratios, and Proportions
Total Learning Hours = 2 1. Students will choose a relevant dataset (e.g., infection rates, vaccination coverage, or mortality rates). [1 Hour] 2. Students will calculate Rates, Ratios, and Proportions. [1 Hour]
Practical Training 1.6 Public Health Dataset
Total Learning Hours = 2

1. Students will select a public health dataset and compute relevant rates (e.g., incidence rate), ratios (e.g., male-to-female cases), and proportions (e.g., percentage of affected individuals). [1 Hour] 2. Analyze the findings to understand the burden of disease and health outcomes in the population, identifying key trends and disparities. [1 Hour]
Practical Training 1.7 Public Health Intervention
Total Learning Hours = 3 1. Based on a hypothetical scenario involving a public health crisis, students will design a targeted intervention using epidemiological principles. [1 Hour 30 Minutes] 2. They will create an action plan that includes prevention strategies and evaluation metrics. [1 Hour 30 Minutes]
Practical Training 1.8 Public Health Policies
Total Learning Hours = 3 1. Students will evaluate an existing public health policy (e.g., smoking cessation) using epidemiological data to assess its effectiveness. [2 Hours] 2. They will present a report with recommendations for improving the policy based on their findings. [1 Hour]
Experiential Learning Activity
Experiential-Learning Learning 1.1: Historical Disease Timeline Creation
Total Learning Hour = 1 1. Students will create a timeline of major epidemiological milestones, mapping key outbreaks, discoveries, and innovations in the field. [1Hour]
Experiential-Learning Learning 1.2: Epidemiology Film Screening
Total Learning Hour = 1

1. Watch a documentary (e.g., "Contagion") and have a discussion on how real historical events influenced the portrayal of epidemiological concepts. [1 Hour]

Experiential-Learning Learning 1.3: Evolution of Epidemiological Approaches

Total Learning Hours = 2

1. Students will role-play as epidemiologists from different historical eras, presenting their approach to a public health crisis based on the knowledge and methods available during their time. [2 Hours]

Experiential-Learning Learning 1.4: Decision-making regarding risk factors

Total Learning Hours = 2

1. Students will analyze a public health scenario (e.g., disease outbreak) and identify key risk factors. [1 Hour]
2. Based on knowledge, students will propose intervention strategies to mitigate these risks. [1 Hour]

Experiential-Learning Learning 1.5: Designing a Survey

Total Learning Hours = 4

1. Choose a relevant community health issue (e.g., obesity). [1 Hour]
2. Develop a study plan, including the research question, hypothesis, sample selection, and data collection methods (e.g., surveys, interviews). [2 Hours]
3. Present the study plan to peers and teachers. [1 Hour]

Experiential-Learning Learning 1.6: Concept Mapping Exercise

Total Learning Hours = 3

1. Select key risk factors related to a specific disease (e.g., smoking, diet for lung cancer). [1 Hour]
2. Draw a concept map to visually represent how these risk factors influence the disease, showing direct and indirect relationships. [1 Hour]
3. Highlight causal pathways, interactions between multiple factors, and their overall impact on disease outcomes. [1 Hour]

Experiential-Learning Learning 1.7: Epidemiological tools for public health interventions
Total Learning Hours = 2 1. Use provided simulated datasets to calculate rates, ratios, and proportions. [1 Hour] 2. Identify trends, patterns, and potential public health concerns based on the calculations. [1 Hour]
Experiential-Learning Learning 1.8: Geographic Investigation
Total Learning Hours = 2 1. Work with provided public health datasets to identify key variables. [30 Minutes] 2. Calculate disease rates (e.g., incidence rate), ratios (e.g., male-to-female cases), and proportions (e.g., percentage of the population affected). [1 Hour] 3. Analyze the calculated values to assess the burden of disease and identify trends or disparities. [30 Minutes]
Experiential-Learning Learning 1.9: Rates, Ratio, and Proportion
Total Learning Hours = 2 1. Students will compute rates, ratios, and proportions from simulated data, such as incidence rates, gender-based ratios, and disease proportions. [1 Hour] 2. Students will analyze the calculated measures to identify disease patterns, trends, and potential public health implications. [1 Hour]
Experiential-Learning Learning 1.10: Public Health Policy
Total Learning Hours = 3 1. Analyze existing public health policies that are based on epidemiological data (e.g., vaccination programs, smoking cessation campaigns). [1 Hour] 2. Critically assess how these policies have impacted community health, using epidemiological tools like rates, ratios, and proportions to measure outcomes. [1 Hour 30 Minutes] 3. Discuss the long-term implications of these policies for public health, including potential benefits, challenges, and areas for improvement. [30 Minutes]
Experiential-Learning Learning 1.11: Community Health Assessment

Total Learning Hours = 2

1. Using a mock community scenario, analyze health data (e.g., disease prevalence, risk factors) to identify key health needs. [1 Hour]
2. Based on the assessment, propose evidence-based interventions and strategies to address the community's health issues. [1 Hour]

Experiential-Learning Learning 1.12: Public Health Issues

Total Learning Hours = 2

1. Review case studies of public health crises (e.g., COVID-19) to understand how epidemiology informed the management and response strategies. [45 Minutes]
2. Assess the effectiveness of interventions (e.g., vaccination, social distancing, quarantine) using epidemiological data such as infection rates, mortality rates, and case studies. [45 Minutes]
3. Reflect on the successes and challenges of interventions and propose improvements based on epidemiological insights for future public health crises. [30 Minutes]

Modular Assessment

Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Poster presentation** on any topic of this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Design and Visuals-10 Marks; Delivery-10 Marks] Or **Presentation** on any topic of this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks]	4

Or **Case Study Analysis** of any historical or contemporary public health case related to this module. [50 Marks] [**Assessment Criteria:** Understanding of the Case-20 Marks; Analysis of Key issues-20 Marks; Presentation and Structure-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations can be taken as assessment. [25 Marks]	

Module 2 : علم الوبائیات میں تصامیم مطالعہ 'Ilm al-Wabā'iyyāt mēn̲ Taṣāmīm-i Muṭāla'a (Epidemiological Study Designs)

Module Learning Objectives

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

- Identify and describe different types of epidemiological study designs, including descriptive, analytical, and experimental studies.
- Analyze the strengths and limitations of various study designs in investigating disease patterns and risk factors.
- Apply appropriate study designs, including randomized controlled trials, to evaluate associations between exposures and health outcomes.

Unit 1 توصیفی مطالعات Tawṣīfī Muṭāla'āt (Descriptive Studies)

2.1.1 کیس رپورٹس *Kēs Reports* (Case Reports)

2.1.2 کیس سلسلے *Kēs Silsile* (Case Series)

2.1.3 مستعرضی مطالعات *Musta'raḍī Muṭāla'āt* (Cross-sectional Studies)

2.1.4 وبائیاتی مطالعات *Wabā'iyyātī Muṭāla'āt* (Epidemiological Studies)

References: 1,2,3,6

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

CO3	Describe the role and methodologies of descriptive studies in epidemiology and their impact on public health understanding.	2	Lecture	CC	Knows-how	L&PPT ,L
CO3	Design a cross-sectional study to assess the prevalence of a specific disease.	2	Practical2.1	CS	Shows-how	PER,PAL,PT
CO3	Demonstrate the ability to document and interpret a patient's clinical presentation and outcomes through a detailed case report.	2	Practical2.2	PSY-SET	Shows-how	PT,D,CD,D-BED,PER
CO3	Apply descriptive epidemiological techniques to a real or simulated data scenario.	1	Experiential-Learning2.1	CAP	Does	SIM,PER
CO3	Conduct a cross-sectional study, collecting and analyzing data to understand the prevalence of health conditions in a simulated population.	1	Experiential-Learning2.2	CAN	Does	CBL,SIM,PER,TBL
CO3	Interpret and evaluate published case reports and case series.	2	Experiential-Learning2.3	PSY-GUD	Shows-how	PER,DIS,JC
CO3	Explore and document the importance of evidence-based medicine in clinical practice, using case studies for support.	2	Experiential-Learning2.4	AFT-VAL	Does	PER,DIS

Unit 2 تجزیاتی مطالعات Tajziyātī Muṭāla'āt (Analytical Studies)

2.2.1 مستعرضی مطالعات *Musta'raḍī Muṭāla'āt* (Cross-sectional Studies)

2.2.2 کیس مقارنی مطالعات *Kēs Muqāranī Muṭāla'āt* (Case-control Studies)

2.2.3 اترابی مطالعات *Atrābī Muṭāla'āt* (Cohort Studies)

References: 3,4,5,6

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

CO1,CO3	Describe the analytical study designs and their appropriateness for different research questions in epidemiology.	3	Lecture	CAN	Knows-how	L,PBL,L&PPT
CO3	Design a cohort study, including selection of participants and consideration of confounding factors, to investigate a health condition.	3	Practical2.3	PSY-MEC	Does	TBL,CBL,PER,PAL,PT
CO3	Design a case-control study, calculate odds ratios, and interpret the risk factors for the selected health condition.	3	Practical2.4	PSY-GUD	Shows-how	PT,TPW,D,PAL,SIM
CO3	Demonstrate the ability to design and role-play cohort and case-control studies, simulating real-world public health challenges.	3	Experiential-Learning2.5	PSY-GUD	Does	PER,SIM,RP
CO3	Analyze peer-reviewed cohort and case-control studies to identify methodological strengths and limitations.	3	Experiential-Learning2.6	CE	Shows-how	JC
CO3	Design an analytical cross-sectional study for a specific public health issue.	3	Experiential-Learning2.7	CS	Does	PBL,TBL,FV

Unit 3 تجرباتی مطالعات Tajrībī (Experimental Studies)

2.3.1 غیرمنظم منضبط تجربات *Ghayr Munaẓẓam Munḍabiṭ Tajrabāt* (Randomized Controlled Trials)

2.3.1.1 مطبی تجربات *Maṭabī Tajrabāt* (Clinical Trials)

2.3.1.2 تحفظی تجربات *Taḥaffuzī Tajrabāt* (Preventive Trials)

2.3.1.3 عوامل اختطاری تجربات *ʻAwāmil Ikhtiṭārī Tajrabāt* (Risk Factor Trials)

2.3.2 منظم منضبط تجربات *Munaẓẓam Munḍabiṭ Tajrabāt* (Non-Randomized Controlled Trials)

2.3.2.1 غیرمنضبط تجربات *Ghayr Munḍabiṭ Tajrabāt* (Uncontrolled Trials)

2.3.2.2 قدرتی تجربات *Qudratī Tajrabāt* (Natural Experiments)

2.3.2.3 قبل و بعد موازنہ جاتی مطالعات *Qabl wa Baʻd Muwāzanajātī Muṭālaʻāt* (Before and After Comparison Studies)

References: 2,8						
3A	**3B**	**3C**	**3D**	**3E**	**3F**	**3G**
CO3	Discuss the principles of experimental study designs, particularly Randomized Controlled Trials, and their significance in establishing causation.	2	Lecture	CK	Knows-how	L&PPT ,L
CO3	Design an RCT to evaluate a public health intervention, addressing participant selection, randomization, and outcome measurement.	2	Practical2.5	PSY-SET	Shows-how	PER,PBL,PT,PSM,TPW
CO1,CO3	Demonstrate the implementation of an RCT, adhering to ethical guidelines and illustrating the practical steps of trial execution.	2	Practical2.6	PSY-SET	Shows-how	SIM,PBL,PER,PT
CO3	Develop skills in planning RCTs by working in groups to formulate hypotheses, select samples, and design interventions.	2	Experiential-Learning2.8	PSY-SET	Does	RLE,DIS,PER,W
CO3	Perorm a clinical trial process, comparing outcomes between intervention and placebo groups.	2	Experiential-Learning2.9	PSY-SET	Does	TPW,SIM,PBL
CO3	Review a published RCT, evaluating its design, strengths, weaknesses, and implications for public health.	2	Experiential-Learning2.10	PSY-SET	Does	PER,JC
CO3	Evaluate clinical trials and understand the role of evidence-based medicine in public health decision-making.	3	Lecture	CK	Knows-how	L&PPT ,L
CO3	Appraise a clinical trial, identifying biases and assessing the study’s impact on evidence-based practice.	3	Practical2.7	PSY-ORG	Shows-how	PT,JC,PER

CO3	Develop evidence-based guidelines for a health intervention using data from clinical trials to support their recommendations.	3	Practical2.8	PSY-SET	Shows-how	PT,PER,PSM
CO3	Evaluate the design, results, and public health impact of community trials.	3	Experiential-Learning2.11	PSY-SET	Does	TPW,FV,PER
CO3	Present a clinical case and justify treatment decisions using evidence from relevant clinical trials.	2	Experiential-Learning2.12	CAN	Shows-how	PER

Practical Training Activity

Practical Training 2.1 Cross-Sectional Study

Total Learning Hours = 2

1. Students will design a cross-sectional study on a selected health condition, including the study population, data collection methods, and analysis plan. [1 Hour 30 Minutes]
2. They will then present their study plan to peers and teachers for feedback. [30 Minutes]

Practical Training 2.2 Case Report

Total Learning Hours = 2

1. Students will write a detailed case report on a single patient's disease presentation, treatment, and outcome, emphasizing descriptive epidemiological elements. [1 Hour 30 Minutes]
2. They will present their case report in class for peer review and constructive feedback. [30 Minutes]

Practical Training 2.3 Cohort Study

Total Learning Hours = 3

1. Students will design a cohort study on a selected health condition, including the study population, data collection methods, and analysis plan. [2 Hours]
2. They will then present their study plan to peers and teachers for feedback. [1 Hour]

Practical Training 2.4 Case-Control Study

Total Learning Hours = 3

1. Students will simulate a case-control study by selecting cases and controls from provided data. [1 Hour]
2. They will calculate the odds ratio and interpret the findings to identify risk factors for the health condition studied. [2 Hours]

Practical Training 2.5 Randomized Controlled Trial

Total Learning Hours = 2

1. Students will design a Randomized Controlled Trial (RCT) to evaluate the effectiveness of a new vaccine. [30 Minutes]
2. They will define inclusion/exclusion criteria, randomization methods, and outcome measures, and present a protocol. [1 Hour 30 Minutes]

Practical Training 2.6 RCT Conduction

Total Learning Hours = 2

1. Students will simulate the steps of an RCT, including participant recruitment, randomization, and adherence to ethical guidelines. [1 Hour]
2. Students will collect simulated data, analyze the results, and discuss the findings while emphasizing ethical considerations and methodological rigor. [1 Hour]

Practical Training 2.7 Biases in Clinical Trials

Total Learning Hours = 3

1. Identify Biases in the Clinical Trial
    - Analyze the trial's design, sampling, randomization, and data collection to identify potential biases that could affect the results. [2 Hours]
2. Evaluate Impact on Evidence-Based Practice

○ Assess the trial's findings, discussing how it contributes to evidence-based practice and its relevance for informing clinical decision-making. [1 Hour]
Practical Training 2.8 Evidence-Based Guidelines
Total Learning Hours = 3 1. Review the data and findings from relevant clinical trials to identify key outcomes and evidence supporting the health intervention. [1 Hour] 2. Develop guidelines for the health intervention based on the trial results, ensuring the recommendations are supported by solid evidence and relevant to public health practice. [2 Hours]
Experiential Learning Activity
Experiential-Learning Learning 2.1: Descriptive Epidemiological Technique
Total Learning Hour = 1 1. Students will apply descriptive epidemiological technique to a real or simulated data scenario. [30 Minutes] 2. They will highlight disease patterns, treatment, and outcomes. [30 Minutes]
Experiential-Learning Learning 2.2: Cross-Sectional Study Simulation
Total Learning Hour = 1 1. Students will conduct a mock cross-sectional study by collecting health data from classmates, calculating the prevalence of specific conditions, and analyzing the results to identify trends and patterns. [1 Hour]
Experiential-Learning Learning 2.3: Data Interpretation
Total Learning Hours = 2 1. Choose relevant published case reports or case series related to a specific health condition or disease. [30 Minutes]

2. Identify the disease presentation, patient demographics, treatment, and outcomes. Evaluate the methodology, data collection, and conclusions. [1 Hour] 3. Discuss the strengths, limitations, and applicability of the findings to public health or clinical practice. [30 Minutes]
Experiential-Learning Learning 2.4: Evidence-Based Medicine
Total Learning Hours = 2 1. Develop a well-reasoned argument either supporting or opposing the importance of evidence-based medicine in clinical practice, using relevant case studies to illustrate your points. [1 Hour] 2. Analyze specific case studies that demonstrate how evidence-based medicine influences clinical decision-making, outcomes, and patient care, and use these examples to back up your argument. [1 Hour]
Experiential-Learning Learning 2.5: Simulate Cohort and Case-Control Study
Total Learning Hours = 3 1. Design Cohort and Case-Control Studies [1 Hour] 2. Role-Play Study Scenarios by acting out the roles of researchers, participants, and stakeholders, emphasizing study design, data collection, and interpretation. [1 Hour] 3. Calculate relevant measures (e.g., relative risk, odds ratio) and present the results, discussing the implications for public health interventions and policy. [1 Hour]
Experiential-Learning Learning 2.6: Journal Review
Total Learning Hours = 3 1. Students will select and critically analyze published cohort and case-control studies. [2 Hours] 2. They will summarize their findings. [1 Hour]
Experiential-Learning Learning 2.7: Analytical Cross-Sectional Study

Total Learning Hours = 3

1. Select a specific public health issue (e.g., hypertension, diabetes) and define the target population (e.g., age group, geographical location). [1 Hour]
2. Determine the key exposure variables (e.g., lifestyle factors, environmental exposures) and health outcomes (e.g., disease prevalence). Choose appropriate data collection methods, such as surveys, medical records, or interviews. [1 Hour 30 Minutes]
3. Prepare and present the study design, including objectives, methods, and expected outcomes, to peers and teachers for feedback. [30 Minutes]

Experiential-Learning Learning 2.8: Interactive RCT Workshop

Total Learning Hours = 2

1. Develop a clear study plan outlining the public health issue, target population, exposure variables, data collection methods, and expected outcomes. [1 Hour 30 Minutes]
2. Present the study design to peers and teachers, highlighting objectives, methodology, and anticipated results, and invite constructive feedback. [30 Minutes]

Experiential-Learning Learning 2.9: Clinical Trial Simulation

Total Learning Hours = 2

1. Design the study plan, including intervention and placebo groups, participant recruitment, and randomization procedures. [30 Minutes]
2. Collect simulated data, analyze the results, and compare the outcomes between the intervention and placebo groups. [1 Hour 30 Minutes]

Experiential-Learning Learning 2.10: Randomized Controlled Trial

Total Learning Hours = 2

1. Review the study's design, including the methodology, randomization, sample size, and controls, and evaluate its strengths and weaknesses. [1 Hour]
2. Critically assess the findings, discussing the implications of the RCT for public health practice and policy and identifying any limitations or biases. [1 Hour]

Experiential-Learning Learning 2.11: Community Trials

Total Learning Hours = 3

1. Evaluate the Design and Results of a Community Trial [2 Hours]
    - Assess the methodology, participant selection, interventions, and outcomes,
    - Identify strengths and weaknesses in the design.
2. Analyze Public Health Impact [1 Hour]
    - Critically evaluate the implications of the trial results for public health, discussing how the findings can inform policy, interventions, and health promotion strategies.

Experiential-Learning Learning 2.12: Evidence-Based Medicine

Total Learning Hours = 2

1. Select a Clinical Case: Choose a relevant clinical case that requires a treatment decision, ensuring it aligns with current public health or medical practice. [30 Minutes]
2. Review Relevant Clinical Trials: Research and analyze clinical trials related to the condition, focusing on the evidence supporting various treatment options. [1 Hour]
3. Present the Case and Justify Treatment: Present the case, clearly explaining the treatment decision and supporting it with evidence from the reviewed clinical trials. [30 Minutes]

Modular Assessment

Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Quiz** on the content related to this module. [50 Marks]	4

[10 MCQs of 5 Marks Each; Questions types: Matching Questions, Reasoning and Assertion Questions, Multiple Correct Option Questions, and Single Correct Option Questions] Or **Presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or **Project** work on any topic related to this module. [50 Marks] [**Assessment Criteria:** Project Planning and Design-30 Marks; Presentation and Documentation-20 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolio/reflections/presentations can be taken as assessment. [25 Marks]	

Semester No : 4

Module 3 : علم الوبائیات میں پیمائشیں Ilm al-Wabā'iyyāt mēn_Paymā'ishēn_ (Measures of Epidemiology)

Module Learning Objectives

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

- Define and apply key epidemiological measures of mortality, morbidity, and disease frequency.
- Evaluate measures of association to assess the relationship between exposures and health outcomes.
- Asess the effect of exposures on disease occurrence in populations.

Unit 1 اموات وامراض کی پیمائشیں Amwāt wa Amrāḍ kī Paymā'ishēn_ (Measures of Mortality and Morbidity)

3.1.1 عمومی شرح اموات، شرح کیس اموات، شرح اموات بحسب السن وغیرہ *'Umūmī Sharḥ-i Amwāt, Sharḥ-i Kēs Amwāt, Sharḥ-i Amwāt bi-Ḥasb al-Sinn waghayra* (Crude Death Rate, Case Fatality Rate, Age-Specific Mortality Rate etc.)

3.1.2 شرح وقوع مرض واشاعت مرض *Sharḥ-i Wuqū'-i Maraḍ wa Ishā'at-i Maraḍ* (Incidence and Prevalence Rate)

References: 2,6,8

3A	3B	3C	3D	3E	3F	3G
CO3	Describe the key measures of disease occurrence and association in epidemiological studies.	3	Lecture	CK	Knows-how	PER,L,L&PPT
CO3	Demonstrate the different measures of disease frequency, evaluating their public health relevance and impact on decision-making.	3	Practical3.1	PSY-SET	Shows-how	TUT,PT,PSM
CO3	Conduct a classroom survey to calculate disease occurrence rates.	2	Experiential-Learning3.1	PSY-SET	Does	TBL,TPW
CO3	Analyze datasets to calculate and interpret various measures of mortality and morbidity.	2	Experiential-Learning3.2	CE	Shows-how	PBL,SDL
CO3	Create visual representations (charts and graphs) of disease incidence and prevalence to communicate epidemiological findings effectively.	3	Experiential-Learning3.3	CC	Shows-how	PER,D

Unit 2 مُشارَکہ کی پیمائشیں Mushārakah kī Paymā'ishēn̲ (Measures of Association)

3.2.1 نسبت احتمال و نسبت اختطار *Nisbat-i Iḥtimāl wa Nisbat-i Ikhtiṭār* (Odds Ratio and Risk Ratio)

References: 1,4

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

CO3	Calculate and interpret relative risk and odds ratios from epidemiological data, explaining their significance in assessing disease-exposure associations.	3	Practical3.2	PSY-SET	Shows-how	PT,PSM
CO3	Identify various data sources used in epidemiology and assess their strengths and limitations in public health research.	4	Lecture	CK	Knows-how	L&PPT ,L
CO3	Demonstrate different measures of association, evaluating their public health relevance and impact on decision-making.	2	Practical3.3	PSY-SET	Shows-how	PT,PER,PBL
CO3	Design a case-control study to determine the association between risk factors and disease.	4	Practical3.4	PSY-SET	Shows-how	PT,TPW,W
CO3	Calculate and interpret the Odds Ratio and Risk Ratio from a real-world dataset.	2	Experiential-Learning3.4	CE	Does	TPW,PER,RLE,RP
CO3	Apply knowledge of Odds Ratio and Risk Ratio to analyze case studies and assess disease-exposure associations.	2	Experiential-Learning3.5	CAP	Shows-how	D,PER,SIM
CO3	Evaluate when to use Odds Ratio versus Risk Ratio in different study designs.	3	Experiential-Learning3.6	PSY-SET	Does	D,SIM,SY

Unit 3 تاثیر کی پیمائشیں Ta'thīr kī Paymā'ishēn̲ (Measures of Impact)

3.3.1 منسوبی اختطار و آبادیاتی منسوبی اختطار *Mansūbī Ikhtiṭār wa Ābādiyātī Mansūbī Ikhtiṭār* (Attributable Risk and Population Attributable Risk)

References: 5,6,8

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

CO3	Describe the measures of impact, describe their calculations, and explain their significance in epidemiology.	3	Lecture	PSY-SET	Knows-how	L&PPT ,BS,L&GD,L
CO3	Calculate and interpret attributable risk and population attributable risk from epidemiological data, explaining their significance in assessing the disease-exposure relationship.	4	Practical3.5	PSY-SET	Shows-how	PER,PT,PBL
CO3	Describe different measures of disease frequency, evaluating their public health relevance and impact on decision-making.	4	Practical3.6	PSY-SET	Shows-how	PrBL,PER,PT
CO3	Calculate and interpret the Attributable Risk and Population Attributable Risk from a real-world dataset.	3	Experiential-Learning3.7	PSY-GUD	Does	RLE,PER,D,DIS
CO3	Apply knowledge of Attributable Risk and Population Attributable Risk to analyse case studies and assess disease-exposure relationships.	5	Experiential-Learning3.8	CS	Does	PSM,PBL,TPW,W
CO1,CO3	Evaluate when to use Relative Risk (RR) versus Attributable Risk (AR).	4	Experiential-Learning3.9	PSY-SET	Does	PER,DIS

Practical Training Activity

Practical Training 3.1 Measures of Disease Frequency

Total Learning Hours = 3

1. Students will compare various measures of disease frequency (e.g., incidence, prevalence) using real-world data. [2 Hours]
2. Students will discuss the public health significance of these measures and how they inform disease monitoring and intervention strategies. [1 Hour]

Practical Training 3.2 Relative Risk and Odds Ratios

Total Learning Hours = 3

1. Students will calculate the Relative Risk (RR) and Odds Ratios (OR) from a provided dataset. [2 Hours]
2. They will then interpret the results, assessing the strength of the association between exposures and outcomes. [1 Hour]

Practical Training 3.3 Comparing Measures of Association

Total Learning Hours = 2

1. Students will compare various measures of association using real-world data. [1 Hour]
2. Students will discuss the public health significance of these measures and how they inform disease monitoring and intervention strategies. [1 Hour]

Practical Training 3.4 Case-Control Study

Total Learning Hours = 4

1. Choose a specific disease and its potential risk factors (e.g., smoking and lung cancer). [1 Hour]
2. Determine the group of people to study (e.g., age, gender, geographical location). [1 Hour]
3. Create a detailed plan for the study, outlining methods of data collection and analysis. [1 Hour]
4. Present the study design to peers and the teacher for feedback and suggestions. [1 Hour]

Practical Training 3.5 Attributable Risk and Population Attributable Risk

Total Learning Hours = 4

1. Students will calculate Attributable Risk (AR) and Population Attributable Risk (PAR) from a provided dataset. [3 Hours]
2. They will then interpret the results, assessing their significance in understanding the relationship between exposures and outcomes. [1 Hour]

Practical Training 3.6 Measures of Impact

Total Learning Hours = 4

1. Students will compare various measures of impact using real-world data. [3 Hours]

2. Students will discuss the public health significance of these measures and how they inform intervention strategies for a specific disease. [1 Hour]
Experiential Learning Activity
Experiential-Learning Learning 3.1: Classroom Epidemiological Survey
Total Learning Hours = 2 1. Students will design a Survey and will gather data on disease status and exposure. [1 Hour 30 Minutes] 2. They will calculate disease occurrence rates and interpret the findings. [30 Minutes]
Experiential-Learning Learning 3.2: Data Interpretation Exercise
Total Learning Hours = 2 1. Students will calculate key measures like mortality rate, morbidity rate, case fatality rate, and disability-adjusted life years (DALYs). [1 Hour] 2. They will assess the findings to understand the burden of disease and discuss the public health implications of the calculated mortality and morbidity rates. [1 Hour]
Experiential-Learning Learning 3.3: Disease Data Management
Total Learning Hours = 3 1. Organize data on disease incidence and prevalence, ensuring it is clean and ready for analysis. [1 Hour] 2. Use tools like Excel or software to create charts and graphs (e.g., bar charts, line graphs, pie charts) that effectively communicate disease incidence and prevalence trends. [2 Hours]
Experiential-Learning Learning 3.4: Odds Ratio and Risk Ratio
Total Learning Hours = 2 1. Give students a dataset containing exposure and disease status (e.g., smoking and lung cancer incidence).

2. In small groups, students will calculate the Odds Ratio (OR) and Risk Ratio (RR) using the provided data. [1 Hour 30 Minutes] 3. Students will interpret the findings, discussing what the calculated ratios suggest about the strength of the association between the exposure and disease. [30 Minutes]
Experiential-Learning Learning 3.5: Odds Ratio and Risk Ratio
Total Learning Hours = 2 1. Provide students with different case studies. 2. Students will identify key data points and calculate the Odds Ratio and Risk Ratio for each case study. [1 Hour 30 Minutes] 3. Each group presents their findings, explaining the significance of the ratios in terms of public health impact. [30 Minutes]
Experiential-Learning Learning 3.6: Odds Ratio versus Risk Ratio
Total Learning Hours = 3 1. Assign different study designs (e.g., cohort, case-control, cross-sectional) to each group. 2. Students will research how OR and RR are used in each type of study and present their findings. [2 Hours] 3. Groups will debate the advantages and limitations of using OR versus RR in their assigned study design, supported by data. [1 Hour]
Experiential-Learning Learning 3.7: Attributable Risk and Population Attributable Risk
Total Learning Hours = 3 1. Give students a dataset containing exposure and disease status. 2. In small groups, students will calculate the Attributable Risk and Population Attributable Risk using the provided data. [2 Hours] 3. Students will interpret the findings, discussing what the calculated Risk suggests about the relationship between the exposure and disease. [1 Hour]
Experiential-Learning Learning 3.8: Attributable Risk and Population Attributable Risk
Total Learning Hours = 5

1. Provide students with different case studies. [30 Minutes]
2. Students will identify key data points and calculate the Attributable Risk and Population Attributable Risk for each case study. [3 Hours 30 Minutes]
3. Each group presents their findings, explaining the significance of the ratios in terms of public health impact. [1 Hour]

Experiential-Learning Learning 3.9: Relative Risk versus Attributable Risk

Total Learning Hours = 4

1. Assign different studies to each group. [30 Minutes]
2. Students will research how RR and AR are used in each situation and present their findings. [2 Hours 30 Minutes]
3. Groups will debate the advantages and limitations of using RR versus AR in their assigned study design, supported by data. [1 Hour]

Modular Assessment

Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be 50 marks for this module. 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. **Quiz** on Epidemiological Measures. [50 Marks] [10 MCQs of 5 Marks Each; Questions types: Matching Questions, Reasoning and Assertion Questions, Multiple Correct Option Questions, and Single Correct Option Questions] Or **Concept mapping** on the topics related to this module. [50 Marks] [**Assessment Criteria:** Clarity and Structure-30 Marks; Design and Visuals-10 Marks; Presentation and Explanation-10 Marks] Or **Presentation** on any topic related to this module. [50 Marks]	4

[**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	

Module 4 : علم الوبائیات میں مشارکہ وسببیت Ilm al-Wabā'iyyāt mēn Mushāraka wa Sababiyyat (Association and Causation in Epidemiology)

Module Learning Objectives

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

- Define and measure the types of association between exposures and health outcomes in epidemiology.
- Identify and address challenges such as confounding, bias, and random error in epidemiological research.
- Apply criteria for causality and causal inference methods to evaluate causal relationships in epidemiological studies.

Unit 1 علم الوبائیات میں مشارکہ Ilm al-Wabā'iyyāt mēn Mushāraka (Association in Epidemiology)

4.1.1 تعریف، اقسام اور پیمائشیں *Ta'rīf, Aqsām avr Paymā'ishēn* (Definition, Types, and Measures)

4.1.2 مشارکہ کے استحکام میں تحدیات: مضطرب، متعصب، غیر منظم خطا *Mushāraka ke Istiḥkām mēn Taḥaddiyyāt: Muḍṭarib, Muta'aṣṣib,* Ghayr Munaẓẓam *Khaṭā'* (Challenges in Establishing Association: Confounding, Bias, Random Error)

References: 2,5

3A	3B	3C	3D	3E	3F	3G
CO3	Define and explain the concept of association in epidemiology, distinguishing between causation and correlation.	2	Lecture	CK	Knows-how	L&PPT ,L
CO3	Apply statistical tools and software to calculate measures of association from epidemiological data.	2	Practical4.1	PSY-SET	Shows-how	PT,PBL,PER

CO3	Conduct a practical analysis to identify potential confounding factors in a given epidemiological study.	2	Practical4.2	PSY-SET	Shows-how	PER,PT
CO3	Design an epidemiological study with an appropriate methodology for exploring associations between exposure and outcome.	2	Experiential-Learning4.1	CS	Does	TPW,PrBL,SIM
CO3	Evaluate published epidemiological research to identify how the study addresses or fails to address confounding, bias, and random error.	2	Experiential-Learning4.2	CE	Does	PBL,PER,TPW,JC
CO3	Present the findings of an epidemiological investigation, discussing the limitations and validity of associations found.	2	Experiential-Learning4.3	CAP	Does	DIS,TPW,PER
CO3	Identify and describe the various types of measures used to quantify association in epidemiology.	2	Lecture	CK	Knows-how	L&PPT ,L
CO3	Describe the sources of bias in epidemiological studies (selection bias, information bias) and demonstrate how to mitigate their impact on association measures.	2	Practical4.3	PSY-SET	Shows-how	TPW,JC,PT,PER
CO3	Apply statistical tools to calculate and interpret association measures from a given epidemiological dataset.	2	Practical4.4	PSY-SET	Shows-how	PER,PBL,PT,PSM,RLE
CO1,CO3	Conduct a critical review of an epidemiological study to identify key associations and interpret their relevance in real-world settings.	2	Experiential-Learning4.4	CAP	Does	PER,SIM
CO3	Identify challenges in establishing associations (e.g., confounding, bias) and apply strategies to address them.	2	Experiential-Learning4.5	CE	Does	TPW,PBL,PSM,L&GD

CO3	Analyze case studies to identify the impact of confounding, bias, and random error on epidemiological findings.	2	Experiential-Learning4.6	PSY-SET	Does	L&GD,PER,TPW,PrBL

Unit 2 علم الوبائیات میں سببیّت 'Ilm al-Wabā'iyyāt mēṉ Sababiyyat (Causation in Epidemiology)

4.2.1 سببیّت کے معیار *Sababiyyat ke mi'yār* (Criteria for Causation)

4.2.2 سببی تعلقات کی اقسام *Sababī Ta'alluqāt kī Aqsām* (Types of Causal Relationships)

4.2.3 سببی استنباط کے طریقے *Sababī Istinbāṭ ke Ṭarīqe* (Causal Inference Methods)

4.2.4 سببیّت کے استحکام میں تحدیات *Sababiyyat ke Istiḥkām mēṉ Taḥaddiyyāt* (Challenges in Establishing Causality)

References: 1

3A	3B	3C	3D	3E	3F	3G
CO3	Identify and explain the essential criteria used to determine causality in epidemiological studies.	3	Lecture	CK	Knows-how	L,L&PPT
CO3	Apply causal inference methods in epidemiological data.	3	Practical4.5	PSY-SET	Shows-how	SIM,PER,PT,TPW
CO3	Evaluate existing studies for evidence of causality.	3	Practical4.6	PSY-SET	Shows-how	PBL,TPW,PT
CO3	Interpret real-world epidemiological data and infer causal relationships.	2	Experiential-Learning4.7	CC	Does	SIM,RP,PER,SY
CO3	Perform group discussions and peer reviews of causal inference in studies.	3	Experiential-Learning4.8	CS	Does	PBL,JC,PrBL,TPW

CO3	Develop and present a causal pathway model for a public health issue.	2	Experiential-Learning4.9	PSY-GUD	Does	PBL,D,PER
CO3	Discuss the different types of causal relationships in epidemiology.	3	Lecture	CK	Knows-how	L,L&PPT
CO3	Design an epidemiological study to assess causal relationships.	2	Practical4.7	PSY-SET	Shows-how	PT
CO3	Perform casual analysis by using statistical softwares.	4	Practical4.8	PSY-SET	Shows-how	PER,PAL,PSM,PBL,PT
CO3	Analyze the impact of confounding, bias, and interaction in causal studies.	2	Experiential-Learning4.10	PSY-ORG	Does	DIS,SIM,TBL
CO3	Identify the challenges of establishing causality in epidemiology.	2	Experiential-Learning4.11	PSY-GUD	Does	DIS,SDL,LS,RLE,JC
CO3	Design and conduct a mock observational study to test a causal hypothesis.	3	Experiential-Learning4.12	PSY-ADT	Does	PER,FV,TBL

Practical Training Activity

Practical Training 4.1 Hands-on exercises involving datasets

Total Learning Hours = 2

1. Under the guidance of a teacher, students will work with real datasets to calculate association measures, identify confounding factors, and address biases. [2 Hours]

Practical Training 4.2 Practical Exercises
Total Learning Hours = 2 1. Under teachers' guidance, students will analyze the study design and identify all variables that could potentially be confounders. [2 Hours]
Practical Training 4.3 Practical activities focusing on detecting biases
Total Learning Hours = 2 1. Students will examine the study design to identify possible sources of bias, such as selection bias (e.g., non-random sampling) and information bias (e.g., inaccurate data collection). [1 Hour] 2. They will then discuss strategies to minimize bias, such as random sampling, blinding, or data validation. [1 Hour]
Practical Training 4.4 Key association measures
Total Learning Hours = 2 1. Under the teacher's guidance, students will use software or statistical tools to calculate key association measures from a given epidemiological dataset and interpret their significance in the context of the study. [2 Hours]
Practical Training 4.5 Practical experience in using causal inference methods
Total Learning Hours = 3 1. Choose a relevant epidemiological dataset, clean the data, handle missing values, and identify potential confounders or variables of interest for causal analysis. [1 Hour] 2. Apply methods such as regression analysis to explore causal relationships between variables and assess the strength of the association. [1 Hour] 3. Analyze the results, check the validity of the causal assumptions, and discuss the potential limitations of the causal inference based on the chosen method. [1 Hour]
Practical Training 4.6 Evaluation and Critique of published epidemiological studies

Total Learning Hours = 3

1. Under the teacher's guidance, students will review published studies and assess the study design and causal criteria. [1 Hour 30 Minutes]
2. They will also review the study for potential biases and confounders and assess whether the statistical methods used are valid for drawing causal conclusions. [1 Hour 30 Minutes]

Practical Training 4.7 Designing of an epidemiological study

Total Learning Hours = 2

1. Under guidance, students will formulate the research question and choose an appropriate study design based on the research objective. They will define the exposure and outcome variables and plan strategies to control potential confounders (e.g., through matching, stratification, or statistical adjustments). [2 Hours]

Practical Training 4.8 Developing proficiency in using statistical software

Total Learning Hours = 4

1. Students will practice importing the dataset into statistical software, handling missing data, and checking for outliers. [1 Hour]
2. They will conduct causal analysis using appropriate methods to explore the relationships between variables. [2 Hours]
3. They will interpret and report the results. [1 Hour]

Experiential Learning Activity

Experiential-Learning Learning 4.1: Designing an epidemiological study

Total Learning Hours = 2

1. Students will identify the target population, select the exposure and outcome variables, and clearly define how each will be measured. [1 Hour]
2. They will select an appropriate study design (e.g., cohort, case-control, cross-sectional) and plan the statistical methods to analyze associations, ensuring control for confounding factors. [1 Hour]

Experiential-Learning Learning 4.2: Reviewing published studies
Total Learning Hours = 2 1. Review the study design, sampling methods, and data collection processes to assess how well the study controls for confounding, minimizes bias, and addresses random error. [1 Hour] 2. Critically analyze the statistical methods used to control for confounders and biases, and evaluate how the study reports and addresses potential sources of random error in its findings. [1 Hour]
Experiential-Learning Learning 4.3: Presenting a report on the study's findings
Total Learning Hours = 2 1. Review the study's findings and summarize the key associations between exposure and outcome. Include statistical measures such as odds ratio, relative risk, or hazard ratio, and interpret their significance in the context of the study. [1 Hour] 2. Identify potential biases (e.g., selection bias, information bias), confounding factors, and random error. Discuss how these issues may have impacted the study’s validity. Critically assess the study’s limitations, the generalizability of its findings, and the overall validity of the associations found. [1 Hour]
Experiential-Learning Learning 4.4: Critical review of an epidemiological study
Total Learning Hours = 2 1. Students will review the given study and summarize the key associations between exposure and outcome. [1 Hour] 2. They will identify potential biases, confounding factors, and random errors in the study and will discuss how these issues may have impacted the study’s validity. [1 Hour]
Experiential-Learning Learning 4.5: Challenges in establishing associations
Total Learning Hours = 2 1. Students will review a sample dataset and identify potential challenges like confounding variables and biases. [1 Hour]

2. They will suggest and apply strategies to minimize these challenges, such as using control groups, adjusting for confounders, or implementing random sampling techniques. [1 Hour]
Experiential-Learning Learning 4.6: Analysis of case studies
Total Learning Hours = 2 1. Review provided case studies and identify instances of confounding, bias (e.g., selection or information bias), and random error that may influence the study's findings. Assess how these challenges affect the study results and propose strategies to address and reduce their impact on the findings. [2 Hours]
Experiential-Learning Learning 4.7: Analysis of Epidemiological Data
Total Learning Hours = 2 1. Explore the dataset, identify key variables (e.g., exposure, outcome, confounders) to identify possible causal relationships. [1 Hour] 2. Evaluate the findings in the context of causality criteria (e.g., temporality, strength, consistency), consider potential biases and confounders, and conclude the strength and validity of the causal inference. [1 Hour]
Experiential-Learning Learning 4.8: Group discussions on causal inference
Total Learning Hours = 3 1. Students will critically review published studies, focusing on their causal inference methods, study design, and interpretation. [2 Hours] 2. They will also offer suggestions for improving the clarity, methodology, or addressing potential limitations. [1 Hour]
Experiential-Learning Learning 4.9: Causal Pathway Model
Total Learning Hours = 2 1. Students will develop a causal pathway model using diagrams or other visualization tools to represent the relationships between variables in a specific public health context and present their model to peers and teachers. [2 Hours]

Experiential-Learning Learning 4.10: Impact of confounding, bias, and interaction
Total Learning Hours = 2 1. Review the study design and variables to identify possible confounders, biases (e.g., selection, recall), and interaction effects that could impact the interpretation of causal relationships. [1 Hour] 2. Examine the influence of confounders, identify biases, and assess interaction terms in the data. [1 Hour]
Experiential-Learning Learning 4.11: Challenges of establishing causality
Total Learning Hours = 2 1. Students will engage in reflective exercises, discussing the challenges faced when attempting to establish causality in epidemiological studies, including issues like measurement error, unmeasured confounding, and generalizability. [2 Hours]
Experiential-Learning Learning 4.12: Mock observational study
Total Learning Hours = 3 1. Students will define the causal hypothesis and select an appropriate study design based on the hypothesis. [1 Hour] 2. They will simulate or use available data to measure exposure and outcome variables. [1 Hour] 3. They will perform statistical analysis (e.g., regression models) to test the causal relationship. [1 Hour]
Modular Assessment

Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be for 50 marks for this module. 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. **Quiz** on the topics related to this module. [50 marks]	4

[10 MCQs of 5 Marks Each; Questions types: Matching Questions, Reasoning and Assertion Questions, Multiple Correct Option Questions, and Single Correct Option Questions] Or **Concept mapping** of the topics related to this module. [50 Marks] [**Assessment Criteria:** Clarity and Structure-30 Marks; Design and Visuals-10 Marks; Presentation and Explanation-10 Marks] Or **Presentation** on the topics related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	
Semester No : 5	
Module 5 : علم الوبائیات برائے امراض متعدی Ilm al-Wabā'iyyāt barā'e Amrāḍ Muta'add ī (Infectious Disease Epidemiology)	
Module Learning Objectives (At the end of the module, the students should be able to) • Describe the dynamics of infectious disease transmission, including sources, reservoirs, and modes of transmission. • Evaluate the immunity mechanisms and immunization strategies, including active and passive immunity and cold chain maintenance. • Apply disease prevention and control strategies to manage reservoirs, interrupt transmission, and protect susceptible populations.	
Unit 1 انتقال مرض کی حرکیات Intiqāl-i-Maraḍ kī Ḥarakiyyāt (Dynamics of Disease Transmission)	
5.1.1 ذرائع وذخایر *Dharā 'i' wa Dhakhā 'ir* (Sources and Reservoirs)	

5.1.2انتقال کے طریقے *Intiqāl ke Ṭarīqe* (Modes of Transmission) 5.1.3مستعد میزبان *Musta'idd Mezbān* (Susceptible Host) **References:** 2,7						
3A	**3B**	**3C**	**3D**	**3E**	**3F**	**3G**
CO3	Describe the transmission dynamics of different types of communicable diseases.	3	Lecture	CK	Knows-how	L&PPT ,L
CO3	Analyze and compare transmission models for airborne, waterborne, and vector-borne diseases.	3	Practical5.1	PSY-SET	Shows-how	PER,PT
CO3	Investigate a case study of any infectious disease to assess transmission dynamics and propose control strategies.	3	Practical5.2	PSY-SET	Shows-how	PT,PBL
CO3	Demonstrate transmission dynamics of infectious diseases, understanding their unique characteristics through digital models.	4	Experiential-Learning5.1	PSY-SET	Does	SIM,ML,PER,TPW
CO3	Analyze case studies of different transmission types, presenting findings on public health implications and intervention strategies.	3	Experiential-Learning5.2	CC	Does	PER,DIS,FV
CO3	Describe the spread of diseases using geographic information systems (GIS), understanding how transmission modes affect global health.	2	Experiential-Learning5.3	PSY-MEC	Does	PBL,PER,W
CO3	Describe communicable diseases and classify them based on transmission methods and public health significance.	2	Lecture	CK	Knows-how	L,L&PPT

CO3	Develop a classification system for communicable diseases based on transmission mode, pathogen type, and public health impact.	2	Practical5.3	PSY-SET	Shows-how	PAL,PT,PER
CO3	Create detailed fact sheets for selected communicable diseases, summarizing transmission methods and key epidemiological data.	2	Practical5.4	PSY-SET	Shows-how	FV,PT,PER,TPW
CO3	Describe various diseases based on transmission mode, pathogen, and health impact, demonstrating understanding of disease categories.	2	Experiential-Learning5.4	CE	Does	TBL,PER,DIS
CO3	Create infographics summarizing definitions, transmission methods, and classifications of selected communicable diseases for effective communication.	2	Experiential-Learning5.5	PSY-GUD	Does	DIS,TPW,D,PER
CO3	Apply global health database to compare the prevalence of communicable diseases by region and pathogen type, enhancing data analysis skills.	2	Experiential-Learning5.6	AFT-VAL	Does	IBL,PER,PBL

Unit 2 قوت مدافعت اور مدافعتی عوامل Quwwat-i-Mudāfi'at avr Mudāfi'atī 'Awāmil (Immunity and Immunizing Agents)

5.2.1 فعال مدافعت و مفعولی مدافعت *Fa''āl Mudāfi'at wa Maf'ūlī Mudāfi'at* (Active immunity and Passive Immunity)

5.2.2 اجتماعی مدافعت *Ijtimāʿī Mudāfi'at* (Herd Immunity)

5.2.3 تلقیحات، غلوبینات مناعت، مصل الدم مضادہ *Taqlīḥāt, Ghulūbīnāt-i-Manā'at, Maṣl al-Dam Muḍādda* (Vaccines, Immunoglobulins, Antisera)

5.2.4 سلسلۂ تبرید کی نگہداشت *Silsila'-i-Tabrīd kī Nigahdāsht* (Cold Chain Maintenance)

5.2.5 منفی واقعات بعد از تطعیمات *Manfī Wāqi'āt Ba'd az Taṭʿīmāt* (Adverse Events Following Immunizations)

References: 4,5,10

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

CO3	Describe the concepts of active and passive immunity, and their roles in disease prevention.	2	Lecture	CC	Knows-how	L,L&PPT
CO3	Demonstrate the process of vaccine preparation, administration, and cold chain maintenance.	2	Practical5.5	PSY-SET	Shows-how	PT,PER
CO3	Assess and identify adverse events following immunization (AEFI) and understand their management.	2	Practical5.6	PSY-SET	Shows-how	PT,PER,PBL,L&GD
CO3	Conduct interviews with healthcare professionals to gather insights on vaccination practices and cold chain management.	2	Experiential-Learning5.7	PSY-GUD	Does	RLE,PER
CO3	Participate in a vaccine awareness campaign, educating peers on the importance of immunization and herd immunity.	2	Experiential-Learning5.8	CAN	Does	PER,TPW
CO1,CO3	Demonstrate the impact of herd immunity in a community through role-play and scenario-based activities.	2	Experiential-Learning5.9	CC	Does	D,ML,EDU,DIS,RP

Unit 3 تحفظ وتحدید مرض Taḥaffuẓ wa Taḥdīd-i-Maraḍ (Disease Prevention and Control)

5.3.1 ذخیرہ کی تحدید *Dhakhīra kī Taḥdīd* (Control of Reservoir)

5.3.2 انتقال کا انقطاع *Intiqāl kā Inqiṭā'* (Interruption of Transmission)

5.3.3 مستعدین کی حفاظت *Musta'iddīn kī Ḥifāẓat* (Protection of Susceptibles)

5.3.4 نگرانی *Nigarānī* (Surveillance)

5.3.5 تطہیر *Taṭhīr* (Disinfection)

References: 1,2

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

CO3	Discuss the key strategies for disease prevention and control, including control of reservoirs, interruption of transmission, protection of susceptibles, and surveillance.	3	Lecture	CC	Knows-how	L&PPT ,L
CO3	Demonstrate techniques for controlling disease reservoirs and interrupting disease transmission.	3	Practical5.7	PSY-SET	Shows-how	TPW,PSM,PT
CO3	Conduct disinfection procedures to prevent the spread of infectious diseases.	3	Practical5.8	PSY-SET	Shows-how	FV,PT,D
CO3	Observe and report on a public health surveillance system in action.	1	Experiential-Learning5.10	PSY-MEC	Does	PBL,FV,PER,SY
CO3	Visit a healthcare facility to learn about disinfection protocols and infection control measures.	2	Experiential-Learning5.11	PSY-MEC	Does	FV,PER
CO3	Participate in a disease prevention campaign, focusing on controlling reservoirs and protecting susceptible populations.	2	Experiential-Learning5.12	AFT-VAL	Does	PER,PSM,DIS,RP,PrBL

Practical Training Activity

Practical Training 5.1 Transmission Models for Communicable Diseases

Total Learning Hours = 3

1. Students will examine the transmission dynamics of airborne, waterborne, and vector-borne diseases through case studies and research articles. [1 Hour]
2. They will compare how each transmission method influences the spread of diseases. [1 Hour]
3. Students will create a poster and present their findings to peers and teachers. [1 Hour]

Practical Training 5.2 Case Study of a Communicable Disease
Total Learning Hours = 3 1. Students will investigate a case study of an infectious disease, analyzing its transmission dynamics, including environmental and host factors. [2 Hours] 2. They will then present their findings and propose prevention and control strategies. [1 Hour]
Practical Training 5.3 Classifying Communicable Diseases
Total Learning Hours = 2 1. Students will classify a list of communicable diseases based on their mode of transmission, pathogen type, and public health impact. [1 Hour] 2. They will create a classification table and present it in class. [1 Hour]
Practical Training 5.4 Developing Fact Sheets for Communicable Diseases
Total Learning Hours = 2 1. Students will create fact sheets for three communicable diseases, detailing their definitions, transmission methods, and key epidemiological data. [1 Hour 30 Minutes] 2. They will use these fact sheets as educational resources to raise awareness. [30 Minutes]
Practical Training 5.5 Handling of vaccines
Total Learning Hours = 2 1. Students will practice the proper handling, storage, and transportation of vaccines, adhering to cold chain protocols. [2 Hours]
Practical Training 5.6 Adverse Events Following Immunization
Total Learning Hours = 2

1. Students will simulate the identification and management of adverse reactions following immunization, learning to recognize symptoms such as allergic reactions and fever. [1 Hour] 2. They will practice responding with appropriate medical interventions and report the events as per standard protocols. [1 Hour]
Practical Training 5.7 Controlling Strategies for Disease
Total Learning Hours = 3 1. Students will apply practical methods to control disease reservoirs by eliminating vectors (e.g., mosquitoes) or contaminated sources (e.g., water). [1 Hour 30 Minutes] 2. They will also implement transmission interruption strategies such as isolation and sanitation practices to reduce disease spread. [1 Hour 30 Minutes]
Practical Training 5.8 Disinfection Procedures
Total Learning Hours = 3 1. Students will practice using different disinfectants to sanitize surfaces and environments in real-world settings. [1 Hour 30 Minutes] 2. They will tell how to select appropriate disinfectants and apply them effectively to minimize the risk of disease transmission. [1 Hour 30 Minutes]
Experiential Learning Activity
Experiential-Learning Learning 5.1: Interactive Transmission Model Workshop
Total Learning Hours = 4 1. Students will use digital models to simulate and experiment with the transmission dynamics of various communicable diseases (airborne, waterborne, vector-borne). [3 Hours] 2. They will compare how different factors influence disease spread in each transmission type. [1 Hour]
Experiential-Learning Learning 5.2: Case Study Analysis

Total Learning Hours = 3 1. Students will analyze case studies of diseases with different transmission types, such as cholera (waterborne) and malaria (vector-borne). [2 Hours] 2. They will then present their findings, highlighting key factors influencing disease spread and control measures. [1 Hour]
Experiential-Learning Learning 5.3: Interactive Mapping of Disease Spread
Total Learning Hours = 2 1. Students will utilize Geographic Information Systems (GIS) to map the global spread of diseases, focusing on transmission modes. [1 Hour 30 Minutes] 2. They will analyze patterns and trends in disease dissemination worldwide. [30 Minutes]
Experiential-Learning Learning 5.4: Interactive Disease Classification Exercise
Total Learning Hours = 2 1. Provide students with a set of diseases and have them classify these based on transmission mode, pathogen, and health impact. [2 Hours]
Experiential-Learning Learning 5.5: Communicable Disease Infographic Design
Total Learning Hours = 2 1. Students will design infographics summarizing the definitions, transmission, and classifications of selected communicable diseases. [1 Hour 30 Minutes] 2. They will present this to peers and teachers. [30 Minutes]
Experiential-Learning Learning 5.6: Exploration of Virtual Disease Database
Total Learning Hours = 2 1. Students will use a global health database to explore and compare the prevalence of communicable diseases across different regions, pathogen types and their impact on public health. [2 Hours]
Experiential-Learning Learning 5.7: Insights on Vaccination Practices

Total Learning Hours = 2 1. Students will interview local health workers or immunization experts, gaining first-hand knowledge of vaccine administration and cold chain logistics in real-world settings. [1 Hour 30 Minutes] 2. They will present the findings to the teacher. [30 Minutes]
Experiential-Learning Learning 5.8: Vaccine Awareness Campaign
Total Learning Hours = 2 1. Students will create educational materials related to vaccine awareness. [1 Hour] 2. They will participate in campaigns aimed at raising awareness about vaccines for disease prevention. [1 Hour]
Experiential-Learning Learning 5.9: Impact of herd immunity in a community
Total Learning Hours = 2 1. Participate in a group activity that simulates the spread of a communicable disease within a population. Observe how different levels of vaccination affect the spread of the disease during the simulation. [1 Hour] 2. Discuss the role of herd immunity and the importance of high vaccination rates in controlling disease outbreaks. [1 Hour]
Experiential-Learning Learning 5.10: Public Health Surveillance System
Total Learning Hour = 1 1. Students will observe the operations of a local surveillance system, documenting how data is collected, analyzed, and used to monitor disease spread. [1 Hour]
Experiential-Learning Learning 5.11: Infection Control Measures in Health Care Facilities
Total Learning Hours = 2

1. Students will visit any healthcare setting to observe disinfection protocols and infection control measures in practice, understanding how they help prevent disease outbreaks. [1 Hour 30 Minutes]
2. They will discuss the findings with the teacher. [30 Minutes]

Experiential-Learning Learning 5.12: Disease Prevention Campaign

Total Learning Hours = 2

1. Students will engage in a campaign or awareness program, working to educate the community on controlling disease reservoirs (such as mosquitoes or contaminated water) and protecting vulnerable groups. [2 Hours]

Modular Assessment

Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Quiz** on the topics related to this module. [50 marks] [10 MCQs of 5 Marks Each; Questions types: Matching Questions, Reasoning and Assertion Questions, Multiple Correct Option Questions, and Single Correct Option Questions] Or **Structured Essay** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Organization-10 Marks; Presentation and Language-10 Marks] Or **Project work** on topics related to this module. [50 Marks] [**Assessment Criteria:** Project Planning and Design-30 Marks; Presentation and Documentation-20 Marks]	4

Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	

Module 6 : امراض ساریہ: امراض ہوائی و آبی Amrāḍ Sāriya: Amrāḍ Hawā'ī wa Ābī (Communicable Diseases: Airborne and Waterborne Diseases)

Module Learning Objectives

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

- Analyze the burden and transmission patterns of respiratory and intestinal infections.
- Evaluate prevention and control strategies for respiratory and intestinal infections.
- Apply evidence-based approaches to manage and reduce the impact of respiratory and intestinal infections in populations.

Unit 1 امراض ہوائی Amrāḍ Hawā'ī (Airborne Diseases)

6.1.1 بار، انتقال کے انداز، تحفظ و تحدید کی حکمت عملیاں برائے *Bār, Intiqāl ke Andāz, Taḥaffuẓ wa Taḥdīd kī Ḥikmat 'Amaliyyāṉ barā'e:* (Burden, Transmission Patterns, prevention, and control strategies of:)

6.1.1.1 حمیقاء *Ḥumayqā'* (Chicken Pox)

6.1.1.2 حصبہ *Ḥaṣba* (Measles)

6.1.1.3 نُکاف *Nukāf* (Mumps)

6.1.1.4 حُمَیراء *Ḥumayrā'* (Rubella)

6.1.1.5 خناق *Khunāq* (Diphtheria)

6.1.1.6 شہیقہ *Shaḥīqa* (Whooping Cough)

6.1.1.7 حاد تنفّسی تعدیے *Ḥād Tanaffusī Ta'diyāt* (Acute Respiratory Infections)

6.1.1.8 تپ دق *Tap-i-Diqq* (Tuberculosis)

6.1.1.9 کووِڈ-19 (Covid-19)

References: 2,7						
3A	**3B**	**3C**	**3D**	**3E**	**3F**	**3G**
CO3	Understand and explain the epidemiological determinants of airborne diseases.	3	Lecture	CK	Knows-how	L&PPT ,L
CO3	Investigate a case study of any airborne disease and propose control strategies.	3	Practical6.1	PSY-SET	Shows-how	PBL,PT
CO3	Identify common airborne diseases and understand their transmission dynamics.	3	Practical6.2	PSY-SET	Shows-how	PT,PER,CBL
CO3	Demonstrate the effective communication of airborne diseases.	3	Experiential-Learning6.1	PSY-SET	Does	TPW,DIS,D
CO3	Conduct field studies and surveys, evaluating public knowledge regarding airborne disease.	2	Experiential-Learning6.2	CAP	Does	D,DIS,PER,FV
CO1,CO3	Design and implement health education campaigns aimed at raising awareness about airborne infections.	4	Experiential-Learning6.3	CE	Does	SY,W
CO3	Describe the global and local burden of airborne diseases and their impact on public health.	2	Lecture	CK	Knows-how	L,L&PPT
CO3	Apply preventive measures such as vaccination and the use of personal protective equipment (PPE) in reducing the transmission of airborne diseases in both clinical and community settings.	2	Practical6.3	PSY-SET	Shows-how	PER,D-M,D,PT

CO3	Identify the clinical features, symptoms, and signs of common airborne diseases through case studies and clinical simulations.	2	Practical6.4	PSY-SET	Shows-how	RP,PT
CO3	Evaluate the effectiveness of different strategies in controlling airborne diseases.	2	Experiential-Learning6.4	PSY-SET	Does	TPW,SY,RP
CO3	Develop community-based intervention plans addressing the prevention and control of airborne diseases, with a focus on high-risk groups.	2	Experiential-Learning6.5	PSY-SET	Does	LS,PER
CO3	Participate in role-playing exercises simulating healthcare responses during an outbreak of diseases like Measles or chicken pox, emphasizing effective patient management and transmission reduction.	2	Experiential-Learning6.6	AFT-SET	Does	D,JC

Unit 2 امراض آبیAmrāḍ Ābī (Waterborne Diseases)

6.2.1 بار، انتقال کے انداز، تحفظ و تحدید کی حکمت عملیاں برائے *Bār, Intiqāl ke Andāz, Taḥaffuẓ wa Taḥdīd kī Ḥikmat ʻAmaliyyāṉ barāʼe:* (Burden, Transmission Patterns, prevention, and control strategies of:)

6.2.1.1 فالج الاطفال *Fālij al-Aṭfāl* (Poliomyelitis)

6.2.1.2 التہاب کبد ویروسی *Iltiḥāb-i-Kabid Wayrūsī* (Viral Hepatitis)

6.2.1.3 حاد زحیری امراض *Ḥādd Zaḥīrī Amrāḍ* (Acute Diarrheal Diseases)

6.2.1.4 ہیضہ *Hayḍa* (Cholera)

6.2.1.5 حمیٰ معوی *Ḥummā Miʻwī* (Typhoid)

6.2.1.6 زحیر ابیبائی *Zaḥīr Amībāʼī* (Amoebiasis)

6.2.1.7 تسمم غذائی / تخمہ *Tasammum Ghidhāʼī / Tukhma* (Food Poisoning)

6.2.1.8 داء الصَّفَر *Dāʼ al-Ṣafar* (Ascariasis)

References: 4,8

3A	3B	3C	3D	3E	3F	3G
CO3	Describe the epidemiological determinants of waterborne diseases.	2	Lecture	PSY-SET	Knows-how	L&PPT ,L
CO3	Investigate a case study of any waterborne disease and propose control strategies.	2	Practical6.5	PSY-SET	Shows-how	PT,PER
CO3	Identify common waterborne diseases and understand their transmission dynamics.	2	Practical6.6	PSY-SET	Shows-how	PER,PT,CBL
CO3	Define and describe the, transmission methods, and classifications of a selected waterborne disease for effective communication.	1	Experiential-Learning6.7	PSY-SET	Does	PER,TPW,SY
CO3	Design and implement health education campaigns aimed at raising awareness about waterborne diseases.	3	Experiential-Learning6.8	PSY-GUD	Does	CBL,PER,TUT
CO3	Design surveys, evaluating public knowledge regarding waterborne disease.	2	Experiential-Learning6.9	PSY-GUD	Does	PER,LS,SY
CO3	Understand and explain the global and local burden of waterborne diseases and their impact on public health.	3	Lecture	CK	Knows-how	L&PPT ,L
CO3	Apply preventive measures in reducing the transmission of waterborne diseases in both clinical and community settings.	3	Practical6.7	PSY-SET	Shows-how	PER,L&GD,PT
CO3	Identify the clinical features, symptoms, and signs of common waterborne diseases through case studies and clinical simulations.	3	Practical6.8	PSY-SET	Shows-how	PT

CO3	Evaluate the effectiveness of different strategies in controlling waterborne diseases.	2	Experiential-Learning6.10	CE	Does	PL,TPW,PER,SY,L&GD
CO3	Develop community-based intervention plans addressing the prevention and control of waterborne infections, with a focus on high-risk groups.	1	Experiential-Learning6.11	AFT-SET	Does	D,PER,DIS
CO3	Participate in role-playing exercises simulating healthcare responses during an outbreak of diseases like cholera, emphasizing effective patient management and transmission reduction.	2	Experiential-Learning6.12	CC	Does	SY,RP,TBL

Practical Training Activity

Practical Training 6.1 Case Study Analysis

Total Learning Hours = 3

1. Students will investigate a case study of any airborne disease, analyzing its transmission dynamics, including agent, environmental and host factors. [2 Hours]
2. They will then present their findings and propose prevention and control strategies. [1 Hour]

Practical Training 6.2 Comparison of Epidemiology of Airborne Diseases

Total Learning Hours = 3

1. Students will examine the transmission dynamics of different airborne diseases. [1 Hour]
2. They will compare the epidemiology of each disease. [1 Hour]
3. Students will create a poster and present their findings to peers and teachers. [1 Hour]

Practical Training 6.3 Preventive Measures for Airborne Diseases

Total Learning Hours = 2 1. Students will research and compile a list of recommended preventive measures (vaccination schedules, PPE usage, hygiene practices) for common airborne diseases. [1 Hour] 2. They will demonstrate and educate people on the importance of these measures in preventing the spread of these diseases. [1 Hour]
Practical Training 6.4 Identification of Airborne Diseases
Total Learning Hours = 2 1. Students will review case studies of common airborne diseases (e.g., Chicken Pox, Measles, Tuberculosis) and identify key clinical features, symptoms, and signs associated with each. [1 Hour] 2. They will participate in clinical simulations to practice recognizing and diagnosing these diseases based on observed symptoms and case study information. [1 Hour]
Practical Training 6.5 Case Study Analysis of Waterborne Disease
Total Learning Hours = 2 1. Students will investigate a case study of any waterborne disease, analysing its transmission dynamics, including agent, environmental and host factors. [1 Hour 30 Minutes] 2. They will then present their findings and propose prevention and control strategies. [30 Minutes]
Practical Training 6.6 Comparison of Epidemiology of Waterborne Diseases
Total Learning Hours = 2 1. Students will examine the epidemiology of different waterborne diseases. [1 Hour] 2. Students will create a poster and present their findings to peers and teachers. [1 Hour]
Practical Training 6.7 Preventive Measures for Waterborne Diseases

Total Learning Hours = 3 1. Students will research and compile a list of recommended preventive measures for common waterborne diseases. [2 Hours] 2. They will demonstrate and educate people on the importance of these measures in preventing the spread of waterborne diseases. [1 Hour]
Practical Training 6.8 Identification of Waterborne Diseases
Total Learning Hours = 3 1. Students will review case studies of common waterborne diseases and identify key clinical features, symptoms, and signs associated with each. [2 Hours] 2. They will participate in clinical simulations to practice recognizing and diagnosing these diseases based on observed symptoms and case study information. [1 Hour]
Experiential Learning Activity
Experiential-Learning Learning 6.1: Airborne Diseases Infographic
Total Learning Hours = 3 1. Students will design infographics summarizing the epidemiological determinants like definitions, transmission methods, and classifications of selected airborne diseases. [2 Hour 30 Minutes] 2. They will present this to peers and teachers. [30 Minutes]
Experiential-Learning Learning 6.2: Public Awareness About Airborne Diseases
Total Learning Hours = 2 1. Students will design surveys to assess public awareness and practices related to the prevention and control of airborne diseases (e.g., vaccination, hygiene, mask usage). [1 Hour 30 Minutes] 2. They will present the plan to peers and the teacher for feedback. [30 Minutes]
Experiential-Learning Learning 6.3: Health Education Campaigns on Airborne Diseases

Total Learning Hours = 4

1. Students will research key information on airborne infections (symptoms, transmission, prevention) and develop educational materials (e.g., posters, flyers, social media content). [2 Hours]
2. They will execute an awareness campaign in a local community or school using the designed materials. [2 Hours]

Experiential-Learning Learning 6.4: Simulate Outbreak Management Scenarios for Airborne Diseases

Total Learning Hours = 2

1. Students will review and understand key outbreak management strategies, including isolation procedures, vaccination campaigns, and contact tracing protocols for airborne diseases. [1 Hour]
2. The will participate in a simulated outbreak scenario, applying these strategies to control the spread of disease. [1 Hour]

Experiential-Learning Learning 6.5: Community-Based Intervention Plans for Airborne Diseases

Total Learning Hours = 2

1. Students will research the specific needs and vulnerabilities of high-risk groups (e.g., children, elderly, immunocompromised individuals) regarding airborne diseases. [1 Hour]
2. They will create a detailed community-based intervention plan, including targeted prevention strategies, education campaigns, and present the plan for feedback and improvement. [1 Hour]

Experiential-Learning Learning 6.6: Healthcare Response for Airborne Disease Outbreak

Total Learning Hours = 2

1. Students will participate in role-playing exercises, taking on different healthcare roles (e.g., doctor, nurse, public health official) to simulate outbreak scenarios, focusing on patient care, communication, and implementing transmission-reduction measures. [2 Hours]

Experiential-Learning Learning 6.7: Waterborne Diseases Infographic

Total Learning Hour = 1 1. Students will design infographics summarizing the epidemiological determinants of a selected waterborne disease. [1 Hour]
Experiential-Learning Learning 6.8: Health Education Campaigns on Waterborne Diseases
Total Learning Hours = 3 1. Students will research key information on waterborne infections (symptoms, transmission, prevention) and develop educational materials (e.g., posters, flyers, social media content). [1 Hour 30 Minutes] 2. They will execute an awareness campaign in a local community or school using the designed materials. [1 Hour 30 Minutes]
Experiential-Learning Learning 6.9: Public Awareness on Waterborne Diseases
Total Learning Hours = 2 1. Students will design a survey to assess public awareness and practices related to the prevention and control of waterborne diseases. [1 Hour 30 Minutes] 2. They will present the plan to peers and the teacher for feedback. [30 Minutes]
Experiential-Learning Learning 6.10: Outbreak Management of Waterborne Diseases
Total Learning Hours = 2 1. Students will review and understand key outbreak management strategies for waterborne diseases. [1 Hour] 2. The will participate in a simulated outbreak scenario, applying these strategies to control the spread of these diseases. [1 Hour]
Experiential-Learning Learning 6.11: Community-Based Intervention Plans for Waterborne Diseases
Total Learning Hour = 1 1. Students will develop a detailed community-based intervention plan, including targeted prevention strategies, education campaigns for a selected waterborne disease. [1 Hour]

Experiential-Learning Learning 6.12: Healthcare Response for Waterborne Disease Outbreak	
Total Learning Hours = 2 1. Students will participate in role-playing exercises, taking on different healthcare roles (e.g., doctor, nurse, public health official) to simulate outbreak scenarios, focusing on patient care, communication, and implementing transmission-reduction measures. [2 Hours]	
Modular Assessment	
Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be 50 marks for this module. 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. **Quiz** on topics related to this module. [50 Marks] [10 MCQs of 5 Marks Each; Questions types: Matching Questions, Reasoning and Assertion Questions, Multiple Correct Option Questions, and Single Correct Option Questions] Or **Poster presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Design and Visuals-10 Marks; Delivery-10 Marks] Or **Project work** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Project Planning and Design-30 Marks; Presentation and Documentation-20 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] &	4

Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	

Semester No : 6

Module 7 : امراض سار یہ:امراض بذریعہ حشرات الارض وحیوانات Amrāḍ Sāriyya: Amrāḍ ba-Dhari'a Ḥasharāt al-Arḍ wa Ḥaywānāt (Communicable Diseases: Vector-Borne and Zoonotic Diseases)

Module Learning Objectives

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

- Analyze the burden and transmission patterns of vector-borne and zoonotic diseases.
- Evaluate prevention and control strategies for vector-borne and zoonotic diseases.
- Apply strategies to mitigate the impact of vector-borne and zoonotic diseases in affected populations.

Unit 1 امراض بذریعہ حشرات الارض Amrāḍ ba-Dhari'a Ḥasharāt al-Arḍ (Vector borne Diseases)

7.1.1 بار، انتقال کے انداز، تحفظ وتحدید کی حکمت عملیاں برائے *Bār, Intiqāl ke Andāz, Taḥaffuẓ wa Taḥdīd kī Ḥikmat 'Amaliyyāṉ barā'e:* (Burden, Transmission Patterns, prevention, and control strategies of:)

7.1.1.1 حمیٰ اجامیہ *Ḥummā Ajjāmiya* (Malaria)

7.1.1.2 حمیٰ دنج *Ḥummā Danj* (Dengue)

7.1.1.3 چکن گنیا *Chikungunyā* (Chikungunya)

7.1.1.4 جاپانی حمیٰ دماغی *Jāpānī Ḥummā Dimāghī* (Japanese Encephalitis)

7.1.1.5 کالاآزار/ حمیٰ اسود *Kālā Āzār/Ḥummā Aswad* (Leishmaniasis)

7.1.1.6 داءالفیل لمفاویہ *Dā' al-Fīl Limfāwiya* (Lymphatic Filariasis)

References: 2,8,9

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

CO3	Describe the epidemiological determinants of vector-borne diseases.	2	Lecture	CK	Knows-how	L&PPT ,L
CO3	Investigate a case study of any vector-borne disease and propose control strategies.	2	Practical7.1	PSY-SET	Shows-how	PT,PrBL
CO3	Identify common vector-borne diseases and understand their transmission dynamics.	2	Practical7.2	PSY-SET	Shows-how	PT
CO1,CO3	Create infographics summarizing definitions, transmission methods, and classifications of selected vector-borne diseases for effective communication.	2	Experiential-Learning7.1	CAN	Does	W,SY,TUT
CO3	Design survey evaluating public knowledge regarding vector-borne diseases.	1	Experiential-Learning7.2	CE	Does	PER,SY
CO3	Design health education material aimed at raising awareness about vector-borne diseases.	1	Experiential-Learning7.3	PSY-MEC	Does	TBL,PER,RP
CO3	Understand and explain the global and local burden of vector-borne diseases and their impact on public health.	3	Lecture	PSY-SET	Knows-how	L&PPT ,L
CO3	Identify the clinical features, symptoms, and signs of common vector-borne diseases through case studies and clinical simulations.	3	Practical7.3	PSY-SET	Shows-how	PT
CO3	Apply preventive measures in reducing the transmission of vector-borne diseases.	3	Practical7.4	PSY-SET	Shows-how	PT,PER

CO3	Evaluate the effectiveness of different strategies in controlling vector-borne diseases.	2	Experiential-Learning7.4	PSY-GUD	Does	SY,PER,SIM
CO3	Develop community-based intervention plans addressing the prevention and control of vector-borne diseases.	2	Experiential-Learning7.5	PSY-SET	Does	SIM,TUT,SY
CO3	Participate in role-playing exercises simulating healthcare responses during a dengue outbreak.	3	Experiential-Learning7.6	PSY-SET	Does	FV,PER,SY

Unit 2 امراض بذریعہ حیوانات Amrāḍ ba-Dhari'a Ḥaywānāt (Zoonotic Diseases)

7.2.1 بار، انتقال کے انداز، تحفظ و تحدید کی حکمت عملیاں برائے: *Bār, Intiqāl ke Andāz, Taḥaffuẓ wa Taḥdīd kī Ḥikmat 'Amaliyyāṉ barā'e:* (Burden, Transmission Patterns, prevention, and control strategies of:)

7.2.1.1 داءالکلب *Dā' al-Kalb* (Rabies)

7.2.1.2 طاعون *Ṭā'ūn* (Plague)

7.2.1.3 داء البروسیلات *Dā' al-Brūsīlāt* (Brucellosis)

7.2.1.4 داء البریمیات *Dā' al-Barīmiyyāt* (Leptospirosis)

7.2.1.5 کیاسانور جنگلی مرض *Kiyāsānūr Jangalī Maraḍ* (Kyssanur Forest Disease)

7.2.1.6 تَیفُوسٌ اُکالیّ *Taifūs Ukālī* (Scrub Typhus)

7.2.1.7 حمیٰ کیو *Ḥummā qīw* (Q Fever)

References: 4,5,9

3A	3B	3C	3D	3E	3F	3G
CO3	Understand and explain the epidemiological determinants of zoonotic diseases.	3	Lecture	CK	Knows-how	L,L&PPT

CO3	Investigate a case study of any zoonotic disease and propose control strategies.	3	Practical7.5	PSY-SET	Shows-how	PSM,TPW,PER,PT
CO3	Identify the clinical features, symptoms, and signs of common zoonotic diseases through case studies and clinical simulations.	3	Practical7.6	PSY-SET	Shows-how	PT,PER
CO3	Demonstrate the effective communication for zoonotic diseases.	3	Experiential-Learning7.7	AFT-RES	Does	TPW,FV
CO3	Design and implement health education campaigns aimed at raising awareness about zoonotic diseases.	3	Experiential-Learning7.8	PSY-GUD	Does	PER,PrBL,DIS,TPW
CO3	Design survey, evaluating public knowledge regarding zoonotic disease.	3	Experiential-Learning7.9	PSY-GUD	Does	C_L,PER,DIS,TBL,SY
CO3	Explain the global and local burden of zoonotic diseases and their impact on public health.	2	Lecture	CK	Knows-how	L,L&PPT
CO3	Apply preventive measures to reduce the transmission of zoonotic diseases in community settings.	2	Practical7.7	PSY-SET	Shows-how	TPW,PT,PSM
CO3	Identify the clinical features, symptoms, and signs of common zoonotic diseases through clinical simulations.	2	Practical7.8	PSY-SET	Shows-how	PSM,PT
CO3	Simulate outbreak management scenarios for controlling zoonotic diseases.	2	Experiential-Learning7.10	PSY-MEC	Does	D,TBL,SIM

CO3	Develop community-based intervention plans focused on the prevention and control of zoonotic diseases.	2	Experiential-Learning7.11	CAN	Does	CBL,TPW,PER
CO3	Participate in role-playing exercises simulating healthcare responses during an outbreak of a zoonotic disease.	2	Experiential-Learning7.12	AFT-RES	Does	TPW,DIS,TUT

Practical Training Activity

Practical Training 7.1 Case-Study Analysis of Vector-Borne Disease

Total Learning Hours = 2

1. Students will investigate a case study of any vector-borne disease, analyzing its transmission dynamics, including agent, environmental and host factors. [1 Hour]
2. They will then present their findings and propose prevention and control strategies. [1 Hour]

Practical Training 7.2 Comparison of Epidemiology of Vector-Borne Diseases

Total Learning Hours = 2

1. Students will examine the transmission dynamics of different vector-borne diseases. [1 Hour]
2. Students will create a poster and present their findings to peers and teachers. [1 Hour]

Practical Training 7.3 Identification of Vector-Borne Diseases

Total Learning Hours = 3

1. Students will review case studies of common vector-borne diseases and identify key clinical features, symptoms, and signs associated with each. [2 Hours]
2. They will participate in clinical simulations to practice recognizing and diagnosing these diseases based on observed symptoms and case study information. [1 Hour]

Practical Training 7.4 Preventive Measures for Vector-Borne Diseases
Total Learning Hours = 3 1. Students will research and compile a list of recommended preventive measures for common VBDs. [2 Hours] 2. They will demonstrate and educate people on the importance of these measures in preventing the spread of VBDs. [1 Hour]
Practical Training 7.5 Case Study Analysis of Zoonotic Disease
Total Learning Hours = 3 1. Students will investigate a case study of any zoonotic disease, analysing its transmission dynamics, including agent, environmental and host factors. [2 Hours] 2. They will then present their findings and propose prevention and control strategies. [1 Hour]
Practical Training 7.6 Identification of Zoonotic Diseases
Total Learning Hours = 3 1. Students will review case studies of common zoonotic diseases (e.g., Rabies, Plague) and identify key clinical features, symptoms, and signs associated with each. [2 Hours] 2. They will participate in clinical simulations to practice recognizing and diagnosing these diseases based on observed symptoms and case study information. [1 Hour]
Practical Training 7.7 Preventive Measures For Zoonotic Diseases
Total Learning Hours = 2 1. Students will research and compile a list of recommended preventive measures for zoonotic diseases. [1 Hour] 2. They will educate people on the importance of these measures in preventing the spread of zoonotic diseases. [1 Hour]
Practical Training 7.8 Clinical Simulations for Zoonotic Diseases

Total Learning Hours = 2 1. Students will review case studies of common zoonotic diseases and identify key clinical features, symptoms, and signs associated with each. [1 Hour] 2. They will participate in clinical simulations to practice recognizing and diagnosing these diseases based on observed symptoms and case study information. [1 Hour]
Experiential Learning Activity
Experiential-Learning Learning 7.1: Vector-Borne Diseases Infographic
Total Learning Hours = 2 1. Students will design infographics summarizing the epidemiological determinants of a selected vector-borne disease. [1 Hour 30 Minutes] 2. They will present this to peers and teachers. [30 Minutes]
Experiential-Learning Learning 7.2: Public Awareness About Vector-Borne Diseases
Total Learning Hour = 1 1. Students will design a survey to assess public awareness related to the prevention of vector-borne diseases. [1 Hour]
Experiential-Learning Learning 7.3: Health Education Material on Vector-Borne Diseases
Total Learning Hour = 1 1. Students will research key information on vector-borne diseases (symptoms, transmission, prevention) and develop educational materials (posters, flyers, and social media content). [1 Hour]
Experiential-Learning Learning 7.4: Outbreak Management Scenarios for Vector-Borne Diseases
Total Learning Hours = 2 1. Students will review and understand key outbreak management strategies for VBDs. [1 Hour]

2. The will participate in a simulated outbreak scenario, applying these strategies to control the spread of VBDs. [1 Hour]

Experiential-Learning Learning 7.5: Community-Based Intervention Plans For VBDs

Total Learning Hours = 2

1. Students will research the specific needs and vulnerabilities of high-risk groups regarding VBDs. [1 Hour]
2. They will create a detailed community-based intervention plan, including targeted prevention strategies, education campaigns, for the control of VBDs. [1 Hour]

Experiential-Learning Learning 7.6: Healthcare Response For Dengue Outbreak

Total Learning Hours = 3

1. Students will participate in role-playing exercises, taking on different healthcare roles (e.g., doctor, nurse, public health official) to simulate outbreak scenarios. [2 Hours]
2. They will focus on patient care, communication, and implementing transmission-reduction measures. [1 Hour]

Experiential-Learning Learning 7.7: Zoonotic Diseases Infographic

Total Learning Hours = 3

1. Students will design infographics summarizing the epidemiological determinants like definitions, transmission methods, and classifications of selected zoonotic diseases. [2 Hour 30 Minutes]
2. They will present this to peers and teachers. [30 Minutes]

Experiential-Learning Learning 7.8: Health Education Campaign on Zoonotic Diseases

Total Learning Hours = 3

1. Students will research key information on zoonotic diseases (symptoms, transmission, prevention) and develop educational materials (e.g., posters, flyers, social media content). [2 Hours]

2. They will execute an awareness campaign in a local community or school using the designed materials. [1 Hour]
Experiential-Learning Learning 7.9: Survey on Zoonotic Diseases
Total Learning Hours = 3 1. Students will design a survey to assess public awareness and practices related to the prevention of zoonotic diseases in a community. [2 Hours] 2. They will present the plan to peers and the teacher for feedback. [1 Hour]
Experiential-Learning Learning 7.10: Outbreak Management of Zoonotic Diseases
Total Learning Hours = 2 1. Students will review and understand key outbreak management strategies, including isolation and vaccination campaigns for zoonotic diseases. [1 Hour] 2. The will participate in a simulated outbreak scenario, applying these strategies to control the spread of these diseases. [1 Hour]
Experiential-Learning Learning 7.11: Community Intervention Plan For Zoonotic Diseases
Total Learning Hours = 2 1. Students will research the intervention strategies in community settings for zoonotic diseases. [1 Hour] 2. Students will create a comprehensive, community-based intervention plan and present it to teachers for feedback and refinement. [1 Hour]
Experiential-Learning Learning 7.12: Healthcare Response During Zoonotic Disease Outbreak
Total Learning Hours = 2 1. Students will participate in role-playing exercises, assuming various healthcare roles (e.g., doctor, nurse, public health official) to simulate an outbreak scenario. 2. They will focus on patient care, communication, and implementing transmission-reduction measures to control a zoonotic disease outbreak (e.g., plague). (2 Hours)

Modular Assessment	
Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Quiz** on the topics related to this module. [50 Marks] [10 MCQs of 5 Marks Each; Questions types: Matching Questions, Reasoning and Assertion Questions, Multiple Correct Option Questions, and Single Correct Option Questions] Or **Poster presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Design and Visuals-10 Marks; Delivery-10 Marks] Or **Project work** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Project Planning and Design-30 Marks; Presentation and Documentation-20 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	4
Module 8 : اطلاقی علم الوبائیات Iṭlāqī ʻIlm al-Wabā'iyyāt (Applied Epidemiology)	
Module Learning Objectives (At the end of the module, the students should be able to)	

- Apply epidemiological methods to investigate and respond to disease outbreaks.
- Analyze the purpose, types, and applications of surveillance systems in monitoring disease trends.
- Use epidemiological data to guide public health interventions and inform policy decisions.

Unit 1 افشاءوباءکی تفتیش اور ردعمل Afshā'-i-Wabā' kī Taftīsh avr Radd-i-'Amal (Outbreak Investigation and Response)

8.1.1 وباءاور عالمی وباء کا انتظام *Wabā' avr 'Ālamī Wabā' kā Intiẓām* (Epidemic and Pandemic Management)

8.1.2 افشاءوباءکی تفتیش *Afshā'-i-Wabā' kī Taftīsh* (Outbreak investigation)

References: 1,2,6

3A	3B	3C	3D	3E	3F	3G
CO3	Describe the principles and steps involved in an outbreak investigation, including identification, assessment, and containment of infectious disease outbreaks.	2	Lecture	CK	Knows-how	L,L&PPT
CO3	Apply outbreak investigation techniques, including case definition, surveillance, and data collection, in simulated scenarios.	2	Practical8.1	PSY-SET	Shows-how	PT
CO3	Apply outbreak response tools, such as rapid diagnostic tests and contact tracing, to implement containment measures and prevent further spread.	2	Practical8.2	PSY-SET	Shows-how	PT,PER
CO3	Evaluate the role of technology in outbreak response, including the use of data analytics, mobile applications, and digital surveillance tools.	1	Experiential-Learning8.1	PSY-GUD	Does	RP,SIM,SDL
CO3	Examine a real-world epidemiology case study used to control an epidemic and assess the effectiveness of the intervention.	1	Experiential-Learning8.2	PSY-MEC	Does	FV,PER,JC

CO3	Analyze ethical dilemmas in epidemic and pandemic management.	2	Experiential-Learning8.3	CC	Does	D,SY
CO3	Describe the roles and responsibilities of public health professionals and agencies in epidemic and pandemic management, with an emphasis on coordination and communication.	3	Lecture	CK	Knows-how	L&PPT ,L
CO3	Demonstrate effective communication and coordination strategies during the management of an outbreak, focusing on community engagement and public health response.	3	Practical8.3	PSY-SET	Shows-how	PT,FV
CO3	Assess real-world field epidemiology case studies to assess investigation strategies and propose improvements based on lessons learned.	3	Practical8.4	PSY-SET	Shows-how	PT,SIM,JC
CO1,CO3	Participate in a simulated outbreak investigation, gathering and analyzing data to provide evidence-based recommendations for controlling the outbreak.	3	Experiential-Learning8.4	PSY-MEC	Does	RP,TPW,SIM
CO3	Evaluate the effectiveness of different containment strategies (e.g., quarantine, vaccination, social distancing) based on case studies of recent epidemics and pandemics.	2	Experiential-Learning8.5	CAP	Does	CBL,PER,LS
CO3	Respond to emerging data during an outbreak simulation, adjusting investigation and control measures to effectively contain the outbreak.	2	Experiential-Learning8.6	PSY-GUD	Does	TBL,SIM,PER
Unit 2 نظامہائے نگرانی Niẓāmhā'e Nigrānī (Surveillance Systems) 8.2.1 مقاصدواقسام *Maqāṣid-o-Aqsām* (Purpose and Types)						

8.2.2صحتِ عامہ میں استعمالات Ṣiḥḥat ʿĀmma mēn̲ Istiʿmāl̄āt (Applications in Public Health) **References:** 4,5,10						
3A	**3B**	**3C**	**3D**	**3E**	**3F**	**3G**
CO3	Describe the purpose and types of surveillance systems used in public health.	2	Lecture	CK	Knows-how	L&PPT ,L
CO3	Design a disease surveillance system, outlining data collection methods, key indicators, and reporting structures.	2	Practical8.5	PSY-SET	Shows-how	PT,PER,SIM
CO3	Evaluate an existing disease surveillance system by identifying its strengths, weaknesses, and potential areas for improvement.	2	Practical8.6	PSY-SET	Shows-how	PT,LS,JC
CO3	Evaluate the strengths and weaknesses of different surveillance systems in various public health contexts using real-world case studies.	2	Experiential-Learning8.7	CAN	Does	PBL,TBL,C_L,SIM
CO3	Assess the ethical and privacy concerns related to the use of surveillance systems, considering informed consent and data protection.	2	Experiential-Learning8.8	CAP	Does	PBL,W,PER,SY
CO3	Analyze the response to an outbreak using surveillance data, adjusting control measures based on the evolving situation.	2	Experiential-Learning8.9	PSY-ADT	Does	TPW,SIM
CO3	Describe the applications of surveillance systems in public health for disease monitoring, outbreak detection, and informing public health policies.	3	Lecture	CK	Knows-how	L&PPT ,L

CO3	Collect, analyze, and interpret data from surveillance systems to identify trends, clusters, and potential outbreaks.	3	Practical8.7	PSY-SET	Shows-how	DIS,SY,JC
CO3	Apply epidemiological methods to assess the effectiveness and reliability of surveillance data in guiding public health decisions.	3	Practical8.8	PSY-SET	Shows-how	PT,PSM
CO3	Develop a comprehensive report evaluating the role of surveillance systems in managing public health emergencies and improving health outcomes.	4	Experiential-Learning8.10	PSY-MEC	Does	JC,SY,TPW,W
CO3	Apply hands-on experience in using digital tools and software for data visualization and analysis in a public health surveillance context.	3	Experiential-Learning8.11	CAP	Does	JC,LS
CO3	Interpret complex surveillance data, identifying potential health threats, and providing data-driven recommendations for effective interventions.	2	Experiential-Learning8.12	CAN	Does	SY,SIM,PER,RP

Practical Training Activity

Practical Training 8.1 Outbreak Investigation in Simulated Environment

Total Learning Hours = 2

1. Create a simulated outbreak scenario (e.g., a viral infection in a community). Collect Data. [1 Hour]
2. Based on simulated findings, apply outbreak control measures (e.g., isolation, quarantine, vaccination). [1 Hour]

Practical Training 8.2 Utilization of Outbreak Response Tools

Total Learning Hours = 2

1. The teacher will instruct students on outbreak response tools to identify affected individuals. [1 Hour]
2. Students will engage in discussions on how to apply these tools to prevent the further spread of the outbreak. [1 Hour]

Practical Training 8.3 Effective communication and coordination strategies during an outbreak
Total Learning Hours = 3 1. Students will create communication strategies to inform the community about the outbreak, its risks, and preventive measures. [2 Hours] 2. They will discuss strategies for coordinating with public health agencies and stakeholders to ensure a unified and timely response, fostering collaboration and efficient resource allocation. [1 Hour]
Practical Training 8.4 Reviewing Real-World Field Epidemiology Case Studies
Total Learning Hours = 3 1. Students will review documented field epidemiology case studies and assess the effectiveness of outbreak investigation and response strategies. [2 Hours] 2. They will prepare a report highlighting key lessons learned from the case studies. [1 Hour]
Practical Training 8.5 Designing a Disease Surveillance System
Total Learning Hours = 2 1. Students will design a surveillance system for a selected disease within a specific population, outlining data collection methods and key indicators. They will also establish a reporting structure for efficient monitoring and response. [2 Hours]
Practical Training 8.6 Evaluating Existing Surveillance System
Total Learning Hours = 2 1. Students will assess the components of the disease surveillance system, including data collection methods, reporting processes, and data accuracy, to identify strengths and weaknesses. [1 Hour] 2. They will propose improvements for the surveillance system, considering efficiency, coverage, and timeliness in responding to health threats. [1 Hour]
Practical Training 8.7 Analysis and Interpretation of Surveillance Data

Total Learning Hours = 3

1. Students will collect accurate and comprehensive data from surveillance systems, including cases, symptoms, demographics, and geographic distribution. [1 Hour]
2. They will analyze the data to identify trends, clusters, or unusual patterns. [1 Hour]
3. Based on their findings, students will make informed recommendations for further investigation or intervention. [1 Hour]

Practical Training 8.8 Reliability of surveillance data

Total Learning Hours = 3

1. Students will apply epidemiological methods to evaluate the quality, accuracy, and reliability of surveillance data, focusing on data validity and consistency. [2 Hours]
2. They will assess the effectiveness of the data in guiding public health decisions with teacher guidance. [1 Hour]

Experiential Learning Activity

Experiential-Learning Learning 8.1: Role of technology in outbreak response

Total Learning Hour = 1

1. Students will investigate the use of technology in outbreak response by exploring data analytics, mobile applications, and digital surveillance tools to enhance detection, monitoring, and response efforts. [1 Hour]

Experiential-Learning Learning 8.2: Applied Case Study

Total Learning Hour = 1

1. Students will review a case study in which epidemiology was used to control an outbreak and discuss the effectiveness of the interventions. [1 Hour]

Experiential-Learning Learning 8.3: Ethical dilemmas in epidemic and pandemic management

Total Learning Hours = 2

1. Students will engage in a debate on ethical dilemmas in epidemic and pandemic management, examining the balance between public health measures and individual rights. [2 Hours]

Experiential-Learning Learning 8.4: Role Play in Simulated Outbreak Investigation

Total Learning Hours = 3

1. Students will participate in the simulation by identifying and collecting relevant data from simulated cases, including symptoms, exposures, and demographics. They will identify patterns and potential sources of the outbreak using epidemiological methods. [2 Hours]
2. They will develop evidence-based recommendations for controlling the outbreak, such as quarantine measures, vaccination, or other interventions, and present them to the group. [1 Hour]

Experiential-Learning Learning 8.5: Effectiveness of different containment strategies

Total Learning Hours = 2

1. Students will review case studies of recent epidemics and pandemics to assess the application of containment strategies such as quarantine, vaccination, and social distancing. [1 Hour]
2. They will analyze the effectiveness of each strategy in controlling the outbreak and will discuss with peers and the teacher. [1 Hour]

Experiential-Learning Learning 8.6: Interactive Outbreak Drill

Total Learning Hours = 2

1. Students will participate in a simulated outbreak response drill, where they will analyze new data and adapt their investigation and control measures as needed. [2 Hours]

Experiential-Learning Learning 8.7: Critical Evaluation of Surveillance Systems

Total Learning Hours = 2

1. Students will review case studies to identify the strengths and weaknesses of various surveillance systems, considering factors like data accuracy, timeliness, and population coverage. [1 Hour]
2. They will critically assess how different surveillance systems perform in diverse public health contexts and present the findings to the teacher. [1 Hour]

Experiential-Learning Learning 8.8: Ethical and privacy concerns in surveillance systems

Total Learning Hours = 2

1. Students will identify ethical and privacy concerns related to surveillance systems, focusing on issues like informed consent, data security, and the potential for misuse of personal health information. [1 Hour]
2. They will also evaluate the legal and ethical frameworks for protecting individuals' rights, ensuring data confidentiality, and balancing public health goals with privacy protections. [1 Hour]

Experiential-Learning Learning 8.9: Interactive Surveillance Simulation

Total Learning Hours = 2

1. Students will analyze surveillance data during the simulation to assess the outbreak's progression. [1 Hour]
2. They will adjust control measures (e.g., quarantine, vaccination, social distancing) based on evolving data to contain the outbreak and minimize its spread. [1 Hour]

Experiential-Learning Learning 8.10: Surveillance systems in managing public health emergencies

Total Learning Hours = 4

1. Students will research and analyze the role of surveillance systems in managing public health emergencies, focusing on their effectiveness in early detection, response, and monitoring. [2 Hours]
2. They will evaluate the impact of surveillance systems on improving health outcomes, considering factors like timely interventions, resource allocation, and disease prevention. [1 Hour]

3. They will compile findings into a comprehensive report, summarizing key insights, challenges, and recommendations for enhancing surveillance systems. [1 Hour]

Experiential-Learning Learning 8.11: Digital tools in public health surveillance

Total Learning Hours = 3

1. Students will use digital tools and software to visualize surveillance data, creating charts, graphs, and maps to identify trends, patterns, and potential outbreaks. [2 Hours]
2. They will also analyze the data using relevant software to reach a conclusion. [1 Hour]

Experiential-Learning Learning 8.12: Interpreting complex surveillance data

Total Learning Hours = 2

1. Students will interpret complex surveillance data to identify patterns, trends, and potential health threats. They will then formulate data-driven recommendations for public health interventions based on the identified risks and the analysis of the findings. [2 Hours]

Modular Assessment

Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Project** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Project Planning and Design-30 Marks; Presentation and Documentation-20 Marks] Or **Structured essay** on any topic related to this module. [50 Marks]	4

[**Assessment Criteria:** Content-30 Marks; Organization-10 Marks; Presentation and Language-10 Marks] Or **Poster Presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Design and Visuals-10 Marks; Delivery-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	

Paper No : 2(تغذیہ، طرزِ زندگی اور امراض غیرساریہ Taghdhiya, Ṭarz-i-Zindagī avr Amrāḍ Ghayr Sāriyya (Nutrition, Lifestyle and Non-Communicable Diseases))

Semester No : 3

Module 9 : اصول تغذیہ وغذائی ضروریات Uṣūl-i-Taghdhiya wa Ghidhā'ī Ḍarūriyyāt (Principles of Nutrition and Nutritional Requirements)

Module Learning Objectives

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

1. Describe fundamental nutrition concepts, including key terminologies, food classifications, and Unani perspectives (*Ghidha*, *Taghdhia*).
2. Calculate daily nutritional intake and energy requirements using dietary assessment tools.
3. Appreciate the role of balanced nutrition in promoting health and preventing disease, demonstrating a commitment to educating patients on healthy eating habits.

Unit 1 تغذیہ کے بنیادی نظریات Taghdhiya kē Bunyādī Naẓariyyāt (Core Concepts in Nutrition)

9.1.1 تغذیہ سے متعلق بنیادی اصطلاحات کا تعارف: غذا، خوراک، طعام، تغذیہ، مغذی، علم تغذیہ، ماہر غذائیات، غذائے وظیفی (فعال غذا)، غذائے مطلق، غذائے دوائی، دوائے غذائی۔ *Taghdhiya sē Muta'alliq Bunyādī Iṣtilāḥāt kā Ta'āruf: Ghidhā', Khorāk, Ṭa'ām, Taghdhiya, Mughadhdhī, 'Ilm-i-Taghdhiya, Māhir-i-Ghidhā'iyyāt, Ghidhā' Waẓīfī (Fa''āl Ghidhā'), Ghidhā' Mutlaq, Ghidhā' Dawā'ī, Dawā' Ghidhā'ī,* (Definitions of Key Nutritional Terms: Food, Diet, Meal, Nutrition, Nutrient, Dietetics, Dietician, Functional Food, Absolute Diet, Nutraceuticals)

9.1.2 غذا کی درجہ بندی: بلحاظ تولید اخلاط، افعال، ماخذ، ترکیب و غذائی اہمیت *Ghidhā' kī Darjabandī: ba Liḥāẓ Tawlid-i-Akhlāṭ, Af'āl, Mākhadh, Tarkīb wa Ghidhā'ī Ahammiyyat* (Classification of Foods: Based on Formation of Humours, Functions), Origin, Composition, and Nutritional Value)

9.1.3 مغذیہ کبیرہ: نشاشتہ جات، لحمیات، شحمیات کے افعال اور ان کی یومیہ ضرورت *Mughadhdhiyya Kabīra: Nashāshtajāt, Laḥamiyyāt, Shaḥmiyyāt kē Af'āl avr in kī Yavmiya Ḍarūrat* (Macronutrients: Carbohydrates, Proteins, Fats, their functions and daily requirements)

9.1.4 مغذیہ صغیرہ: حیاتین و معدنیات اور صحت کے برقرار رکھنے میں ان کا کردار *Mughadhdhiyya Ṣaghīra: Ḥayātīn-o-Ma'daniyyāt avr Ṣiḥḥat kē Barqarār Rakhnē mēn in kā Kirdār* (Micronutrients: Vitamins and Minerals, and their Roles in Maintaining Health)

9.1.5 مجوزہ خوراک: لحمیات، شحمیات، نشاشتہ جات، حیاتین و معدنیات *Mujawwaza Khorāk: Laḥamiyyāt, Shaḥmiyyāt, Nashāshtajāt, Ḥayātīn-o-Ma'daniyyāt* (Recommended Intakes: Proteins, Fats, Carbohydrates, Vitamins and Minerals)

References: 64,67,68,69,71,72,73

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO5	Define and describe Key Nutritional terms and Classify Foods on various basis	5	Lecture	CC	Knows-how	L&PPT ,DIS,L&GD,L_VC,FC
CO1,CO2, CO3,CO5	Illustrate the nutritional value of various foods, highlighting their role in promoting health and preventing disease.	10	Practical9.1	CAP	Shows-how	TUT,TBL,DIS,FC
CO1,CO2, CO3,CO5	Educate and engage the public on Unani diet and nutrition principles through interactive awareness programs in hospitals and communities.	8	Experiential-Learning9.1	PSY-MEC	Does	RP,TPW,DIS,BS

Unit 2 متوازن غذا اور غذائی ضرورت Mutawāzin Ghidhā' avr Ghidhā'ī Ḍarūrat (Balanced Diet and Nutritional Needs)

9.2.1 متوازن غذا کی تخطیط اور غذائی اہداف کی تفہیم *Mutawāzin Ghidhā' kī Takẖṭīṭ avr Ghidhā'ī Ahdāf kī Tafhīm* (Designing a Balanced Diet and Understanding Dietary Goals)

9.2.2 نظریہ ہرم غذائی و طبق غذائی *Nazariya-i-Haram Ghidhā'ī wa Ṭabaq Ghidhā'ī* (Concept of the Food Pyramid and Food Plate)

9.2.3 عمر، جنس اور درجات حرکات جسمانی کے لحاظ سے غذائی ضرورت *'Umr, Jins avr Darjāt-i-Ḥarakāt Jismanī kē Liḥāẓ sē Ghidhā'ī Ḍarūrat* (Nutritional Requirement based on Age, Gender and Physical Activity Levels)

9.2.4 حاملہ، مرضعہ اور دیگر ابدان ضعیفہ کے لحاظ سے غذائی ضرورت *Ḥāmila, Murḍi'a avr Dīgar Abdān Ḍa'īfa kē Liḥāẓ sē Ghidhā'ī Ḍarūrat* (Nutritional Requirement for Pregnant, Lactating Women and Other Vulnerable Groups)

9.2.5 تغذیہ ریاضیہ: مختلف کھیلوں کے لحاظ سے غذائی سفارشات *Taghdhiya Riyāḍiya: Mukhtalif Khelon kē Liḥāẓ sē Ghidhā'ī Sifārishāt* (Sports Nutrition: Nutritional Needs in Sports and High-Performance Activities)

References: 1,15,16,18,20,25,60,64,67,69

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

CO1,CO2, CO3,CO5	Describe concept of Balanced Diet and Dietary Goals.	5	Lecture	CE	Knows-how	L_VC,L&GD,TUT,DIS, L&PPT
CO1,CO2, CO3,CO5	Designing of balanced diet for healthy individuals, patients and sports persons considering their specific nutritional needs.	10	Practical9.2	PSY-GUD	Shows-how	TUT,BS,PBL,DIS
CO1,CO2, CO3,CO5	Apply the principles of *Kulliyyāt-i-Akl-i-Ṭa'ām*, *Uṣūl-i-Taghdhiya, Sharā'iṭ-i-Ghidhā',* and *Aḥkām-i-Ghidhā' wa Ghidhā fī Ādāb* to enhance community nutrition awareness.	8	Experiential-Learning9.2	CAN	Does	SDL,PL,FV,LS
CO1,CO2, CO3,CO5	Appraise hospital and health center diet plans for nutritional adequacy, patient suitability, and effectiveness in health and disease management.	10	Experiential-Learning9.3	CAN	Does	BS,CBL,RLE,PBL,IBL

Practical Training Activity

Practical Training 9.1 Nutritive Value of Different Foods

Total Learning Hours = 10

1. The teacher will teach the students about the basic nutritional components. [2 Hours]
2. Students will be assigned a specific food item or a group of food items to analyze.
3. They will assess the nutrient profile of each item, including its macronutrient and micronutrient content (e.g., calories, protein, vitamins, minerals). [3 Hours]
4. Students will create charts or tables to present their findings, comparing the nutrient content of various foods. [3 Hours]
5. Students will present their analysis of the nutritional value of different foods to the class. [2 Hours]

Practical Training 9.2 Meal Planning for healthy, sick and sports persons

Total Learning Hours = 10

1. The teacher will guide the students in meal planning for healthy, Sick and Sports persons. [3 Hours]
2. Students will individually or in groups design a balanced diet plan for a healthy, Sick and Sports persons separately. [4 Hours]
3. Students will present their designed diet plans to the class. [2 Hours]
4. The teacher will provide feedback on the designed diets. [1 Hour]

Experiential Learning Activity

Experiential-Learning Learning 9.1: Nutrition Awareness Programs

Total Learning Hours = 8

1. Group discussion on the role of food in health and disease prevention. [1 Hour]
2. Brainstorm key messages for public awareness. [2 Hours]
3. Develop scripts for *Nukkaṛ Nāṭak* (street play) on good and bad dietary habits. [2 Hours]
4. Conduct awareness sessions. [3 Hours]

Experiential-Learning Learning 9.2: Applicability of *Kulliyyāt-i-Akl-i-Ṭa'ām* in Community Nutrition

Total Learning Hours = 8

1. Explore references on nutrition and dietary principles from Unani texts. [3 Hours].
2. Share insights from the literature review with the teachers and peers [1 Hour].
3. Design pamphlets, posters, and digital content for public awareness. [3 Hours]
4. Showcase prepared materials and receive feedback. [1 Hour]

Experiential-Learning Learning 9.3: Assessment of Dietary Plans

Total Learning Hours = 10

1. Students will visit designated healthcare centers or hospitals.

2. Observe meal preparation, storage, and serving practices. [2 Hours]
3. Assess hygiene, portion control, and adherence to dietary recommendations. [2 Hours]
4. Interact with dietitians, healthcare providers, and patients. [2 Hours]
5. Summarize findings from observations and interviews. [2 Hours]
6. Students will present a structured report summarizing their findings. [2 Hours]

Modular Assessment

Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Quiz** on any topic related to this module. [50 Marks] [10 MCQs of 5 Marks Each; Questions types: Matching Questions, Reasoning and Assertion Questions, Multiple Correct Option Questions, and Single Correct Option Questions] Or **Case study** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Understanding of the Case-20 Marks; Analysis of Key issues-20 Marks; Presentation and Structure-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	4

Module 10 : غذائی تجزیہ وتغذیہ برائے صحت عامہ Ghidhaʾī Tajziyya wa Taghdhiya baraʾe Ṣiḥḥat ʻĀmma (Nutritional Assessment and Public Health Nutrition)

Module Learning Objectives

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

- Describe the methods and indicators of nutritional assessment, including anthropometric, biochemical, clinical, and dietary data.
- Conduct a comprehensive nutritional assessment using standard procedures in a clinical or community setting.
- Analyze empathy and cultural sensitivity while assessing the nutritional needs of individuals from diverse backgrounds.

Unit 1 غذائی احوال کا تجزیہ Ghidhā'ī Aḥwāl kā Tajziyya (Assessment of Nutritional Status)

10.1.1 غذائی جانچ کے طریقۂ کار: جسمانی پیمائش، طبی معائنہ، معملی و حیاتیاتی کیمیائی جانچ، اور غذائی خوراک کا تجزیہ *Ghidhā'ī Jānch kē Tarīqa-i-Kār: Jismānī Payma'ish, Ṭibbī Mu'āina, Ma'malī wa Ḥayātī Kīmiyā'ī Jānch, avr Ghidhā'ī Khurāk kā Tajziyya* (Methods of Nutritional Assessment: Anthropometry, Clinical Examination, Laboratory and Biochemical Assessment, and Dietary Intake Evaluation)

10.1.2 غذائی احوال کے اشاریے: عوامی صحت کی کلیدی علامات کی سراغ رسانی، (پست قامتی، ہزال، نقص وزن، بی ایم آئی {جسمانی کمیت اشاریہ}، مغذیہ صغیرہ کے درجات) *Ghidhā'ī Aḥwāl kē Ishāriyē: 'Awāmī Ṣiḥḥat kī Kalīdī 'Alāmāt kī Surāgh Rasānī (Past Qāmatī, Huzāl, Naqṣ-i-Wazan, BMI (Jismānī Kammiyyat Ishāriyya), Mughadhdhiyya Ṣaghīra kē Darjāt* (Nutritional Status Indicators: Tracking key markers of population health [Stunting, Wasting, Underweight, BMI {Body Mass Index}, Micronutrient levels])

10.1.3 غذائی نگہداشت: عوامی تغذیاتی درجات میں اختطاری عوامل کی شناخت اور مداخلت کے مواقع میں نگرانی کے رجحانات *Ghidhā'ī Nigahdāsht: 'Awāmī Tghdhiyyātī Darjāt mēn Ikhṭiṭārī 'Awāmil kī Shanākht avr Mudākhilat kē Mawāqi' mēn Nigrānī kē Rujḥānāt* (Nutritional Surveillance: Monitoring trends in population-level nutrition to identify risk factors and areas for intervention)

References: 1,2,3,4,12,13,14,18,19,26,27,28,30,34,43,44,47,52,57,74,75

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO5	Understand various tools and techniques of Nutritional Assessment	5	Lecture	CAP	Knows-how	BS,L&PPT ,L_VC,TUT,DIS
CO1,CO2, CO3,CO5	Perform the nutritional assessment using various methods in different groups.	10	Practical10.1	PSY-GUD	Shows-how	PBL,CBL,PrBL

CO1,CO2, CO3,CO5	Monitor population-level nutrition trends to identify key nutritional risk factors and areas for targeted intervention.	10	Experiential-Learning10.1	CC	Does	TPW,BS,RLE,PL,DIS

Unit 2 تغذیہ برائے صحت عامہ Taghdhiya barā'e Ṣiḥḥat 'Āmma (Public Health Nutrition)

10.2.1 صحت عامہ کے غذائی مسائل: پیدائشی نقص وزن، نقص تغذیہ، جفاف العین، فقر الدم غذائی، اضطراب نقص الیود، تسمم متوطن فلوری، تسمم جلبانی کے اسباب، اثرات اور تحفظی تدابیر *Ṣiḥḥat 'Āmma kē Ghidhā'ī Masā'il: Paydā'ishī Naqṣ-i-Wazan, Naqṣ-i-Taghdhiyya, Jafāf al-'Ayn, Faqruddam Ghidhā'ī, Iḍtirab-i-Naqṣ al-Yūd, Tasammum-i-Mutawaṭṭin Florī, Tasammum-i-Jalbānī kē Asbāb, Atharāt, avr Taḥaffuẓī Tadābīr* (Nutritional Problems in Public Health: Causes, Impact and Preventive Measures of Low Birth Weight, Undernutrition, Xerophthalmia, Nutritional Anaemia, Iodine Deficiency Disorders, Endemic Fluorosis, Lathyrism-Burden)

10.2.2 غذائی عوامل برائے امراض غیر سار یہ: امراض قلب و دوران خون، ذیابیطس، سمن مفرط و سرطان *Ghidhā'ī 'Awāmil barā'e Amrāḍ Ghayr Sāriyya: Amrāḍ-i-Qalb-o-Dawran-i-Khūn, Dhayābīṭus, Siman Mufṛit wa Saṛtān* (Nutritional Factors in Non-Communicable Diseases: Cardiovascular Diseases, Diabetes, Obesity and Cancer)

References: 42,43,44,47,48,49,50,51,52,53,54,55,56,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO5	Describe Nutritional Problems in Public Health	5	Lecture	CE	Knows-how	L&PPT ,W,L_VC,L&GD
CO1,CO2, CO3,CO5	Demonstrate the role of nutritional factors in Non-Communicable Diseases (NCDs).	10	Practical10.2	PSY-ORG	Shows-how	DIS,BS,TUT,SY
CO1,CO2, CO3,CO5	Assess the nutritional risk factors contributing to Non-Communicable Diseases (NCDs) through surveys.	8	Experiential-Learning10.2	CAN	Does	TPW,JC,FV,LS
CO1,CO2, CO3,CO5	Analyze the prevalence and impact of nutritional deficiency disorders in the field area.	8	Experiential-Learning10.3	CAN	Does	TPW,IBL,FV

Practical Training Activity

Practical Training 10.1 Nutritional Assessment

Total Learning Hours = 10

1. The teacher will introduce various methods of nutritional assessment (e.g., dietary recall, food frequency questionnaires, anthropometric measurements, and biochemical tests) and explain their applications for different population groups. [2 Hours]
2. Students will be divided into groups and assigned different population groups (children, adults, elderly, pregnant women, etc.). [4 Hours]
3. Students will analyze the collected data to assess the nutritional status of their assigned population. [2 Hours]
4. Students will prepare a report and present their findings. [2 Hours]

Practical Training 10.2 Nutritional Factors of Non-Communicable Diseases (NCDs)

Total Learning Hours = 10

1. The teacher will provide an overview of how nutrition influences the development and progression of NCDs. [2 Hours]
2. Students will research scientific literature and data on the role of nutrition in the prevention and management of NCDs. [4 Hours]
3. Students will create informative charts and posters illustrating the connection between specific nutritional factors and NCDs. [3 Hours]
4. Student will present their charts and posters to the class. [1 Hour]

Experiential Learning Activity

Experiential-Learning Learning 10.1: Identification of Nutritional Risk Factors and Areas for Intervention

Total Learning Hours = 10

1. The teacher will divide students into groups and assign specific field areas (communities, hospitals, etc.) for monitoring trends in population-level nutrition. [1 Hour]
2. Students will conduct surveys, interviews, or observational assessments in their designated field areas. [5 Hours]
3. They will analyze the collected data to identify common nutritional risk factors in their assigned areas. [2 Hours]
4. They will present a summary of findings with suggestions for nutritional interventions. [2 Hours]

Experiential-Learning Learning 10.2: Nutritional Risk Factors of NCDs	
Total Learning Hours = 8 1. Students will survey a designated location and collect data on nutritional practices. [4 Hours] 2. Students will analyze the collected data to identify prevalent nutritional risk factors in the population. [2 Hours] 3. They will compile the findings into a report. [1 Hour] 4. They will discuss the findings with teachers and peers. [1 Hour]	
Experiential-Learning Learning 10.3: Assessment of Nutritional Deficiency Disorders	
Total Learning Hours = 10 1. Students will survey a selected field area (community, village, or hospital). [5 Hours] 2. Analyze the collected data to quantify the prevalence. [2 Hours] 3. Compile findings into a structured report, summarizing the causes, impact, and recommended preventive measures. [3 hours]	
Modular Assessment	
Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Case Study** on Anthropometric Measurements. [50 Marks] [**Assessment Criteria:** Understanding of the Case-20 Marks; Analysis of Key issues-20 Marks; Presentation and Structure-10 Marks] Or	4

Presentation on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	

Semester No : 4

Module 11 : اطلاقی تغذیہ برائے صحت ومرض Iṭlāqī Taghdhiyya barā'e Ṣiḥḥat-o-Maraḍ (Applied Nutrition in Health and Disease)

Module Learning Objectives

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

- Describe the principles of nutrition in health promotion, Unani dietary concepts, and nutrition management for different life stages and diseases.
- Develop balanced and therapeutic diet plans for individuals based on temperament, seasonal variations, and specific health conditions.
- Assess and recommend dietary modifications through case studies, patient interactions, and real-world nutritional interventions.

Unit 1 تغذیہ برائے افزائش صحت Taghdhiyya barā'e Ifzā'ish-i-Ṣiḥḥat (Nutrition for Health Promotion)

11.1.1 مختلف المزاج افراد کی غذائی تدبیر *Mukhtalif al-Mizāj Afrād kī Ghidhā'ī Tadbīr* (Diet for Individuals of different Temperament)

11.1.2 مختلف فصل کی غذائی تدبیر *Mukhtalif Fuṣūl kī Ghidhā'ī Tadbīr* (Diet in different Seasons)

11.1.3 نتائج صحت کی بہتری میں غذائے وظیفی اور غذائے دوائی کا کردار *Natā'ij-i-Ṣiḥḥat kī Bihtarī mēn Ghidhā' Waẓīfī avr Ghidhā' Dawā'ī kā Kirdār* (Role of Functional foods and nutraceuticals in improving health outcomes)

11.1.4 فروغ صحت اور مختلف مرضی احوال کی یونانی طبی ذخائر میں مذکور مخصوص غذائیں *Farogh-i-Ṣiḥḥat avr Mukhtalif Maraḍī Aḥwāl kī Yūnānī Ṭibbī Dhakhā'ir mēn Madhkūr Makhṣūṣ Ghidhā'ēn* (Special Foods mentioned in Unani Medical Literatures for Health Promotion and Different Disease Conditions)

11.1.5 مختلف ادوار حیات اور صحتی حالات میں غذائی ترمیمات کا دستور العمل *Mukhtalif Adwār-i-Ḥayāt avr Ṣiḥḥatī Ḥālāt mēn Ghidhā'ī Tarmīmāt kā Dastūr al-'Amal* (Guidelines for dietary modifications during different life stages and health conditions)

11.1.6 تغذیہ برائے نومولود، اطفال، نوجوان، حاملہ و مرضعہ اور مشائخ *Taghdhiya barā'ē Navmawlūd, Aṭfal, Navjavān, Ḥāmila wa Murḍi'a avr Mashā'ikh* (Nutrition for infants, children, adolescents, pregnant and lactating women, and the elderly)

References: 11,15,16,17,18,19,20,25,61,62,63,64,65,66,67,68,69,70,71,72,73

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO5	Describe different type of diets according to age, sex, temperament and season.	5	Lecture	CAP	Knows-how	TUT,L&PPT ,DIS,BS,L&GD
CO1,CO2, CO3,CO5	Evaluate the role of Unani nutraceuticals used in health and disease conditions.	10	Practical11.1	PSY-GUD	Shows-how	CBL,LS,L&GD,BS,FC
CO1,CO2, CO3,CO5	Apply the principles of nutrition in real-life scenarios and develop personalized dietary recommendations for health promotion and disease prevention.	10	Experiential-Learning11.1	PSY-ADT	Does	RLE,FV,PBL

Unit 2 تغذیہ برائے مداوات امراض Taghdhiya barā'ē Madāwāt-i-Amrāḍ (Nutrition for Disease Management)

11.2.1 غذائی تدابیر برائے امراض غیر سار یہ: امراض قلب و دوران خون، ذیابیطس، سمن مفرط و سرطان *Ghidhā'ī Tadābīr barā'ē Amrāḍ Ghayr Sāriyya: Amrāḍ-i-Qalb-o-Dawran-i-Khūn, Dhayābīṭus, Siman Mufriṭ wa Saṛtān* (Nutrition management of non-communicable diseases: Cardiovascular Diseases, Diabetes, Obesity, and Cancer)

11.2.2 غذائی تدابیر برائے امراض مزمنہ: امراض گردہ، جگر کی خرابیاں اور امراض معدہ و امعاء *Ghidhā'ī Tadābīr barā'ē Amrāḍ Muzmina: Amrāḍ-i-Gurda, Jigar kī Kharābiyān avr Amrāḍ-i-Mi'da-o-Am'ā'* (Nutritional management of chronic illnesses: Renal disease, Liver disorders, and Gastrointestinal disorders)

References: 11,15,16,17,18,19,20,43,44,47,61,62,63,64,65,66,67,68,69,70,71,72,73

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

CO1,CO2, CO3,CO5	Describe the methods of dietary management of Chronic Renal diseases, Liver disorders, and gastrointestinal disorders with special reference to Unani Medicine	5	Lecture	CS	Knows-how	DIS,L_VC,TUT,L&GD, L&PPT
CO1,CO2, CO3,CO5	Develop diet plans for diabetics/hypertensives/obese individuals.	10	Practical11.2	PSY-GUD	Shows-how	FV,RP,BS,DIS,TUT
CO1,CO2, CO3,CO5	Plan and conduct a health education session on nutrition in NCDs in community or hospital settings.	10	Experiential-Learning11.2	PSY-ADT	Does	FV,SDL
CO1,CO2, CO3,CO5	Evaluate the impact of dietary modifications on health promotion by analyzing specific cases.	6	Experiential-Learning11.3	CAN	Does	SDL,BS,FV,DIS

Practical Training Activity

Practical Training 11.1 Unani Nutraceuticals

Total Learning Hours = 10

1. The teacher will introduce Unani nutraceuticals and their role in health promotion and disease prevention. [3 Hours]
2. Students will review literature and document various Unani nutraceuticals used for managing different disease conditions. [4 Hours]
3. Students will create informative posters and charts highlighting the benefits of Unani nutraceuticals in health promotion and disease prevention. [3 Hours]

Practical Training 11.2 Diet Planning

Total Learning Hours = 10

1. Students will be trained by the teacher for meal planning of specific cases. [4 Hours]
2. Students will prepare diet plans for diabetics, hypertensives, and obese patients. [4 Hours]
3. Students will present their diet plans to teachers and peers. [2 Hours]

Experiential Learning Activity	
Experiential-Learning Learning 11.1: Nutrition in Real-Life Scenarios	
Total Learning Hours = 10 1. Students will prepare IEC material for the demonstration of the role of nutrition in health promotion and disease prevention. [4 Hours] 2. Students will visit a designated location and provide tailored dietary recommendations based on individual *Mizāj* and health conditions, integrating both Unani and contemporary nutritional approaches. [5 Hours] 3. Students will record counseling outcomes in the form of feedback. [1 Hour]	
Experiential-Learning Learning 11.2: Health Education on Nutrition in NCDs	
Total Learning Hours = 10 1. Students will prepare educational materials (posters, pamphlets, and presentations) on the role of nutrition in preventing and managing NCDs. [5 Hours] 2. Students will deliver an interactive lecture to the targeted audience in different settings. [4 Hours] 3. Students will conduct and distribute self-monitoring dietary charts to the targeted population. [1 Hour]	
Experiential-Learning Learning 11.3: Impact of Dietary Modifications on Health Promotion	
Total Learning Hours = 6 1. Students will survey a designated location and collect data from one or two individuals following specific diet plans. [3 Hours] 2. Students will analyze the data and document health improvements. [2 Hours] 3. They will prepare reports and present their observations. [1 Hour]	
Modular Assessment	
Assessment	**Hour**

Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Case Presentation on** Nutrition in Specific Diseases. [50 Marks] [**Assessment Criteria:** Understanding of the Case-20 Marks; Analysis of Key issues-20 Marks; Presentation and Structure-10 Marks] Or **Presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential as portfolios/reflections/presentations can be taken as assessment. [25 Marks]	4
Module 12 : امراض بذریعہ غذائی آلودگی وغذائی حفظان صحت Amrāḍ ba Dhari'a Ghidhā'ī Ālūdgī wa Ghidhā'ī Ḥifẓān-i-Ṣiḥḥat (Foodborne Diseases and Food Hygiene)	
Module Learning Objectives (At the end of the module, the students should be able to) • Describe the classification, causes, and prevention of foodborne intoxications and infections, along with food hygiene principles. • Demonstrate proper food handling, sanitation practices, and hygiene protocols for different food items and food service environments. • Assess food safety risks, conduct hygiene audits, and apply preventive strategies in real-world food handling settings.	
Unit 1 تسمم غذائی Tasammum Ghidhā'ī (Foodborne Intoxications) 12.1.1 تعریف ودرجہ بندی *Ta'rīf wa Darjabandī* (Definition and Classification)	

12.1.2 سموم غذائی کبیرہ: افلاٹاکسین، ارگاٹ، جلودھر وبائی، استسقائے وطنی اور فیوساریم ٹاکسنس کے ماخذ، صحتی اثرات اور تحفظی تدابیر *Sumūm-i-Ghidhā'ī Kabīra: Aflatoxin, Ergot, Jalodhar Waba'ī, Istisqā' Waṭanī, avr Fusarium Toxins kē Mākhaz, Ṣiḥḥat Atharāt avr Tahaffuẓī Tdābīr* (Major Food Intoxicants: Sources, Health Impact, and Prevention of Aflatoxins, Ergot, Epidemic Dropsy, Endemic Ascites, Fusarium Toxins)

References: 12

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO5	Define and classify the Food intoxicants	5	Lecture	CE	Knows-how	FC,L&GD,PBL,L&PPT ,L_VC
CO1,CO2, CO3,CO5	Apply food hygiene and sanitation techniques in handling various food items.	10	Practical12.1	PSY-GUD	Shows-how	PrBL,TUT,IBL,DIS
CO1,CO2, CO3,CO5	Identify sources of foodborne intoxications and preventive measures during field visits.	10	Experiential-Learning12.1	PSY-SET	Does	DIS,FV

Unit 2 تعدیہ بذریعہ غذائی آلودگی Ta'diyya ba Dhari'a Ghidhā'ī Ālūdgī (Foodborne Infections)

12.2.1 تعدیہ بذریعہ غذائی آلودگی کا جائزہ: عمومی جراثیم، انتقال تعدیہ کے طریقے، غذائی تعامل، معکوسی تعدیہ *Ta'diyya ba Dhari'a Ghidhā'ī Ālūdgī kā Jā'iza: 'Umūmī Jarathīm, Intiqāl-i-Ta'diyya kē Ṭarīqē, Ghidhā'ī Ta'āmul, Ma'kūsī Ta'diyya* (Overview of Foodborne Infections: Common pathogens, Transmission pathways, Food handling, Cross-contamination)

12.2.2 غذائی حفظان صحت: غذائی عُمال کی شخصی حفظان صحت، کھانے کی جگہوں کی صفائی وستھرائی، معقول صفائی اور غذائی اجناس کا تعامل۔ دودھ، گوشت، مچھلی، انڈا، اثمار و میوہ جات اور بقول *Ghidhā'ī Ḥifẓān-i-Ṣiḥḥat: Ghidhā'ī 'Ummāl kī Shakhṣī Ḥifẓān-i-Ṣiḥḥat, Khānē kī Jaghon kī Ṣafā'ī-o-Suthrā'ī, Ma'qūl Ṣafā'ī avr Ghidhā'ī Ajnās kā Ta'āmul - Dūdh, Gosht, Machlī, Anda, Athmār-o-Mevajāt avr Buqūl* (Food Hygiene: Personal hygiene of food handlers, Sanitation of eating Places, Proper cleaning and handling of Food Items - Milk, Meat, Fish, Egg, Fruits and Vegetables)

References: 1,26

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO5	Evaluate and explain the food-handling practices and personal hygiene standards of food handlers.	10	Practical12.2	PSY-GUD	Shows-how	D,DL,D-M
CO1,CO2, CO3,CO5	Educate and raise awareness among food stakeholders about foodborne infections.	10	Experiential-Learning12.2	CE	Does	EDU,BS,BL,RLE,RP
CO1,CO2, CO3,CO5	Describe foodborne infections, mode of transmission and cross contamination.	5	Lecture	CE	Knows-how	TUT,L&GD,L&PPT ,L_VC
CO1,CO2, CO3,CO5	Evaluate sanitation methods in public food establishments through hands-on inspections.	6	Experiential-Learning12.3	PSY-MEC	Does	RLE,FV,TPW

Practical Training Activity

Practical Training 12.1 Food Hygiene

Total Learning Hours = 10

1. The teacher will teach them food hygiene practices. [8 Hours]
2. Students will demonstrate proper handwashing and use of protective gear (gloves, aprons). [2 Hours]

Practical Training 12.2 Personal Hygiene of Food Handlers

Total Learning Hours = 10

1. The teacher will instruct about the assessment of personal hygiene among food handlers. [1 Hour]
2. Students will be divided into groups, and they will visit any nearby restaurants or food facilities to assess personal hygiene among food handlers. [4 Hours]

3. Studnets will prepare IEC material to explain the food handling techniques and personal hygiene for food handlers. [3 Hours]
4. Students will conduct awareness sessions for food handlers. [2 Hours]

Experiential Learning Activity

Experiential-Learning Learning 12.1: Sources of Foodborne Intoxications

Total Learning Hours = 10

1. Students will visit a local food processing or storage facility, and they will observe food storage conditions, handling practices, and potential sources of contamination. [4 Hours]
2. Studnets will conduct interviews with facility staff. [3 Hours]
3. Analyze the real-life case studies. [1 Hour].
4. Students will share their observations. [2 Hours]

Experiential-Learning Learning 12.2: Counselling Session for Food Stakeholders

Total Learning Hours = 10

1. Students will gather information on common foodborne infections, their causes, symptoms, and preventive measures. [3 Hours]
2. They will create handouts, brochures about foodborne infections and hygiene practices. [3 Hours]
3. Conduct awareness sessions for food stakeholders and demonstrate hygiene practices such as proper handwashing, use of gloves, safe food storage, cleaning of surfaces, and avoiding cross-contamination. [4 Hours]

Experiential-Learning Learning 12.3: Sanitary Status of Public Food Establishments

Total Learning Hours = 6

1. Conduct a sanitation inspection of a local restaurant or cafeteria, evaluating cleanliness, food storage, and handling practices. [3 Hours]
2. Assess the personal hygiene of food handlers. [1 Hour]

3. Prepare a report on observed sanitation strengths and weaknesses, including recommended improvements. [2 Hours]	
Modular Assessment	
Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Poster Presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Design and Visuals-10 Marks; Delivery-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	4
Semester No : 5	
Module 13 : غذائی تحصین وغذائی سلامتی کے معیارات Ghidhā'ī Taḥṣīn wa Ghidhā'ī Salāmatī kē Mi'yārāt (Food Fortification and Food Safety Standards)	
Module Learning Objectives (At the end of the module, the students should be able to) • Explain the principles, objectives, and impact of food fortification and food safety regulations on public health. • Identify food adulteration, assess fortified foods, and analyze compliance with food safety standards. • Evaluate food safety measures in the community and recommend fortification strategies for nutritional improvement.	
Unit 1 غذائی تحصین وصحت عامہ Ghidhā'ī Taḥṣīn wa Ṣiḥḥat 'Āmma (Food Fortification and Public Health)	

13.1.1 غذائی تحصین: تعریف و مقاصد *Ghidhā'ī Taḥsīn: Ta'rif-o-Maqāṣid* (Food Fortification: Definition and Objectives)

13.1.2 عمومی محصّن غذائیں: نمک، آٹا، اناج، دودھ اور زیوت الطبخ *'Umūmī Muḥaṣṣan Ghidhā'ēn: Namak, Āṭā, Anāj, Dūdh avr Zuyūt al-Ṭtabakh* (Commonly Fortified Foods: Salt, Flour, Grains, Milk and Cooking Oils)

13.1.3 غذائی تحصین کے قومی و بین الاقوامی ضوابط *Ghidhā'ī Taḥsīn kē Qawmī wa Bayn al-Aqwāmī Ḍawābiṭ* (National and International Guidelines for Food Fortification)

13.1.4 غذائی تحصین کے اثرات صحت عامہ پر: فولاد، یود، حیاتین الف، اور فولک ایسڈ کے نقص کو دور کرنا *Ṣiḥḥat 'Āmma par Ghidhā'ī Taḥsīn kē Atharāt: Favlād, Yūd, Ḥayātīn Alif avr Folic Acid kē Naqs ko Dūr Karnā* (Public Health Impact of Food Fortification: Addressing Iron, Iodine, Vitamin A, and Folic Acid Deficiencies)

References: 1,2,15,16,17,18,19,20,27,61,62,63,64,65,66,67,68,69,70,71,72,73

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO5	Assess the health impact of food fortification, understanding its benefits and challenges in improving public health.	5	Practical13.1	PSY-SET	Shows-how	PER,CBL,TBL
CO1,CO2, CO3,CO5	Discuss he objectives and the methods of food fortification.	5	Lecture	CC	Knows-how	L_VC,PrBL,L&GD,TUT ,L&PPT
CO1,CO2, CO3,CO5	Identify adulteration in various food items through hands-on testing and analysis.	5	Practical13.2	PSY-GUD	Shows-how	SIM,TUT,W,TPW
CO1,CO2, CO3,CO5	Describe various methods of Food Fortification.	5	Experiential-Learning13.1	PSY-MEC	Does	TPW,SDL,SY
CO1,CO2, CO3,CO5	Analyze the various methods of food fortification described in Unani classical literature, understanding their traditional practices and health benefits.	5	Experiential-Learning13.2	CAP	Does	LS,TUT,JC,SDL,BS
CO1,CO2, CO3,CO5	Analyze and apply various food fortification methods described in Unani classical literature.	4	Experiential-Learning13.3	PSY-ADT	Does	PrBL,SDL,LS

Unit 2 غذائی سلامتی اور اس کے معیارات Ghidhā'ī Salāmatī avr us kē Mi'yārāt (Food Safety and Standards)

13.2.1 غذائی آمیزش: تعریف، تقسیم، اسباب، صحت عامہ پر اس کے اثرات، تحفظی و تحدیدی اقدامات *Ghidhā'ī Āmēzish: Ta'rīf, Taqsī, Asbāb, Ṣiḥḥat 'Āmma par us kē Atharāt, Taḥaffuẓī wa Taḥdīdī Iqdāmāt* (Food Adulteration: Definitions, Types, Causes, Impact on Public Health, Prevention, and Control Measures)

13.2.2 غذائی معیارات: کوڈیکس الیمنٹاریئس، پی ایف اے (پریوینشن آف فوڈ ایڈلٹریشن ایکٹ) اسٹینڈرڈس، ایگمارک اسٹینڈرڈس، بیورو آف انڈین اسٹینڈرڈس (بی آئی ایس)، ایف ایس ایس اے آئی (ادارۂ تحفظِ خوراک و معیارات، بھارت) *Ghidhā'ī Mi'yārāt: Codex Alimentarius, PFA [Prevention of Food Adulteration Act] Standards, Agmark standards, BIS [Bureau of Indian Standards], FSSAI (Bhāratī Idāra' barā'e Taḥaffuẓ-i-Khurāk-o-Mi'yārāt)* (Food Standards: Codex Alimentarius, PFA [Prevention of Food Adulteration Act] Standards, Agmark standards, BIS [Bureau of Indian Standards], FSSAI [Food Safety and Standards Authority of India])

References: 15,16,17,18,19,20,60,61,62,63,64,65,66,67,68,69,70,71,72,73

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO5	Explore and discuss different regulatory guidelines for food standards.	5	Practical13.3	PSY-SET	Shows-how	BS,BL
CO1,CO2, CO3,CO5	Identify adulterated and non-adulterated food items using hands-on techniques to identify differences and understand the impact of adulteration.	5	Practical13.4	PSY-GUD	Shows-how	W,D,DL
CO1,CO2, CO3,CO5	Apply traditional methods and techniques described in Unani literature to detect adulterants in food samples.	5	Experiential-Learning13.4	PSY-MEC	Does	PrBL,IBL,DIS,TUT
CO1,CO2, CO3,CO5	Assess awareness on food adulteration among the population.	4	Experiential-Learning13.5	CC	Does	TBL,Mnt,FV,LS,TUT
CO1,CO2, CO3,CO5	Design and develop IEC Material on food adulteration and food standards for public awareness.	3	Experiential-Learning13.6	CC	Does	TPW

CO1,CO2, CO3,CO5	Comprehend Food Adulterants and its consequences on public health	5	Lecture	CAP	Knows-how	BL,JC,L&GD,L_VC,L& PPT

Practical Training Activity

Practical Training 13.1 Impact of Food Fortification

Total Learning Hours = 5

1. Teacher will introduce the concept of food fortification, types of fortified foods (e.g., fortified flour, salt, milk), and their intended health benefits. [1 Hour]
2. Teacher will present real-world case studies or data on the impact of food fortification in various countries or regions. [1 Hour]
3. Students will research the health impacts of different food fortifications and present findings on their effectiveness in addressing specific nutritional deficiencies. [2 Hours]
4. Students will discuss the potential benefits and challenges of food fortification, considering factors like bioavailability, cost, and public health outcomes. [1 Hour]

Practical Training 13.2 Identification of Food Adulteration.

Total Learning Hours = 5

1. Teacher will provide a variety of food items (e.g., milk, honey, oil, spices) with both adulterated and non-adulterated samples for comparison. (30 Minutes)
2. Teacher will demonstrate simple adulteration detection tests for different food items. (2 Hours)
3. Students will conduct these tests on the provided food samples to identify the presence of adulterants. (1 Hour 30 Minutes)
4. Students will discuss the results, identify the adulterants, and reflect on the potential health risks associated with each type of food adulteration. (1 Hour)

Practical Training 13.3 Guidelines for Food Standards

Total Learning Hours = 5

1. Teacher will provide students with key regulatory documents (e.g., FSSAI guidelines, international food safety standards) for review. [1 Hour]

2. Teacher will present case studies of food safety violations or regulatory actions, explaining how guidelines were applied. [1 Hour]
3. Students will work in groups to analyze specific food safety regulations and their real-world applications to different food items. [2 Hours]
4. Students will present their findings on the guidelines, discussing how they ensure food safety and the impact of non-compliance. [1 Hour]

Practical Training 13.4 Comparison of adulterated and non-adulterated food items

Total Learning Hours = 5

1. Teacher will select common food items and prepare both adulterated and non-adulterated samples for comparison. [1 Hour]
2. Teacher will demonstrate simple methods (e.g., water test, heat test) to detect adulterants in food items. [1 Hour]
3. Students will conduct the same tests on the samples, identifying adulterated vs. non-adulterated food. [2 Hours]
4. Students will discuss their findings with the teacher, reflecting on the visual differences between adulterated and non-adulterated foods. [1 Hour]

Experiential Learning Activity

Experiential-Learning Learning 13.1: Field Visit

Total Learning Hours = 5

1. Teacher will oragnise a field visit of the students to the food fortification industry. [2 Hours]
2. Students will submit a detailed report on methods of food fortification. [3 Hours]

Experiential-Learning Learning 13.2: Food Fortification Methods Analysis

Total Learning Hours = 5

1. Students document the specific fortification methods mentioned in Unani texts, noting the foods involved and the health benefits attributed to these practices. [2 Hours]
2. Students design a survey to collect additional information or opinions from experts in Unani medicine or practitioners regarding the practical application and effectiveness of these fortification methods. [1 Hour]

3. Students will analyze the survey results and compile their findings into a comprehensive report, reflecting on the relevance and potential application of these methods in contemporary nutrition and health. They will analyze the various methods of food fortification as described in Unani classical literature, understanding their traditional practices and health benefits. [2 Hours]

Experiential-Learning Learning 13.3: Food Fortification Methods in Unani Classical Literature

Total Learning Hours = 4

1. Students will research Unani classical texts to identify and understand traditional food fortification methods. [1 Hour]
2. Students will design a survey to collect information on these fortification methods. [1 Hour]
3. Students will gather data from experts on the usage and effectiveness of Unani food fortification methods. [1 Hour]
4. Students will compile the collected data into a detailed report, analyzing the traditional methods of fortification and discussing their potential relevance in modern food practices. [1 Hour]

Experiential-Learning Learning 13.4: Identification of Food Adulterants

Total Learning Hours = 5

1. Students will review classical Unani texts to identify references to food adulteration, adulterants, and their effects on health. [2 Hours]
2. Students will create a list of food items commonly prone to adulteration, as described in Unani literature, along with methods for detecting them. [2 Hours]
3. Students will conduct a session to demonstrate how to identify adulterated foods based on traditional Unani methods or using modern techniques. [1 Hour]

Experiential-Learning Learning 13.5: Awareness on Food Adulteration

Total Learning Hours = 4

1. Students will design IEC materials (posters, pamphlets, and social media posts) to spread awareness. [3 Hours]
2. Students will distribute materials and engage in discussions about food safety with the target population. [1 Hour]

Experiential-Learning Learning 13.6: IEC Material on Food Aduleration and Food Standards	
Total Learning Hours = 3 1. Students will collect information on common adulterants, health risks, and food safety standards. [1 Hour] 2. Students will develop IEC Materials (pamphlets, posters, infographics, etc.) with engaging visuals and easy-to-understand information. [2 Hours]	
Modular Assessment	
Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or **Quiz** related to the content of this module. [50 Marks] [10 MCQs of 5 Marks Each; Questions types: 3 Matching Questions, 2 Reasoning and Assertion Questions, 3 Multiple Correct Option Questions, and 2 Single Correct Option Questions.] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	4
Module 14 : طرز زندگی سے پیدا ہونے والے امراض کا تعارف Tarz-i-Zindagī sē Paydā honē vālē Amrāḍ kā Ta'āruf (Introduction to Lifestyle Disorders)	

Module Learning Objectives

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

- Describe the impact of lifestyle on health, the burden of NCDs, and the Unani approach to chronic disease management.
- Design lifestyle intervention plans incorporating diet, exercise, and stress management for individuals at risk of developing lifestyle disorders.
- Assess individual lifestyle patterns and recommend Unani-based preventive and therapeutic strategies.

Unit 1 عوامل طرز زندگی وامراض غیر سار یہ Awāmil-i-Ṭarz-i-Zindagī wa Amrāḍ Ghayr Sārīya (Lifestyle Factors and Non-Communicable Diseases)

14.1.1 مبادیاتِ طرز زندگی: تعریف، جہات، غیر صحت مندانہ طرز زندگی کے مجموعی صحت پر اثرات *Mabādiyyat-i-Ṭarz-i-Zindagī: Ta'rīf, Jihāt, Ghyar Ṣiḥḥatmandāna, Ṭarz-i-Zindagī kē Majmū'ī Ṣiḥḥat par Atharāt* (Basics of Lifestyle: Definition and dimensions, Impact of unhealthy lifestyle on overall health)

14.1.2 اہم امراضِ غیر سار یہ کا جائزہ: امراض قلب وعروق، ذیابیطس اور سرطان کی بڑھتی ہوئی شرح، اختطاری عوامل، حکمت عملی برائے مداخلت طرز زندگی وسماجی سطح پر کیے جانے والے تحفظی اقدامات *Aham Amrāḍ Ghayr Sārīya kā Jā'iza: Amrāḍ-i-Qalb-o-'Urūq, Dhayābīṭus avr Saṭān kī Barhtī hu'ī Sharḥ, Ikhtiṭārī 'Awāmil, Ḥikmat 'Amalī barā'ē Mudākhilat-i-Ṭarz-i-Zindagī wa Samājī Sṭaḥ par kiyē jānē vālē Taḥaffuẓī Iqdāmāt* (Overview of Major NCDs: Cardiovascular Diseases, Diabetes and Cancer Burden, Risk factors, Strategies for lifestyle interventions and community-based preventive Measures)

References: 1,2,3,4,5,6,7,9,11,12,13,14,15,16,17,18,19,20,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,74,75

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO5	Understand the basics of lifestyle and NCDs with special reference to *Asbāb Sitta Ḍarūriyya w*a *Asbāb Ghayr Ḍarūriyya*	4	Lecture	CC	Knows-how	L&GD,L&PPT ,FC,BS
CO1,CO2, CO3,CO5	Assess lifestyle factors and health status of individuals using various tools and techniques.	4	Practical14.1	PSY-MEC	Shows-how	PBL,TUT,D
CO1,CO2, CO3,CO5	Demonstrate strategies for lifestyle interventions and community-based prevention in NCDs.	4	Practical14.2	PSY-ORG	Shows-how	PT,CBL,Mnt

CO1,CO2, CO3,CO5	Analyze lifestyle modification strategies in Unani Medicine for the prevention of lifestyle disorders.	5	Experiential-Learning14.1	PSY-ADT	Does	Mnt,PER,LS
CO1,CO2, CO3,CO5	Analyze the methods of palliative care provided to cancer patients	5	Experiential-Learning14.2	CC	Does	SDL,CBL

Unit 2 امراض غیر سارِیہ کا یونانی طبی نقطۂ نظر Amrāḍ Ghayr Sārīya kā Ūnānī Ṭibbī Nuqta Naẓar (Unani Medicine Approach to Non-Communicable Diseases)

14.2.1 امراض مزمنہ کا یونانی طبی نظریہ *Amrāḍ Muzmina kā Ūnānī Ṭibbī Naẓariya* (Unani Medicine Perspective on Chronic Diseases)

14.2.1.1 یونانی نظام طب میں امراض مزمنہ کی تعریف و درجہ بندی *Unani Niẓam-i-Ṭibb mēn Amrāḍ Muzmina kī Ta'rīf wa Darjabandī* (Definition and Classification of Chronic Diseases in Unani System of Medicine)

14.2.1.2 امراض مزمنہ کے ماہیت المرضی اسباب مزاجی نقطۂ نظر سے، اور اس کی متعلقہ علامات و نشانیاں *Amrāḍ Muzmina kē Māhiyat al-Maraḍī Asbāb Mizājī Nuqta Naẓar sē, avr us kī Muta'alliqa 'Alāmāt-o-Nishāniyān* (Etiopathogenesis based on *Mizāj* and Associated Signs and Symptoms of Chronic Diseases)

14.2.1.3 یونانی طبی اصول کے مطابق امراض مزمنہ سے تحفظ و تحدید کے اقدامات *Unani Ṭibbī Uṣūl kē Muṭābiq Amrāḍ Muzmina sē Taḥaffuẓ-o-Taḥdīd kē Iqdāmāt* (Prevention and Control Measures using Unani Medicine Principles)

14.2.2 طرز زندگی کو بہتر بنانے کی حکمتِ عملی *Ṭarz-i-Zindagī kō Bihtar banānē kī Ḥikmat 'Amalī* (Practical Lifestyle Management Strategies)

14.2.2.1 ثلاثیات (غذا، ریاضت و نوم (ابن سینا برائے حفظِ صحت *Thalathiyyat (Ghidhā', Riyāḍat wa Nawm) Ibn Sīnā barā'ē Ḥifẓ-i-Ṣiḥḥat* (Ibn Sīnā's Trilogy [Diet, Exercise and Sleep] for Health Preservation)

14.2.2.2 طرز زندگی سے پیدا ہونے والے امراض میں اسباب ستہ ضروریہ کا اطلاق: غذائی ضوابط، ریاضتی سفارشات، دماغی استراحتی تکنیکات اور نوم جید *Tarz-i-Zindagī sē Paydā honē vālē Amrāḍ mēn Asbāb Sitta Ḍarūriyya kā Iṭlāq: Ghidhā'ī Ḍawābiṭ, Riyāḍatī Sifārishāt, Dimāghī Istirāḥatī Taknīkāt avr Nawm Jayyid* (Application of *Asbāb Sitta Ḍarūriyya* in Lifestyle Disorders: Dietary guidelines, Exercise recommendations, Mental relaxation techniques and Sound sleep practices)

References: 1,2,3,4,5,11,12,13,14,15,16,17,18,19,20,21,22,25,55,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO5	Describe the etiological basis of chronic diseases and its management in Unani Medicine.	6	Lecture	CS	Knows-how	BS,L&GD,L_VC,FC,CBL
CO1,CO2, CO3,CO5	Plan and recommend suitable modification in *Asbāb Sitta Ḍarūriyya* in the management of NCDs.	8	Practical14.3	PSY-GUD	Shows-how	CBL,TPW,BS,PBL
CO1,CO2, CO3,CO5	Appraise the geriatric population on adopting a healthy lifestyle.	8	Experiential-Learning14.3	AFT-RES	Does	RLE,TBL,SDL
CO1,CO2, CO3,CO5	Conduct a health education session on lifestyle management to raise community awareness.	8	Experiential-Learning14.4	CC	Does	RP,PER,SY,FV
CO1,CO2, CO3,CO5	Explore and apply the mental relaxation techniques and sound sleep practices in Lifestyle management	4	Practical14.4	PSY-SET	Shows-how	RP,PER,D,RLE

Practical Training Activity

Practical Training 14.1 Lifestyle Assessment

Total Learning Hours = 4

1. Teacher will introduce different tools and techniques for assessing lifestyle and health status, such as health questionnaires, physical assessments, and lifestyle questionnaires. [1 Hour]
2. Students will use the introduced tools to assess their lifestyle or the health status of a peer or community member. [1 Hour]
3. Students will analyze the collected data to assess the health status of an individual, identifying risk factors for NCDs and areas where lifestyle modification is needed. [1 Hour]
4. Students will provide feedback and suggest personalized lifestyle modifications based on the assessment. [1 Hour]

Practical Training 14.2 Strategies for lifestyle interventions and community-based prevention in NCDs

Total Learning Hours = 4

1. The teacher will provide an overview of common NCDs and their risk factors, emphasizing the importance of prevention through lifestyle interventions. [2 Hours]
2. Students will design a community-based prevention program, focusing on raising awareness and implementing lifestyle changes within a local community (e.g., health education sessions, exercise classes). [2 Hours]

Practical Training 14.3 *Asbāb Sitta Ḍarūriyya* nd NCDs

Total Learning Hours = 8

1. Teacher will introduce *Asbāb Sitta Ḍarūriyya* (the six essential factors) in Unani Medicine (Ambient air, food & drinks, physical activity, psychological factors, sleep & awkeness, and elimination) and their role in maintaining health. [2 Hours]
2. Students will research common NCDs (e.g., diabetes, hypertension, heart disease) and analyze how each of *Asbāb Sitta Ḍarūriyya* (the six essential factors) contributes to the prevention and management of these conditions. [3 Hours]
3. Students will propose suitable modifications to *Asbāb Sitta Ḍarūriyya* (the six essential factors) to better address NCDs, focusing on lifestyle changes, dietary adjustments, exercise regimens, and mental health strategies. [3 Hours]

Practical Training 14.4 Mental relaxation techniques and Sound sleep practices

Total Learning Hours = 4

1. Teacher will introduce various mental relaxation techniques and sound sleep practices. [1 Hour]
2. Teacher will demonstrate how to perform relaxation exercises and sleep techniques. [1 Hour]
3. Students will practice these techniques individually or in groups and track their experiences (e.g., stress levels, sleep quality). [1 Hour]
4. After practicing, students share their experiences and discuss the impact of these techniques on their mental health and sleep. [1 Hour]

Experiential Learning Activity

Experiential-Learning Learning 14.1: Analysis of lifestyle modification strategies in Unani Medicine

Total Learning Hours = 5

1. Study the lifestyle modification principles in Unani medicine, such as diet, exercise, and mental well-being practices. [2 Hours]
2. Evaluate how these strategies can be applied for the prevention of lifestyle disorders, discussing their relevance and effectiveness. [2 Hours]
3. Engage in group discussions to compare the Unani medicine's approach with other health practices, reflecting on the integration of these strategies into contemporary lifestyle management. [1 Hour]

Experiential-Learning Learning 14.2: Observation of palliative care methods

Total Learning Hours = 5

1. Students will study the key principles of palliative care, including pain management and psychological support for cancer patients. [1 Hour]
2. Students will observe palliative care practices in a clinical or simulated environment, noting how healthcare professionals manage pain and address the needs of cancer patients. [2 Hours]
3. Students will engage with healthcare professionals to discuss their approach to palliative care, focusing on patient comfort and quality of life. [1 hour]
4. Students will prepare a brief report of their observations. [1 Hour]

Experiential-Learning Learning 14.3: Counseling for Healthy Living
Total Learning Hours = 8 1. Students will study common health challenges in the elderly and prepare lifestyle advice tailored to their needs. [2 Hours] 2. They will conduct one-on-one or group counseling, providing guidance on nutrition, physical activity, mental health, and medication management. [3 Hours] 3. They will show simple exercises, relaxation techniques, and healthy meal planning to encourage participation. [2hrs] 4. They will provide additional resources and get feedback on the counseling experience. [1 Hour]
Experiential-Learning Learning 14.4: Health Education on Lifestyle Mangement
Total Learning Hours = 8 1. Students will research key concepts related to lifestyle management, including nutrition, physical activity, and stress management. [2 Hours] 2. Students will design an engaging health education session, including practical tips and interactive activities. [3 Hours] 3. Students will deliver the health education session to groups (e.g., community members, patients), using visual aids, handouts, or presentations. [2 Hours] 4. Students will gather feedback from participants and peers on the effectiveness of the session. [1 Hour]
Modular Assessment

Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Presentation on** a specific disease discussed in the module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or	4

Poster Presentation on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Design and Visuals-10 Marks; Delivery-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolio/reflections/presentations can be taken as assessment. [25 Marks]	

Semester No : 6

Module 15 : وبائیت امراض غیر سار یہ Waba'iyat-i-Amrāḍ Ghayr Sāriya (Epidemiology of Non-Communicable Diseases)

Module Learning Objectives

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

- Describe the epidemiology, risk factors, clinical features, and prevention strategies of major non-communicable diseases.
- Conduct risk assessments, classify disease burden, and analyze preventive approaches for cardiovascular diseases, stroke, diabetes, and obesity.
- Demonstrate a sense of responsibility in advocating for preventive measures and policies to reduce the burden of NCDs.

Unit 1 وبائیت امراض قلب و دوران خون و سکتہ Waba'iyat-i-Amrāḍ-i-Qalb-o-Dawrān-i-Khūn wa Sakta (Epidemiology of Cardiovascular Diseases and Stroke)

15.1.1 امراض قلب و دوران خون: بار، اختطاری عوامل (قابل ترمیم و غیر ترمیم)، تحفظی و تحدیدی حکمت عملی *Amrāḍ-i-Qalb-o-Dawrān-i-Khūn: Bār, Ikhtiṭārī ʻAwāmil (Qābil-i-Tarmīm-o-Ghayr Tarmīm), Taḥaffuẓī wa Taḥdīdī Ḥikmat ʻAmalī* (Cardiovascular Diseases: Burden, Risk Factors [Modifiable and Non-Modifiable], Prevention and Control Strategies)

15.1.2 سکتہ دماغی: بار، اختطاری عوامل (قابل ترمیم و غیر ترمیم)، تحفظی و تحدیدی حکمت عملی *Sakta Dimāghī: Bār, Ikhtiṭārī ʻAwāmil (Qābil-i-Tarmīm-o-Ghayr Tarmīm), Taḥaffuẓī wa Taḥdīdī Ḥikmat ʻAmalī* (Stroke: Burden, Risk Factors [Modifiable and Non-Modifiable], Prevention and Control Strategies)

15.1.3 ضغط الدم قوی: تعریف، درجہ بندی، بار، اختطاری عوامل (قابل ترمیم و ناقابل ترمیم)، سریریاتی ظواہر، عوارضات، تحفظی و تحدیدی حکمت عملی *Ḍaght al-Dam Qawī: Taʻrīf, Darjabandī, Bār, Ikhtiṭārī ʻAwāmil (Qābil-i-Tarmīm-o-Ghayr Tarmīm), Saririyyātī Ẓawāhir, ʻAwāriḍāt, Taḥaffuẓī wa Taḥdīdī Ḥikmat ʻAmalī* (Hypertension: Definition, Classification, Burden, Risk Factors [Modifiable and Non-Modifiable], Clinical Features, Complications, Prevention and Control Strategies)

References: 1,2,3,19,28,43,44,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO5	Describe the epidemiological perspective of Cardiovascular diseases and stroke	4	Lecture	CAN	Knows-how	L&GD,L_VC,PBL,L&P PT ,TUT
CO1,CO2, CO3,CO5	Assess and discuss the risk factors of CVDs across various social strata.	10	Practical15.1	AFT-RES	Shows-how	PER,BS,PT,CBL
CO1,CO2, CO3,CO5	Analyze a health awareness program on CVDs and Stroke prevention in community or hospital settings, focusing on the principles of Unani Medicine.	10	Experiential-Learning15.1	PSY-GUD	Does	DIS,FV,TPW,PrBL

Unit 2 وبائیت ذیابیطس وسمن مفرط Waba'iyat-i-Dhayābiṭus wa Siman Mufriṭ (Epidemiology of Diabetes and Obesity)

15.2.1 ذیابیطس: درجہ بندی، بار، اختطاری عوامل (قابل ترمیم وناقابل ترمیم) سریاتی ظواہر، عوارضات، تحفظی وتحدیدی حکمت عملی *Dhayābiṭus: Darjabandī, Bār, Ikhṭiṭārī 'Awāmil (Qābil-i-Tarmīm-o-Ghayr Tarmīm), Saririyyātī Ẓawāhir, 'Awāriḍāt, Taḥaffuẓī wa Taḥdīdī Ḥikmat 'Amalī* (Diabetes: Classification, Burden, Risk Factors [Modifiable and Non-Modifiable], Clinical features, Complications, Prevention and Control Strategies)

15.2.2 سمن مفرط: درجہ بندی، بار، تجزیہ، خطرات، تحفظی وتحدیدی حکمت عملی *Siman Mufriṭ: Darjabandī, Bār, Tajziya, Khatrāt, Taḥaffuẓī wa Taḥdīdī Ḥikmat 'Amalī* (Obesity: Classification, Burden, Assessment, Hazards, Prevention and Control Strategies)

References: 1,2,3,16,17,18,19,20,61,62,63,64,65,66,67,68,69

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO5	Describe the epidemiological perspective of Diabetes and Obesity	4	Lecture	CC	Knows-how	L&GD,L&PPT ,L_VC,TUT,CBL
CO1,CO2, CO3,CO5	Assess and discuss the risk factors of diabetes and obesity across various social strata.	5	Practical15.2	PSY-SET	Shows-how	D,DIS

CO1,CO2, CO3,CO5	Assess and value a health awareness program on diabetes and obesity prevention in community or hospital settings, focusing on the principles of Unani Medicine.	10	Experiential-Learning15.2	AFT-VAL	Does	DIS,RLE,FV,BS

Unit 3 وبائیت سرطان Waba'iyat-i-Saṛtān (Epidemiology of Cancers)

15.3.1 سرطان: بیان مسئلہ، وقتی رجحانات، اسباب و عوامل، سرطان کی مختلف اقسام کی تحفظی و تحدیدی تدابیر *Saṛtān: Bayān-i-Mas'ala, Waqtī Rujḥānāt, Asbāb-o-'Awāmil, Saṛtān kī Mukhtalif Aqsām kī Taḥaffuẓī wa Taḥdīdī Tadābīr* (Cancers: Problem statement, time trends, causes, prevention and control measures for different type of cancers)

References: 55,56,57,58,59,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO5	Discuss the epidemiological perspective of cancers	2	Lecture	CC	Knows-how	L&PPT ,L&GD,TUT,PBL,SY
CO1,CO2, CO3,CO5	Assess and discuss the risk factors of cancer across various social strata and understand the role of cancer registries in public health.	5	Practical15.3	PSY-GUD	Shows-how	DIS,PBL,SDL
CO1,CO2, CO3,CO5	Analyze a health awareness program on cancer prevention in community or hospital settings, focusing on the principles of Unani medicine.	6	Experiential-Learning15.3	PSY-SET	Does	SDL,Mnt,FV,PrBL

Practical Training Activity

Practical Training 15.1 Risk Assessment for CVDs

Total Learning Hours = 10

1. The teacher will lead a group discussion on the primary risk factors for CVDs, including diet, physical activity, genetics, and access to healthcare across various social groups. [2 Hours]
2. The teacher will also introduce various scales and questionnaires for risk assessment. [2 Hours]

3. Students will assess the risk factors in different social strata using the provided questionnaires and scales. [4 Hours]
4. Students will present the findings, highlighting the disparities in risk factors across various social groups. [2 Hours]

Practical Training 15.2 Risk Assessment for Diabetes and Obesity

Total Learning Hours = 5

1. The teacher will lead a group discussion on the primary risk factors for diabetes and obesity, including diet, physical activity, genetics, and access to healthcare across various social groups. [1 Hour]
2. The teacher will also introduce various scales and questionnaires for risk assessment. [1 Hour]
3. Students will assess the risk factors in different social strata using the provided questionnaires and scales. [2 Hours]
4. Students will present the findings, highlighting the disparities in risk factors across various social groups. [1 Hour]

Practical Training 15.3 Assessment of risk factors of cancers and cancer registry

Total Learning Hours = 5

1. Teacher will guide students in identifying and analyzing the social, economic, and environmental factors contributing to cancer risk in different social groups. [1 hour]
2. Students will research and present case studies or statistics on cancer prevalence and risk factors in different social strata. [2 Hours]
3. Teacher will facilitate a discussion on the significance of cancer registries in tracking trends, improving prevention, and guiding public health policies. [1 Hour]
4. Students will create a report or presentation summarizing the impact of cancer registries and their importance in cancer prevention and management. [1 Hour]

Experiential Learning Activity

Experiential-Learning Learning 15.1: Health Awareness Campaign on CVDs and Stroke

Total Learning Hours = 10 1. Students will develop informative resources on the role of Unani medicine in CVDs and Stroke prevention, including dietary guidelines, herbal remedies, and lifestyle practices. [4 Hours] 2. Organize interactive and engaging community events to spread awareness about CVDs and Stroke prevention through Unani practices. [4 Hours] 3. Assess and record the effectiveness of the campaign in increasing community awareness using feedback forms from participants. [2 Hours]
Experiential-Learning Learning 15.2: Health Awareness Campaign on Diabetes and Obesity Prevention
Total Learning Hours = 10 1. Students will develop informative resources on the role of Unani medicine in diabetes and obesity prevention, including dietary guidelines, herbal remedies, and lifestyle practices. [4 Hours] 2. Organize interactive and engaging community events to spread awareness about diabetes and obesity prevention through Unani practices. [4 Hours] 3. Assess and record the effectiveness of the campaign in increasing community awareness using feedback forms from participants. [2 Hours]
Experiential-Learning Learning 15.3: Health Awareness Camapign on Cancer Prevention
Total Learning Hours = 6 1. Students will develop informative resources on the role of Unani medicine in cancer prevention, including dietary guidelines, herbal remedies, and lifestyle practices. [2 Hours] 2. Organize interactive and engaging community events to spread awareness about cancer prevention through Unani practices. [2 Hours] 3. Assess and record the effectiveness of the campaign in increasing community awareness using feedback forms from participants. [2 Hours]
Modular Assessment

Assessment	**Hour**

Instructions: Conduct a structured modular assessment. Assessment will be for 50 marks for this module. 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. **Quiz** related to the content of this module. [50 Marks] [10 MCQs of 5 Marks Each; Questions types: Matching Questions, Reasoning and Assertion Questions, Multiple Correct Option Questions, and Single Correct Option Questions] Or **Presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks**]** Or **Poster making** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Design and Visuals-10 Marks; Delivery-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	4
Module 16 : امراض غیر سار یہ کی نخل اور بنیادی نگہداشت Amrāḍ Ghayr Sārīya kī Nakhl avr Bunyādī Nigahdāsht (Screening and Primary Care for Non-Communicable Diseases)	
Module Learning Objectives (At the end of the module, the students should be able to) • Describe the principles, criteria, and effectiveness of screening programs and primary care strategies for NCD prevention. • Conduct screenings, evaluate test effectiveness, and apply prevention strategies at individual and community levels. • Design and implement community-based education and prevention programs for NCD screening and early intervention.	

Unit 1 نظریۂ نخل Naẓariya'-i-Nakhl (Concept of Screening)

16.1.1 تعریف،اصول وضوابط،استعمالات،نخل کے معیارات(مرض وامتحان) نخل کا جائزہ اور نخلی پروگرام *Ta'rīf, Uṣūl-o-Ḍawābiṭ, Isti'mālāt, Nakhl kē Mi'yārāt (Maraḍ-o-Imtiḥān), Nakhl kā Jā'iza avr Nakhlī Program* (Definition, Principles, Uses, Types, Criteria for Screening [Disease and Tests], Evaluation of Screening Tests, and Screening Programmes)

16.1.2 نخل برائے سرطان(سرطان فمِ رحم،سرطانِ ریہ،سرطانِ ثدی)،ذیابیطس ودیگر امراض غیرسماریہ *Nakhl barā'ē Saṛtān (Saṛtān-i-Fam-i-Raḥim, Saṛtān-i-Riya, Saṛtān-i-Thadī), Dhayābīṭus wa Dīgar Amrāḍ Ghayr Sāriya* (Screening for cancer [Ca cervix, Ca lung, Ca breast], Diabetes, and Other NCDs)

References: 1,2,3,7,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO5	Understand Definition, Principles, Uses, Types, Criteria for Screening (disease and tests), Evaluation of Screening Tests, and Screening Programmes	5	Lecture	CAN	Knows-how	TUT,L&PPT ,L&GD,BL,ML
CO1,CO2, CO3,CO5	Appraise and evaluate various Methods of Screening for cancer (Ca cervix, Ca lung, Ca breast), diabetes, and other NCDs	10	Practical16.1	PSY-ORG	Shows-how	D,SY,CBL
CO1,CO2, CO3,CO5	Conduct screening for cancer (cervical, lung, breast), diabetes, and other Non-Communicable Diseases in both community and hospital settings.	10	Experiential-Learning16.1	PSY-GUD	Does	CBL,FV,Mnt

Unit 2 امراض غیرسماریہ میں بنیادی صحت کی نگہداشت کے مناہج Amrāḍ Ghayr Sāriya mēn Bunyādī Ṣiḥḥat kī Nigahdāsht kē Manāhij (Primary Healthcare Approach to NCDs)

16.2.1 امراض غیرسماریہ کے لیے سماجی سطح پر کی جانے والی تحفظی تدابیر *Amrāḍ Ghayr Sāriya kē liyē Samājī Saṭaḥ par kī jānē vālī Tadābīr* (Community-Level Prevention Measures for NCDs)

16.2.1.1 اساسی تحفظ: سماجی تعلیمی پروگرام کے ذریعہ صحت مند طرززندگی کی ترویج و اشاعت، جسمانی سرگرمی اقدامات و غذائی رہنمائی *Asāsī Taḥaffuẓ: Samājī Ta'līmī Program kē Dhari'a Ṣiḥḥatmand Ṭarz-i-Zindagī kī Tarwīj-o-Isha'at, Jismānī Sargarmī Iqdāmāt wa Ghidh Rahnumā'ī* (Primordial Prevention: Promotion of Healthy Lifestyles through Community Education Programs, Physical Activity Initiatives, and Nutritional Guidance)

16.2.1.2 ابتدائی تحفظ: اختطاری عوامل کی شناخت اور خصوصی مشورے/ تحفظ *Ibtidā'ī Taḥaffuẓ: Ikhṭitārī 'Awāmil kī Shanākht avr Khuṣūṣī Mashwarē/Taḥaffuẓ* (Primary Prevention-Identifying Risk and Specific Advice/Protection)

16.2.1.2.1 عوامی سطحی حکمت عملی *'Awāmī Saṭaḥī Ḥikmat 'Amalī* (Population Strategy)

16.2.1.2.2 اعلیٰ خطری حکمت عملی *A'lā Khatrī Ḥikmat 'Amalī* (High-Risk Strategy)

16.2.1.3 ثانوی تحفظ : تشخیص مبکر وعلاج *Thānwī Taḥaffuẓ: Tashkhīṣ Mubakkir-o-'Ilāj* (Secondary Prevention: Early Diagnosis and Treatment)

References: 1,2,3,61,62,64,65,66,67,68,69,70,71,72,73,74,75

3A	3B	3C	3D	3E	3F	3G
CO1,CO2, CO3,CO5	Describe the basics of Primary Healthcare Approach to NCDs	5	Lecture	CAP	Knows-how	SY,L&PPT ,L_VC,TUT,BS
CO1,CO2, CO3,CO5	Develop a module on Primary Healthcare for Non-Communicable Diseases in the context of Unani Medicine.	10	Practical16.2	PSY-MEC	Shows-how	BS,TPW,TUT,SDL,DIS
CO1,CO2, CO3,CO5	Apply the Unani Medicine-based module for primary healthcare in the prevention and management of Non-Communicable Diseases (NCDs).	6	Experiential-Learning16.2	CAN	Does	PSM,BL
CO1,CO2, CO3,CO5	Educate and train Community Health Workers to implement Unani Medicine-based Modules of primary healthcare in managing Non-Communicable Diseases (NCDs).	10	Experiential-Learning16.3	PSY-ADT	Does	FV,DIS,BS

Practical Training Activity

Practical Training 16.1 Screening of Cancers
Total Learning Hours = 10 1. A training Program will be organised by the teacher to demonstrate the correct use of screening tools. [2 Hours] 2. Students will perform screening of diseases at designated screening OPD of the College Hospital using tools taught in the training. [3 Hours] 3. The teacher will arrange visits to primary health centers/District Epidemiological office/Cancer Registry centers to understand screening practices. [5 Hours]
Practical Training 16.2 Primary Healthcare Module for NCDs in Unani Medicine
Total Learning Hours = 10 1. Students will prepare charts and IEC materials on the primary healthcare approach to NCDs, incorporating Unani principles. [4 Hours] 2. Teacher will organize a seminar where students present the module and discuss the role of Unani Medicine in managing and preventing NCDs. [4 Hours] 3. Teacher will also facilitate a group discussion on the integration of Unani Medicine with conventional healthcare approaches in the management of NCDs. [2 Hours]
Experiential Learning Activity
Experiential-Learning Learning 16.1: Screening for NCDs
Total Learning Hours = 10 1. Community Outreach Activities: Students will participate in screening activities. [5 Hours] 2. Hospital Screening: Students will perform screenings in hospital settings using tools for early detection of cancer, diabetes and other NCDs. [3 Hours] 3. They will collect and analyze the screening data, documenting findings such as the number of individuals screened, risk factors identified, and compile these into a report. [2 Hours]
Experiential-Learning Learning 16.2: Apllicability of Unani Medicine Modules of Primary Health Care in NCDs

Total Learning Hours = 6

1. Assess the health status of two individuals. [1 Hour]
2. Identify risk factors for NCDs, focusing on diet and lifestyle. [1 Hour]
3. Develop personalized health plans incorporating Unani dietary guidelines, herbal remedies, and lifestyle modifications for NCD prevention and management. [2 Hours]
4. Compile the findings and health plans in a structured report form. [2 Hours]

Experiential-Learning Learning 16.3: Training of Community Health Workers

Total Learning Hours = 10

1. Prepare IEC material that outlines the primary healthcare approach to NCDs, integrating Unani medicine principles. [3 Hours]
2. Attend a seminar to learn about the Unani Medicine approach to NCDs and strategies for incorporating it into primary healthcare practices. [3 Hours]
3. Visit primary health centers for practical exposure. [2 Hours]
4. Conduct practical training sessions with Community Health Workers, guiding them in applying Unani Medicine modules in community settings for NCDs prevention and management. [2 Hours]

Modular Assessment

Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be for 50 marks for this module. 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. **Quiz** related to the content of this module. [50 Marks]	4

[10 MCQs of 5 Marks Each; Questions types: Matching Questions, Reasoning and Assertion Questions, Multiple Correct Option Questions, and Single Correct Option Questions] Or **Case Presentation:** Specific case of NCD. [50 Marks] [**Assessment Criteria:** Understanding of the Case-20 Marks; Analysis of Key issues-20 Marks; Presentation and Structure-10 Marks] Or **Presentation** on any topic of this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	

Paper No : 3(ماحولیاتی صحت، آبادیات اور حرکیات آبادی MĀḤAWLIYĀTĪ ṢIḤḤAT, ĀBĀDIYYĀT AVR ḤARAKIYYĀT-I-ĀBĀDĪ (ENVIRONMENTAL HEALTH, DEMOGRAPHY AND POPULATION DYNAMICS))

Semester No : 3

Module 17 : طبیعی ماحول Ṭabī'ī Maḥawl (Physical Environment)

Module Learning Objectives

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

- Describe the components of the physical environment (air, water, soil) and their influence on health.
- Conduct assessments of air and water quality using standard procedures.
- Appraise the importance of preserving the environment for public health.

Unit 1 ماحولیاتی صحت کی اساسیات Maḥawliyātī Ṣiḥḥat kī Asāsiyāt (Foundations of Environmental Health)

17.1.1 ماحولیاتی صحت کا جائزہ *Maḥawliyātī Ṣiḥḥat kā Jā'iza* (Overview of Environmental Health)

17.1.1.1 تعریف، دائرۂ کار و اہمیت *Ta'rīf, Dā'ira'-i-Kār-o-Ahammiyat* (Definition, Scope and Importance)

17.1.1.2 اہم تصورات و اصول *Aham Taṣawwurāt-o-Uṣūl* (Key Concepts and Principles)

17.1.2 ماحول کے اجزاء *Maḥawl kē Ajzā'* (Components of Environment)

17.1.3 ماحولیاتی عوامل اور نتائج صحت کے مابین باہمی تعاملات *Maḥawliyyātī 'Awāmil avr Ṣiḥḥat kē Mābayn Bāhamī Ta'āmulāt* (Interactions between Environmental Factors and Health Outcomes)

References: 1,4,12,13,14,26,27,34

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

CO2,CO4	Explain the concept and components of environmental health and their significance in public health.	5	Lecture	CK	Knows-how	L&PPT
CO2,CO4	Analyze how environmental factors can affect human health, including acute and chronic effects.	5	Practical17.1	PSY-SET	Shows-how	FV
CO2,CO4	Describe how environmental pollution affects health by analyzing case studies.	5	Practical17.2	PSY-GUD	Shows-how	CBL
CO2,CO4	Identify various environmental hazards.	7	Experiential-Learning17.1	PSY-SET	Does	SY,W
CO2,CO4	Identify environmental health concerns of a specific locality.	7	Experiential-Learning17.2	PSY-ORG	Does	PrBL,TPW,TBL

Unit 2 خوبیٔ آب وصحت Khūbi'-i-Āb wa Ṣiḥḥat (Water Quality and Health)

17.2.1 محفوظ اور صحت بخش پانی کے خواص *Maḥfūẓ avr Ṣiḥḥat Bakhsh Pānī kē Khawāṣ* (Characteristics of Safe and Wholesome Water)

17.2.2 آبی ضروریات *Ābī Ḍarūriyyāt* (Water Requirements)

17.2.3 ذرائع آب واستعمالات *Dharā'i'-i-Āb wa Isti'mālāt* (Uses and Sources of Water)

17.2.4 آبی آلودگی ومتعلقہ امراض *Ābī Ālūdgī wa Muta'alliqa Amrāḍ* (Water Pollution and Related Diseases)

17.2.5 آبی صفائی کے طریقے *Ābī Ṣafā'ī kē Ṭarīqē* (Water Purification Techniques)

17.2.5.1 وسیع پیمانے پر *Wasī' Paymānē par* (On large Scale)

17.2.5.2 محدود پیمانے پر *Maḥdūd Paymānē par* (On Small Scale)

17.2.6 جراثیمی تصفیۂ آب *Jarāthīmī Tasfiyya'-i-Āb* (Water Disinfection)

17.2.7 تصفیۂ آب/ طریقہائے جراثیم کشی بحوالہ یونانی طبی کتب *Tasfiyya'-i-Āb/Ṭarīqahā'ē Jarāthīm Kushī ba Ḥawāla Unānī Ṭibbī Kutub* (Water Purification/Disinfection Methods in Classical Unani Books)

17.2.8 خوبیٔ آب: اصول و معیارات *Khūbi'-i-Āb: Uṣūl-o-Mi'yārāt* (Water Quality: Criteria and Standards)

17.2.8.1 قبولیت کے پہلو *Qubūliyyat kē Pahlū* (Acceptability Aspects)

17.2.8.2 قصیر حیاتیاتی پہلو *Qaṣīr Ḥayātiyātī Pahlū* (Microbiological Aspects)

17.2.8.3 کیمیائی پہلو *Kīmiyāī Pahlū* (Chemical Aspects)

17.2.8.4 شعاعی پہلو *Shu'ā'ī Pahlū* (Radiological Aspects)

17.2.9 خوبیٔ آب شرب کی نگہداشت *Khūbi'-i-Āb-i-Shurb kī Nigahdāsht* (Drinking Water Quality Surveillance)

References: 1,4,5,12,13,14,18,25,27,28,74,75

3A	3B	3C	3D	3E	3F	3G
CO2,CO4	Discuss the Characteristics of Safe and Wholesome Water, Water pollution and water purification.	5	Lecture	CK	Knows-how	L&GD,L_VC
CO2,CO4	Conduct Water Purification Techniques and assess water quality.	10	Practical17.3	PSY-ORG	Shows-how	PT,LRI
CO2,CO4	Observe water purification systems.	7	Experiential-Learning17.3	PSY-ORG	Does	FV

CO2,CO4	Identify the Impact of Water Pollution on Health.	5	Experiential-Learning17.4	CAP	Does	JC,PBL

Unit 3 خوبیٔ ہواء وصحت Khūbi'-i-Hawā' wa Ṣiḥḥat (Air Quality and Health)

17.3.1 ترکیب ہواء *Tarkīb-i-Hawā'* (Composition of Air)

17.3.2 حرارتی تسکین کے اشاریے *Ḥarārati Taskin kē Ishāriyē* (Indicators of Thermal Comfort)

17.3.3 ہوائی آلودگی *Hawā'ī Ālūdgī* (Air Pollution)

17.3.3.1 ہوائی آلودگی کے ذرائع *Hawā'ī Ālūdgī kē Dharā'i'* (Sources of Air Pollution)

17.3.3.2 ہوائی عناصر آلودگی *Hawā'ī 'Anāṣir-i-Ālūdgī* (Air Pollutants)

17.3.3.3 نگرانی و اثرات *Nigrānī-o-Atharāt* (Monitoring and Effects)

17.3.3.4 تحفظ و انسداد کی حکمت عملی *Taḥaffuẓ-o-Insidād kī Ḥikmat 'Amalī* (Prevention and Control Strategies)

17.3.4 تصفیۂ ہوا کے طریقے *Taṣfiya'-i-Hawā' kē Ṭarīqē* (Methods of Air Purification)

17.3.4.1 روایتی تقنیات *Ravāyatī Taqniyyāt* (Traditional Techniques)

17.3.4.2 جدید تقنیات *Jadīd Taqniyyāt* (Recent Techniques)

17.3.5 خوبیٔ ہواء کے انسانی صحت پر اثرات *Khūbi'-i-Hawā' kē Insānī Ṣiḥḥat par Atharāt* (Impacts of Air Quality on Human Health)

17.3.5.1 قلیل مدتی اثرات *Qalīl Muddatī Atharāt* (Short-Term Effects)

17.3.5.2 طویل مدتی اثرات *Ṭawīl Muddatī Atharāt* (Long-Term Effects)

17.3.6 خوبیٔ ہواء کے معیارات *Khūbi'-i-Hawā' kē Mi'yārāt* (Air Quality Standards)

17.3.7 تہویہ *Tahviyya* (Ventilation)

17.3.7.1 تعریف *Ta'rīf* (Definition)

17.3.7.2 معیارات *Mi'yārāt* (Standards)

17.3.7.3 طریقے *Ṭarīqē* (Methods)

References: 1,4,5,12,13,14,15,16,18,20,25,27,28,34,36,64,69,71,72,73,74,75

3A	3B	3C	3D	3E	3F	3G
CO2,CO4	Understand the Composition of Air and Indicators of Thermal Comfort, air pollution and purification	5	Lecture	CAP	Knows-how	L&PPT ,L
CO2,CO4	Assess the Role of Air Quality Monitoring in Public Health.	5	Practical17.4	PSY-ADT	Shows-how	SIM,PT
CO2,CO4	Analyze Ventilation Efficiency and Performance.	5	Practical17.5	PSY-ADT	Shows-how	FV,PL
CO2,CO4	Assess Air Purification Techniques and Air Quality Control.	8	Experiential-Learning17.5	PSY-MEC	Does	W
CO2,CO4	Analyse the effect of quality of air on health.	5	Experiential-Learning17.6	CAP	Does	SY,TUT,PrBL
Practical Training Activity						
Practical Training 17.1 Environmental Health Case Study Analysis						
Total Learning Hours = 5 1. Introduction and Overview [1 Hour] 2. Case Study Analysis [3 Hours] 3. Group Discussions [1 Hour]						
Practical Training 17.2 Case Studies Analysis						
Total Learning Hours = 5						

1. Select Relevant Case Studies [1 Hour]
2. Research the context of each case study [1 Hour]
3. Conduct a SWOT Analysis. [1 Hour]
4. Use Analytical Frameworks to assess the interconnections between the environment and health. [1 Hour]
5. Evaluate Health Outcomes [1 Hour]

Practical Training 17.3 Quality Assessment and Purification Techniques

Total Learning Hours = 10

The practical will be performed in three steps:

1. Water Purification Techniques [3 Hours]
    - Hands-On Training: Estimation of chlorine demand of water by using Horrock's apparatus.
2. Water Quality Testing [3 Hours]
    - Equipment Use: Familiarization with water quality monitoring devices
3. Water Sampling and Analysis [4 Hours]
    - Collection and analysis of water samples from different sources.

Practical Training 17.4 Air Quality Monitoring

Total Learning Hours = 5

1. Introduction of air quality assessment [1 Hour]
2. Practical Activity [3 Hours]:
    - Students will be divided into groups and visit designated locations. Each group will record pollutant levels using pollution monitors.
3. Post-Activity Discussion [1 Hour]

Practical Training 17.5 Ventilation Systems Assessment

Total Learning Hours = 5

1. Introduction to Ventilation Systems [1 Hour]
2. Field Assessment and Data Collection [3 Hours]
    - Students will visit a selected community building (e.g., school, hospital, or workplace) to assess its ventilation system.
3. Post-Activity Discussion [1 Hour]

Experiential Learning Activity

Experiential-Learning Learning 17.1: Workshop / Seminar on Environmental Health (Student-Led)

Total Learning Hours = 7

1. Preparation & Research (Before the Seminar) [1 Hour]
2. Seminar Sessions [4 Hours]
3. Interactive Discussion [1 Hour]
4. Report Submission & Assessment [1 Hour]

Experiential-Learning Learning 17.2: Environmental Health Assessment & Action Plan

Total Learning Hours=7

1. Overview & Project Orientation (Teacher-led Discussion) [1 Hour]
2. Data Collection & Analysis [4 Hours]
3. Developing Solutions & Action Plans [1 Hour]
4. Presentation & Report [1 Hour]

Experiential-Learning Learning 17.3: Water Purification Plant Visit

Total Learning Hours = 7

1. Pre-Visit Orientation [1 Hour]
2. Field Visit - Observing the Water Purification Process [4 Hours]
3. Group Discussion & Data Analysis [1 Hour]
4. Report Writing & Presentation [1 Hour]

Experiential-Learning Learning 17.4: Journal club on Water Quality Assessment

Total Learning Hours = 5

1. Introduction & Overview [1 Hour]
2. Reviewing Recent Research [1 Hour]
3. Discussion on Local Water Quality Issues [1 Hour]
4. Presentation & Peer Feedback [1 Hour]
5. Report Writing & Recommendations [1 Hour]

Experiential-Learning Learning 17.5: Workshop on Emerging Techniques for Air Quality Improvement

Total Learning Hours = 8

1. Introduction & Overview [2 Hours]
2. Interdisciplinary Approaches & Policy Insights [2 Hours]
3. Case Study & Community Engagement [2 Hours]
4. Future Directions & Research Opportunities [2 Hours]

Experiential-Learning Learning 17.6: Air Quality Assessment

Total Learning Hours=5

1. Introduction & Background [1 Hour]

2. Field-Based Data Collection [2 Hours]
3. Data Analysis & Interpretation [1 Hour]
4. Discussion & Problem-Solving [1 Hour]

Modular Assessment

Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Quiz** on the content related to this module. [50 Marks] [10 MCQs of 5 Marks Each; Questions types: Matching Questions, Reasoning and Assertion Questions, Multiple Correct Option Questions, and Single Correct Option Questions] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolio/reflections/presentations can be taken as assessment. [25 Marks]	6

Module 18 : سماجی ماحول Samājī Maḥawl (Social Environment)

Module Learning Objectives

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

- Analyze the social determinants of health and their impact on population well-being.
- Conduct community-based assessments to evaluate social factors affecting health.
- Demonstrate empathy and sensitivity towards the health needs of socially vulnerable groups.

Unit 1 صحت کے سماجی عوامل Ṣiḥḥat kē Samājī ʻAwāmil (Social Determinants of Health)

18.1.1 صحت کے سماجی عوامل کی تفہیم *Ṣiḥḥat kē Samājī ʻAwāmil kī Tafhīm* (Understanding Social Determinants of Health)

18.1.2 صحت پر سماجی طبقے کے اثرات *Ṣiḥḥat par Samājī Ṭabqē kē Atharāt* (Influences of Social Class on Health)

18.1.3 ثقافتی عوامل اور صحت *Thaqāfatī ʻAwāmil avr Ṣiḥḥat* (Cultural Factors and Health)

18.1.4 سماجی امدادی شبکات کی اہمیت *Samājī Imdādī Shabakāt kī Ahammiyat* (Importance of Social Support Networks)

18.1.5 صحتی مساوات و سماجی انصاف *Ṣiḥḥatī Masāwat wa Samājī Inṣāf* (Health Equity and Social Justice)

18.1.6 صحت پر سماجی ذرائع ابلاغ کے اثرات *Ṣiḥḥat par Samājī Dharāʼiʻ Iblāgh kē Atharāt* (Impacts of Social Media on Health)

References: 1,2,3,4,5,6,7,26,27,28,30,42,54,55,74,75

3A	3B	3C	3D	3E	3F	3G
CO4	Identify and explain how different social factors influence health disparities and overall well-being and relevance in present scenerio.	3	Lecture	CAP	Knows-how	L&PPT ,DIS,BS,L,L&GD
CO4	Assess the effects of social media on mental health among different demographic groups.	7	Practical18.1	CAN	Shows-how	PT,TUT
CO4	Assess Health equity and social justice, exploring their application in reducing health disparities.	5	Experiential-Learning18.1	CC	Does	DIS,BS,RP

Unit 2 صحت اور مساکن Ṣiḥḥat avr Masākin (Housing and Health)

18.2.1 مساکن کے سماجی اہداف *Masākin kē Samājī Ahdāf* (Social Goals of Housing)

18.2.2 مساکن کے معیارات و ضوابط *Masākin kē Miʻyārāt-o-Ḍawābiṭ* (Housing Standards and Regulations)

18.2.3 صحت مند مساکن کے معیارات *Ṣiḥḥatmand Masākin kē Miʻyārāt* (Criteria for Healthful Housing)

18.2.4 حالاتِ مساکن اور مسائل صحت *Ḥālāt-i-Masākin avr Masāʼil-i-Ṣiḥḥat* (Housing Conditions and Health Problems)

18.2.5 معیاری مساکن کے اشاریے *Miʻyārī Masākin kē Ishāriyē* (Indicators of Quality Housing)

References: 1,2,3,4,5,6,7,9,10,52,54,55,74,75

3A	3B	3C	3D	3E	3F	3G
CO4	Identify key housing-related factors and explain their impact on health conditions such as respiratory diseases, cardiovascular health, and mental well-being.	2	Lecture	CK	Knows-how	L&PPT ,L
CO4	Assess local housing conditions and thier helath impact.	3	Practical18.2	PSY-SET	Shows-how	TUT
CO4	Conduct field visits to observe housing conditions and the associated health risks, especially in underprivileged communities.	8	Experiential-Learning18.2	PSY-MEC	Does	FV

Practical Training Activity

Practical Training 18.1 Social Media Impact Survey

Total Learning Hours = 7

1. Introduction [1 Hour]
2. Survey Design [2 Hours]
    - Students will work in small groups to design a questionnaire.
3. Data Collection & Analysis [2 Hours]
4. Post-Activity Discussion [2 Hours]

Practical Training 18.2 Housing Quality Assessment

Total Learning Hours = 3

1. Introduction & Importance of Housing Conditions [30 Minutes]
2. Checklist Development [1 Hour]
3. Validation and Review by Teacher [45 Minutes]

4. Assessment & Feedback [45 Minutes]

Experiential Learning Activity

Experiential-Learning Learning 18.1: Group Discussion on Health Equity

Total Learning Hours = 5

1. Interactive Demonstration [2 Hours]
2. Hands-On Practice [2 Hours]
3. Case Study & Analysis [1 Hour]

Experiential-Learning Learning 18.2: Field Observation on Housing and Health

Total Learning Hours=8

1. Pre-Visit Preparation: [2 Hours]
    - Identify the target underprivileged community.
    - Develop a housing and health risk checklist.
2. Field Visit: [5 Hours]
    - Observe housing conditions.
    - Document findings with notes, and photos.
3. Post-Visit Discussion: [1 Hour]
    - Prepare a report on housing conditions and health risks.

Modular Assessment

Assessment	**Hour**

Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	2

Semester No : 4

Module 19 : حیاتیاتی ماحول Hayātiyātī Māḥawl (Biological Environment)

Module Learning Objectives

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

- Describe the relationship between the biological environment and disease transmission (e.g., vectors, pathogens).
- Identify and classify vectors of disease in a laboratory setting.
- Appreciate the role of biological control in preventing disease outbreaks.

Unit 1 مفصلیات/حشرات سے پیدا ہونے والے امراض کا جائزہ Mafṣalīyyāt/Hasharāt se Paydā hone wāle Amrāḍ kā Jā'iza (Overview of Arthropods/Insects-Borne Diseases)

19.1.1 مفصلیات/حشرات سے پیدا ہونے والے امراض کا تعارف *Mafṣalīyyāt/Hasharāt se Paydā hone wāle Amrāḍ kā Ta'āruf* (Introduction to Arthropods/Insects-Borne Diseases)

19.1.2 انسداد مفصلیات/حشرات کے اصول *Insidād-i-Mafṣalīyyāt/Hasharāt ke Uṣūl* (Principles of Arthropods/Insects Control)

References: 1,4,12

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

CO4	Identify and describe key biological environmental factors, such as microbial pathogens, allergens, and vectors, and their roles in influencing human health and disease.	5	Lecture	CC	Knows-how	L&PPT ,L,L_VC
CO4	Demonstrate how various arthropods act as disease vectors, including the life cycle.	5	Practical19.1	PSY-MEC	Shows-how	LRI,PT
CO4	Identify mosquito breeding places and their key role in spread of vector borne diseases.	5	Practical19.2	PSY-ADT	Shows-how	FV
CO4	Identify the major diseases associated with each vector and describe how these vectors contribute to disease spread with appropriate control measures.	8	Experiential-Learning19.1	CC	Does	FV
CO4	Identify arthopod borne diseases and measures to control them.	5	Experiential-Learning19.2	CAP	Does	DIS,BS

Unit 2 اہم مفصلیات/حشرات اوران کا نسداد Ahamm Mafṣalīyyāt/Hasharāt avr un kā Insidād (Key Arthropods/Insects and their Control)

19.2.1 بعوضہ (مچھر): دورۂ حیات، تولیدی طرز عمل، انتقال مرض اور انسداد کی تدابیر *Ba'ūḍa (Machchar): Dawra'-i-Ḥayāt, Tawlīdī Tarz-i-'Amal, Intiqāl-i-Maraḍ avr Insidād kī Tadābīr* (Mosquitoes: Life Cycle, Breeding Habits, Disease Transmission and Control Measures)

19.2.2 ذبابہ (گھریلو مکھی): دورۂ حیات، تولیدی طرز عمل، انتقال مرض اور انسداد کی تدابیر *Dhubāba (Gharaylū Makhkhī): Dawra'-i-Ḥayāt, Tawlīdī Tarz-i-'Amal, Intiqāl-i-Maraḍ avr Insidād kī Tadābīr* (Housefly: Life Cycle, Breeding Habits, Disease Transmission and Control Measures)

19.2.3 فاصدہ (ریت مکھی): دورۂ حیات، تولیدی طرز عمل، انتقال مرض اور انسداد کی تدابیر *Fāṣida (Rēt Makhkhī): Dawra'-i-Ḥayāt, Tawlīdī Tarz-i-'Amal, Intiqāl-i-Maraḍ avr Insidād kī Tadābīr* (Sandfly: Life Cycle, Breeding Habits, Disease Transmission and Control Measures)

19.2.4 قُملہ (جوئیں)، بُرغُوث (پسو)، قُرادَہ (چیچڑ) اور سُوسَہ (گھُن): دورۂ حیات، تولیدی طرز عمل، انتقال مرض اور انسداد کی تدابیر *Qumla (Jū'iṇ), Burghūth (Pissū), Qurāda (Chīchaṛ) avr Sosa (Ghun): Dawra'-i-Ḥayāt, Tawlīdī Tarz-i-'Amal, Intiqāl-i-Maraḍ avr Insidād kī Tadābīr* (Louse, Flea, Tick, and Mite: Life Cycle, Breeding Habits, Disease Transmission and Control Measures)

References: 1,4,12

3A	3B	3C	3D	3E	3F	3G
CO4	Identify and describe key biological environmental factors, such as vectors, and their roles in influencing human health and disease.	3	Lecture	CK	Knows-how	L&GD,L_VC,L&PPT
CO4	Demonstrate the LifeCycle of Arthopods.	6	Practical19.3	PSY-GUD	Shows-how	PT
CO4	Assess the effectiveness of various control strategies for reducing vector populations and preventing disease transmission.	8	Experiential-Learning19.3	PSY-MEC	Does	FV

Unit 3 قارِض(چوہا)اورحشرات کش ادویہ Qāriḍ (Chūhā) avr Hasharāt Kush Adwiya (Rodents and Insecticides)

19.3.1 قارِض(چوہا):انتقال مرض اور انسداد کی تدابیر *Qāriḍ (Chūhā): Intiqāl-i-Maraḍ avr Insidād kī Tadābīr* (Rodent: Disease Transmission and Control Measures)

19.3.2 حشرات کش ادویہ: درجہ بندی، عمل کے طریقۂ کار، ماحولیاتی اثرات و حفاظتی خدشات، نباتی طاردات و مُدَخِّنات (دھونیاں) *Hasharāt Kush Adwiya: Darja Bandī, 'Amal kē Ṭarīqa'-i-Kār, Māḥawliyātī Atharāt wa Ḥifāẓatī Khadshāt, Nabātī Ṭāridāt wa Mudakhkhināt (Dhūniyān)* (Insecticides: Classification, Mechanisms of Action, Environmental Impacts and Safety Concerns, Herbal Repellents and Fumigants)

References: 1,4,12,14,26,28,34

3A	3B	3C	3D	3E	3F	3G
CO4	Describe role of insecticides in vector control.	2	Lecture	CC	Knows-how	L,L&PPT
CO4	Analyze safety and mechanism of action of insecticides.	4	Practical19.4	PSY-ADT	Shows-how	PSM,L_VC
CO4	Analyze the effectiveness of various herbal repellents and assess their advantages and limitations compared to synthetic alternatives.	5	Experiential-Learning19.4	CC	Does	SY

Practical Training Activity
Practical Training 19.1 Identifying common arthropods under a microscope
Total Learning Hours = 5 1. Introduction to Arthropods [1 Hour] 2. Microscopy Demonstration [1 Hour] 3. Hands-on Identification [2 Hours] 4. Case Integration [1 Hour]
Practical Training 19.2 Mosquito Breeding Site Identification and Larvae Sampling
Total Learning Hours=5 1. Identify Mosquito Breeding Sites [1 Hour] 2. Collect Samples [2 Hours] 3. Identification of Mosquito Larvae [1 Hour] 4. Data Analysis [1 Hour]
Practical Training 19.3 Life Cycle of common Arthropods
Total Learning Hours = 6 1. Introduction to Arthropod Life Cycles [1 Hour] 2. Visualizing Life Cycle Stages Using Models and Charts [3 Hours] 3. Case Study and Public Health Relevance [1 Hour] 4. Post-Activity Discussion [1 Hour]
Practical Training 19.4 Safe and effective application of different classes of insecticides

Total Learning Hours = 4

1. Introduction to Insecticides [1 Hour]
2. Demonstration of Application Methods [2 Hours]
3. Case Integration & Risk Assessment [1 Hour]

Experiential Learning Activity

Experiential-Learning Learning 19.1: Knowledge, Attitudes, and Practices (KAP) Survey

Total Learning Hours = 8

1. Pre-survey preparation [1 Hour]
2. Conduct surveys to assess the knowledge, attitudes, and practices of local populations regarding vector-borne diseases. [4 Hours]
3. Analyze the data. [2 Hours]
4. Make a conclusion and recommendations. [1 Hour]

Experiential-Learning Learning 19.2: Discussion on Arthopod-borne Diseases

Total Learning Hours = 5

Key points for discussion:

1. Common Arthropod Vectors and Diseases [1 Hour]
2. Transmission Mechanism [1 Hour]
3. Public Health Impact [1 Hour]
4. Control and Prevention Strategies [1 Hour]
5. Challenges and Emerging Threats [1 Hour]

Experiential-Learning Learning 19.3: Field Visit to public health facilities to observe vector control strategies

Total Learning Hours = 8

1. Visit of local public health facilities to observe ongoing vector control programs and understand the integration of Unani and modern control measures. [4 Hours]
2. Engage with Staff: Speak with public health officials, practitioners, and community health workers to gain different perspectives on the effectiveness of the programs. [2 Hours]
3. Community Feedback: If possible, gather feedback from community members on their experiences with vector control measures. [2 Hours]

Experiential-Learning Learning 19.4: Symposium on Herbal Repellents

Total Learning Hours = 5

1. Introduction & Overview [1 Hour]
2. Lectures of Students [3 Hours]
3. Feedback & Expert Talk [1 Hour]

Modular Assessment

Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. Keep a structured marking pattern. Use different assessment methods in each module for the semester. **Presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	4

Module 20 : صحت پر موسمیاتی تبدیلی کے اثرات اور آفات کا نظم و نسق Ṣiḥḥat par Mavsamiyyātī Tabdīlī kē Atharāt avr Āfāt kā Naẓm-o-Nasq (Impacts of Climate Change on Health and Disaster Management)

Module Learning Objectives

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

- Describe the effects of climate change on global and local health, including emerging diseases.
- Demonstrate disaster preparedness and response techniques for health emergencies.
- Advocate for climate action and sustainable practices to mitigate health risks.

Unit 1 موسمیاتی تبدیلی اور اس کے انسانی صحت پر اثرات Mavsamiyyātī Tabdīlī avr us kē Insānī Ṣiḥḥat par Atharāt (Climate Change and its Effects on Human Health)

20.1.1 موسمیاتی تبدیلی: وجوہات و مضمرات *Mavsamiyyātī Tabdīlī: Vujūhāt wa Muḍmirāt* (Climate Change: Causes and Implications)

20.1.2 خطرے سے دوچار گروہوں کی شناخت: اطفال، مشائخ و حالیہ امراض کے شکار افراد پر موسمیاتی تبدیلی کے اثرات *Khatrē sē Dochār Girohon kī Shanākht: Aṭfāl, Mashā'ikh wa Ḥāliya Amrāḍ kē Shikār Afrād par Mavsamiyyātī Tabdīlī kē Atharāt* (Identifying At-Risk Groups: Impacts of Climate Change on Children, Elderly and Those with Pre-existing Conditions)

20.1.3 فصول اربعہ اور مزاج *Fuṣūl Arba'a avr Mizāj* (Four Seasons and their Relations to *Mizāj*)

20.1.4 موسمی امراض بلحاظ مزاج *Mavsamī Amrāḍ ba Liḥāẓ-i-Mizāj* (Seasonal Diseases with Reference to *Mizāj*)

20.1.5 تدابیر برائے مختلف موسمیات *Tadābīr barā'ē Mukhtalif Mavsamiyyāt* (Regimens in Different Seasons)

References: 1,2,3,4,12,14,15,16,18,19,20,34

3A	3B	3C	3D	3E	3F	3G
CO2,CO4	Value Climate Change Fundamentals and health issues arising due to climate change.	5	Lecture	AFT-VAL	Knows-how	L&PPT ,L&GD
CO2,CO4	Assess the Impacts of Climate Change with special reference to *Mizāj*.	5	Practical20.1	AFT-RES	Shows-how	IBL,SIM,PER

CO2,CO4	Identify Unani *Tadābīr* (Regimens) in different seasons for healthy living with relation to age groups and *Mizāj*.	5	Practical20.2	PSY-ORG	Shows-how	DIS,SY,TUT
CO2,CO4	Apply the Mitigation and Adaptation Strategies.	3	Experiential-Learning20.1	CAP	Does	FV,REC
CO2,CO4	Evaluate and compare concept of climate change in classical Unani Medical litrature with present advances.	5	Experiential-Learning20.2	CAN	Does	DIS,LS
CO2,CO4	Analyze Unani interventions adopted in different seasons.	5	Experiential-Learning20.3	CC	Does	JC

Unit 2 (ردعمل) آفات کانظم ونسق اور صحتی اقدامات Āfāt kā Naẓm-o-Nasq avr Ṣiḥḥatī Iqdāmāt (Radd-i-'Amal) (Disaster Management and Health Response)

20.2.1 آفات کی اقسام، آفات اور ہنگامی حالات کے مابین فرق *Āfāt kī Aqsām, Āfāt avr Hangāmī Ḥālāt kē Mābayan Farq* (Types of Disasters, Differences between Disasters and Emergencies)

20.2.2 آفات کے خطرات میں کمی کے طریقے *Khatrāt-i-Āfāt Mēn Kamī kē Tarīqē* (Disaster Risk Reduction Methods)

20.2.3 آفات کے لیے پیشگی تیاری *Āfāt kē liyē Pēshgī Tayyārī* (Disaster Preparedness)

20.2.4 ہنگامی طبی خدمات *Hangāmī Tibbī Khidmāt* (Emergency Medical Care)

20.2.5 وبائے امراض کی نگرانی اور انسداد *Wabā'-i-Amrāḍ kī Nigrānī avr Insidād* (Monitoring and Controlling of Disease Outbreaks)

20.2.6 صحتی فروغ وتعلیم *Ṣiḥḥatī Farogh-o-Ta'līm* (Health Promotion and Education)

20.2.7 حکومت اور غیر حکومتی تنظیموں کا کردار *Ḥukūmat avr Ghayr Ḥukūmatī Tanẓīmon kā Kirdār* (Role of Government and NGOs)

References: 1,26,27,34

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

CO2,CO4	Discuss the importance of disaster management in the context of community health.	5	Lecture	CK	Knows-how	L,L&GD,L_VC,L&PPT
CO2,CO4	Identify and assess potential risks and vulnerabilities in communities regarding different types of disasters.	5	Practical20.3	PSY-MEC	Shows-how	PER,L_VC
CO2,CO4	Implement disaster preparedness plans at the community level.	5	Practical20.4	PSY-ORG	Shows-how	SIM
CO4	Examine disaster preparedness and management at the community level.	5	Experiential-Learning20.4	PSY-SET	Does	W
CO4	Design a campaign to raise awareness about disaster preparedness in the community.	5	Experiential-Learning20.5	PSY-MEC	Does	FV
CO4	Discuss the importance of coordination among multiple organizations in disaster response and recovery efforts.	3	Experiential-Learning20.6	CE	Does	BS,DIS

Practical Training Activity

Practical Training 20.1 Healthy living plan for different seasons by taking into consideration the *Mizāj* of Individuals

Total Learning Hours = 5

1. Teacher-led Introduction [1 Hour]
2. Development of Health Plan for Each Season by Students [3 Hours]
3. Feedback Session by Teacher [1 Hour]

Practical Training 20.2 *Tadābīr* (Regimens) in different seasons with relation to age groups and *Mizāj*

Total Learning Hours = 5

1. Teacher-led Introduction [1 Hour]
2. Development of Health Plan for all four seasons by taking into consideration age group, *Mizāj* of individual, and *Mizāj* of season. [3 Hours]
3. Feedback Session by Teacher [1 Hour]

Practical Training 20.3 Video-clips/ Presentation on health issues and their solution during natural calamities

Total Learning Hours = 5

1. Show video clips on disasters and disaster management. [1 Hour].
2. Presentation on different disasters and management. [3 Hours]
3. Post Activity Discussion and Feedback [1 Hour]

Practical Training 20.4 Mock Drills and Simulation Exercises

Total Learning Hours = 5

Conduct disaster simulation exercises to practice response strategies as under:

1. Planning of Mock Drill [1 Hour 30 Minutes]
2. Conduction the Mock Drill [2 Hours 30 Minutes]
3. Post Activity Discussion [1 Hour]

Experiential Learning Activity

Experiential-Learning Learning 20.1: Community Awareness Campaign

Total Learning Hours = 3

1. Identify the Target Audience and choose awareness method. [30 Minutes]
2. Awareness Session [2 Hours]

3. Feedback Collection [30 Minutes]

Experiential-Learning Learning 20.2: Climatic Changes in Unani Classical Literature vs. Present Advances

Total Learning Hours = 5

1. Review climatic changes mentioned in Unani Classical Literature and compare them with recent advances. [3 Hours]
2. Analyze and compare the findings. [1 Hour]
3. Present the findings. [1 Hour]

Experiential-Learning Learning 20.3: Journal Club on Global Warming and its Impact on Health

Total Learning Hours = 5

Key Points:

1. Review from classical texts role of *Mizāj* in seasonal regimens [2 Hours]
2. Comparative Analysis [1 Hour]
    - Compare Unani seasonal regimens with preventive measures in other traditional systems of medicine.
3. Current Relevance and Research [2 Hours]
    - Discussion of any contemporary research or studies on Unani practices and their effectiveness.
    - Exploration of how these regimens can be integrated into modern preventive healthcare.

Experiential-Learning Learning 20.4: Workshop on disaster preparedness

Total Learning Hours = 5

1. Participate in workshops (online/offline) focused on disaster preparedness and management. [4 Hours]
2. Document key points and resources for future reference. [30 Minutes]
3. Present the key points in the form of a report. [30 Minutes]

Experiential-Learning Learning 20.5: Health Awareness Campaign

Total Learning Hours = 5

1. Identify Target Audience and Method of Awareness [1 Hour]
2. Conduct Awareness Sessions [3 Hours]
3. Collect Feedback from Participants and Prepare a Report [1 Hour]

Experiential-Learning Learning 20.6: Discussion on Relief Organizations

Total Learning Hours = 3

1. Identify key organizations involved in disaster relief (Red Cross, WHO, UN agencies, etc.). [1 Hour]
2. How do these organizations assist during and after disasters? [1 Hour]
3. What role does government support play in disaster management? [1 Hour]

Modular Assessment

Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or **Structured essay** on any topic related to this module. [50 Marks] **[Assessment Criteria:** Content-30 Marks; Organization-10 Marks; Presentation and Language-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks]	4

& Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	

Semester No : 5

Module 21 : صفائی اور ٹھوس فضلات کا انتظام Ṣafā'ī avr Thos Fuḍlāt kā Intiẓām (Sanitation and Solid Waste Management)

Module Learning Objectives

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

- Describe various sanitation systems and their role in preventing communicable diseases.
- Develop plans for effective waste management in both rural and urban settings.
- Evaluate community participation in maintaining hygiene and proper waste disposal.

Unit 1 صفائی کے معمولات اور صحت عامہ Ṣafā'ī kē Ma'mūlāt avr Ṣiḥḥat 'Āmma (Sanitation Practices and Public Health)

21.1.1 صفائی کی تفہیم *Ṣafā'ī kī Tafhīm* (Understanding Sanitation)

21.1.2 ہندستان میں صفائی کے درپیش مسائل *Hindustān mēn Ṣafā'ī kē Darpēsh Masā'il* (Sanitation Challenges in India)

21.1.3 ناقص صفائی سے صحت کے خطرات *Nāqiṣ Ṣafā'ī sē Ṣiḥḥat kē Khaṭrāt* (Health Risks from Poor Sanitation)

21.1.4 صفائی کی رکاوٹیں اور ان کا کردار *Ṣafā'ī kī Rukāvatēn avr un kā Kirdār* (Sanitary Barriers and Their Role)

21.1.5 مسائل متعلقہ صحت *Masā'il Muta'alliqa'-i-Ṣiḥḥat* (Associated Health Issues)

21.1.6 اندفاع فضلات کے طریقے *Indifā'-i-Fuḍlāt kē Ṭarīqē* (Excreta Disposal Methods)

21.1.6.1 غیر نکاسیٔ آب علاقوں میں *Ghayr Nikāsi-i-Āb 'Ilāqon mēn* (In Un-sewered Areas)

21.1.6.2 نکاسیٔ آب علاقوں میں *Nikāsi-i-Āb 'Ilāqon mēn* (In Sewered Areas)

References: 1,5,12,13,14

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

CO4	Enumerate the principles of sanitation and identify the key challenges faced in India, evaluating their impact on public health and community well-being.	5	Lecture	CK	Knows-how	L&PPT
CO4	Design and implement effective strategies for improving sanitation and waste management in communities.	10	Practical21.1	PSY-SET	Shows-how	D-M,L_VC,ML
CO4	Implement and evaluate community clean-up drives to enhance sanitation, reduce health risks, and promote sustainable waste management practices.	7	Experiential-Learning21.1	PSY-MEC	Does	CBL
CO4	Examine the process and operations of a sewage treatment plant and understand its role in environmental health.	6	Experiential-Learning21.2	CAN	Does	FV

Unit 2 ٹھوس فضلات کا انتظام Thos Fuḍlāt kā Intiẓām (Solid Waste Management)

21.2.1 جامد فضلات: تعریف و ذرائع *Jāmid Fuḍlāt: Ta'rīf-o-Dharā'i'* (Solid Waste: Definition and Sources)

21.2.2 فضلات کی ذخیرہ اندوزی کا مؤثر حل *Fuḍlāt ki Dhakhīra Andozī kā Mu'aththir Ḥal* (Effective Waste Storage Solutions)

21.2.3 جامد فضلات اکٹھا کرنے کا نظام *Jāmid Fuḍlāt Ikaththā karnē kā Niẓām* (Solid Waste Collection Systems)

21.2.4 اندفاع فضلات کے طریقے اور بہترین طریقۂ کار *Indifā'-i-Fuḍlāt kē Ṭarīqē avr Bihtarīn Ṭarīqa'-i-Kār* (Waste Disposal Methods and Best Practices)

21.2.5 غیر مناسب اندفاع فضلات کے صحت پر اثرات *Ghayr Munāsib Indifā'-i-Fuḍlāt kē Ṣiḥḥat par Atharāt* (Health Implications of Improper Waste Disposal)

References: 1,5,12,14

3A	3B	3C	3D	3E	3F	3G
CO4	Identify and implement best practices for waste disposal to promote sustainability and environmental health.	5	Practical21.2	PSY-SET	Shows-how	L&GD
CO4	Assess the health implications of improper waste disposal and recommend disposal methods and best practices that mitigate risks to public health and the environment.	8	Experiential-Learning21.3	PSY-MEC	Does	TBL

CO4	Evaluate the consequences of improper waste disposal on health, the environment, and society.	5	Experiential-Learning21.4	PSY-SET	Does	L&GD,FV
CO4	Define solid waste and identify its various sources, analyzing the impact of different types of waste on environmental health and sustainability.	5	Lecture	CK	Knows-how	L&PPT ,L&GD
CO4	Analyze the health implications of improper waste disposal.	5	Practical21.3	PSY-GUD	Shows-how	FV

Practical Training Activity

Practical Training 21.1 Strategies for improving sanitation and waste management

Total Learning Hours = 10

1. Conduct a community walk or field observation to assess the current sanitation and waste management practices. [2 Hours]
2. Identify key issues, such as improper waste disposal, lack of waste segregation, overflowing bins, and areas prone to pollution or disease outbreaks. [1 Hour]
3. Take notes and photographs to document the areas that need improvement, including waste accumulation sites, public spaces, and water contamination concerns. [1 Hour]
4. In small groups, brainstorm and design strategies for improving sanitation and waste management based on the identified issues. [3 Hours]
5. Develop a comprehensive action plan, including roles and responsibilities, resources needed, and potential challenges to address. [3 Hours]

Practical Training 21.2 Group Discussion on Waste Disposal Methods

Total Learning Hours = 5

1. Present the different types of waste (biodegradable, recyclable, hazardous, etc.) and their appropriate disposal methods. [1 Hour]

2. Introduce key best practices, such as waste segregation, recycling, composting, and safe disposal of hazardous materials. [1 Hour]
3. Students will practice sorting different types of waste into appropriate categories (e.g., organic, recyclable, and hazardous). [1 Hour]
4. Students will design a waste disposal action plan for their school or local community, focusing on the best practices they've learned (e.g., introducing waste segregation bins, promoting composting, encouraging recycling). [2 Hours]

Practical Training 21.3 Health implications of improper waste disposal

Total Learning Hours = 5

1. Introduction to Waste Disposal and Health Implications [1 Hour]
2. Field Observation/Survey of Local Waste Disposal Practices [2 Hours]
3. Group Reflection & Discussion on Solutions [2 Hours]

Experiential Learning Activity

Experiential-Learning Learning 21.1: Community clean-up drives

Total Learning Hours = 7

1. Divide participants into groups and assign different areas for the clean-up drive. [1 Hour]
2. Discuss safety precautions, the type of waste to collect, and the tools required (gloves, bags, recycling bins). [1 Hour]
3. Develop an action plan for the clean-up, including roles, responsibilities, and time management. [1 Hour]
4. Implement the community clean-up drive in the designated area(s). [3 Hours]
5. Group discussion on the experience and the importance of regular community clean-ups. [1 Hour]

Experiential-Learning Learning 21.2: Visit to Sewage Treatment Plant

Total Learning Hours = 6

1. Guided tour of a nearby sewage treatment plant. [1 Hour]
2. Observe and document each stage of the treatment process (e.g., screening, sedimentation, filtration, disinfection). [2 Hours]
3. Ask questions to plant operators about the technology used, maintenance, and challenges faced in the treatment process. [1 Hour]
4. Present findings and propose recommendations for enhancing the sewage treatment process in their local community. [2 Hours]

Experiential-Learning Learning 21.3: Field Visit

Total Learning Hours = 8

1. Field Observation and Waste Audit [3 Hours]
    - Visit a local waste disposal site or observe waste management practices in the community.
2. Waste Sorting and Impact Analysis [2 Hours]
    - Sort different types of waste (organic, recyclable, hazardous) and discuss the environmental and health risks of improper disposal.
3. Water and Soil Quality Testing [2 Hours]
    - Conduct simple tests on water and soil samples from areas affected by improper waste disposal to evaluate contamination levels, discussing the direct impact on human health and the environment.
4. Action Plan Development and Presentation [1 Hour]
    - In groups, design an action plan for improving local waste management practices.

Experiential-Learning Learning 21.4: Health Impact of Sanitation and Waste Management

Total Learning Hours = 5

1. Visit a local area to observe waste disposal practices. [3 Hours]
2. Reflect on the field observations and waste-sorting activity. Develop an action plan for improving waste disposal practices in the community. [2 Hours]

Modular Assessment

Assessment	**Hour**

Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or **Poster presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Design and Visuals-10 Marks; Delivery-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	4

Module 22 : حیاتیاتی طبی اور برقی فضلات کا انتظام Ḥayātiyātī Ṭibbī avr Barqī Fuḍlāt kā Intiẓām (Biomedical and E-Waste Management)

Module Learning Objectives

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

- Discuss the health and environmental risks associated with biomedical and electronic waste.
- Demonstrate safe practices for handling and disposing of biomedical waste.
- Recognize the ethical responsibility of healthcare professionals in managing hazardous waste.

Unit 1 حیاتیاتی طبی فضلات کا انتظام Ḥayātiyātī Ṭibbī Fuḍlāt kā Intiẓām (Biomedical Waste Management)

22.1.1 حیاتیاتی طبی فضلات: تعریف، درجہ بندی و ذرائع *Ḥayātiyātī Ṭibbī Fuḍlāt: Ta'rīf, Darjabandī-o-Dharā'i'* (Biomedical Waste: Definition, Classification and Sources)

22.1.2 صحت کے خدشات بسبب غیر مناسب انتظام *Ṣiḥḥat kē Khadshāt ba Sabab Ghayr Munāsib Intiẓām* (Health Concerns Linked to Improper Management)

22.1.3 علیٰحدگی و بندوبست *'Ilāḥidgī-o-Bandobast* (Segregation and Handling)

22.1.4 اندفاع فضلات کے طریقے *Indifā'-i-Fuḍlāt kē Ṭarīqē* (Waste Disposal Methods)

22.1.5اصول وضوابط *Uṣūl-o-Dhawābiṭ*)Guidelines and Regulations)

References: 1,5,12,14

3A	3B	3C	3D	3E	3F	3G
CO4	Define biomedical waste, classify its various types, and identify its sources within healthcare settings, emphasizing the importance of proper management to minimize environmental and health risks.	5	Lecture	CK	Knows-how	L
CO4	Evaluate the health concerns and risks associated with improper biomedical waste management and recommend strategies for segregation and safe handling to protect healthcare workers and the public.	5	Practical22.1	PSY-SET	Shows-how	D
CO4	Analyze different biomedical waste treatment and disposal methods and interpret relevant regulations and guidelines to ensure compliance with biomedical waste management standards.	6	Experiential-Learning22.1	CE	Does	W
CO4	Illustrate safe handling procedures for biomedical waste.	5	Practical22.2	PSY-ADT	Shows-how	D
CO4	Assess the colour coding practices for biomedical waste management.	4	Experiential-Learning22.2	PSY-GUD	Does	FV
CO2,CO4	Analyze the management of biomedical waste in Unani healthcare facilities Or/and other healthcare settings.	6	Experiential-Learning22.3	CC	Does	FV,PAL

Unit 2 برقی فضلات کا انتظام Barqī Fuḍlāt kā Intiẓām (E-Waste Management)

22.2.1برقی فضلات: تعریف، اقسام وذرائع *Barqī Fuḍlāt: Ta'rīf, Aqsām-o-Dharā'i'* (E-Waste: Definition, Types and Sources)

22.2.2 برقی فضلات کے صحتی خطرات *Barqī Fuḍlāt kē Ṣiḥḥatī Khatrāt* (Health Risks from E-Waste Exposure)

22.2.3 جمع آوری اور دوبارہ کارآمد بنانے کے طریقے *Jama‘ Āvarī avr Dobāra Kārāmad Banānē kē Ṭarīqē* (Collection and Recycling Practices)

22.2.4 محفوظ اندفاع کے اختیارات *Maḥfūẓ Indifā‘ kē Akhtiyārāt* (Safe Disposal Options)

22.2.5 برقی فضلات کے بندوبست کے حفاظتی اقدامات *Barqī Fuḍlāt kē Bandobast kē Ḥifāẓatī Iqdāmāt* (Protective Measures for Handling E-Waste)

22.2.6 اصول وضوابط *Uṣūl-o-Dhawābiṭ*)Guidelines and Regulations)

22.2.7 آگاہی وتعلیمی حکمت عملی *Āgāhī wa Ta‘līmī Ḥikmat ‘Amalī* (Awareness and Education Strategies)

References: 12

3A	3B	3C	3D	3E	3F	3G
CO4	Define e-waste, classify its types, and identify its sources, emphasizing the importance of proper e-waste management to mitigate environmental and public health hazards.	5	Lecture	CK	Knows-how	L&PPT
CO4	Analyze the correct segregation of e-waste into different categories.	5	Practical22.3	PSY-SET	Shows-how	PrBL,D
CO4	Analyze e-waste regulations and guidelines and develop awareness and education strategies to promote safe disposal options for e-waste management within communities.	7	Experiential-Learning22.4	CAN	Does	W
CO4	Describe and appraise the process of e-waste management, including its collection, segregation, recycling, and disposal.	3	Experiential-Learning22.5	AFT-SET	Does	SY
CO4	Identify and understand the health risks associated with exposure to e-waste.	5	Practical22.4	PSY-ADT	Shows-how	BL,DIS

Practical Training Activity

Practical Training 22.1 Health concerns and Risks associated with improper biomedical waste management

Total Learning Hours = 5

1. Overview of biomedical waste and its potential health hazards. [1 Hour]
2. Discussion on the specific health concerns for healthcare workers, waste handlers, and the general public when waste is not properly managed. [1 Hour]
3. Conduct a risk assessment of a healthcare facility's waste management system (or a simulated scenario). [1 Hour]
4. Identify potential hazards at each stage of waste handling, from segregation to final disposal. [1 Hour]
5. Group discussions on common mistakes in biomedical waste management and how they lead to accidents or health risks. [1 Hour]

Practical Training 22.2 Safe Handling for Biomedical Waste

Total Learning Hours = 5

1. Visit a local health facility to observe current practices. [1 Hour]
2. Document and analyse disposal methods. [1 Hour]
3. Take notes on the condition of the site. [1 Hour]
4. In small groups, students will create an action plan to improve BMW disposal. Each group will present their plan to the peers. [2 Hours]

Practical Training 22.3 Segregation of e-waste

Total Learning Hours = 5

1. Participants will be given mixed e-waste materials (e.g., computers, phones, wires, batteries, printers) and practice sorting them into the appropriate categories. [1 Hour]
2. Guide how to identify hazardous components (e.g., lead, mercury, batteries). [2 Hours]
3. Discuss and demonstrate the correct methods of separating reusable components (e.g., circuit boards, copper wiring) from waste materials. [2 Hours]

Practical Training 22.4 Health risks associated with e-waste exposure

Total Learning Hours = 5

1. Visit any local e-waste recycling or disposal site to observe current practices. [1 Hour]
2. Document and analyze disposal methods, safety measures, and potential health risks associated with the process. [2 Hours]
3. Take notes on the condition of the site. [1 Hour]
4. In small groups, students will create an action plan to improve e-waste disposal in their community. [1 Hour]

Experiential Learning Activity

Experiential-Learning Learning 22.1: Analysis of different biomedical waste treatment and disposal methods

Total Learning Hours = 6

1. Introduction to Biomedical Waste and Treatment Methods [1 Hour 30 Minutes]
2. Case Study Analysis of Treatment Methods [1 Hour 30 Minutes]
3. Review of Biomedical Waste Management Regulations [1 Hour 30 Minutes]
4. Simulate Biomedical Waste Treatment and Disposal Scenario [1 Hour 30 Minutes]

Experiential-Learning Learning 22.2: Colour coding practices for biomedical waste management

Total Learning Hours = 4

1. Pre-survey preparation [1 Hour]
2. Visit different departments (Wards, OPD, laboratory, etc.) and observe the BMW management system in place. [2 Hours]
3. Note down your observation and write a brief report. [1 Hour]

Experiential-Learning Learning 22.3: Management of BMW in Unani Health care facility

Total Learning Hours = 6

1. Guided tour of a healthcare facility focusing on its biomedical waste management practice. [3 Hours]
2. Interact with waste management staff to understand procedures, safety protocols, and regulatory compliance. [1 Hour]

3. Write the observations in the report. [2 Hours]

Experiential-Learning Learning 22.4: Safe disposal options for e-waste management

Total Learning Hours=7

1. Overview of global, national, and local e-waste regulations and guidelines. [2 Hours]
2. Discussion on the legal responsibilities of producers, consumers, and waste management agencies regarding e-waste disposal. [1 Hour]
3. Research and present current e-waste management practices within their local community or region. [1 Hour]
4. Identify gaps in existing regulations or practices that hinder effective e-waste disposal. [1 Hour]
5. Work in groups to create educational materials to raise awareness about safe e-waste disposal. [2 Hours]

Experiential-Learning Learning 22.5: Experts Discussion on e-waste management

Total Learning Hours = 3

1. Site visit or virtual tour of an e-waste recycling facility to observe the recycling process in action. [1 Hour]
2. Interact with experts in e-waste management to understand their methods, equipment, and safety protocols. [1 Hour]
3. Discussion on the technology and processes involved in safely extracting reusable materials. [1 Hour]

Modular Assessment

Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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.	4

Poster presentation on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Design and Visuals-10 Marks; Delivery-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	

Semester No : 6

Module 23 : پیشہ ورانہ صحت اور خطرات Pēshavarāna Ṣiḥḥat avr Khatrāt (Occupational Health and Hazards)

Module Learning Objectives

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

- Identify common occupational hazards and their impact on workers' health.
- Perform risk assessments for workplace hazards and recommend preventive measures.
- Evaluate culture of safety and health consciousness in various occupational settings.

Unit 1 پیشہ ورانہ صحت کی بنیادیں Pēshavarāna Ṣiḥḥat kī Bunyādēn (Foundations of Occupational Health)

23.1.1 پیشہ ورانہ صحت: تعریف، دائرہ کار و اہمیت *Pēshavarāna Ṣiḥḥat: Ta'rīf, Dā'ira'-i-Kār wa Ahammiyyat* (Occupational Health: Definition, Scope and Importance)

23.1.2 پیشہ ورانہ صحت کے معیارات میں تاریخی سنگ میل *Pēshavarāna Ṣiḥḥat kē Mi'yārāt mēn Tārīkhī Sang-i-Mīl* (Historical Milestones in Occupational Health Standards)

23.1.3 پیشہ ورانہ صحت کے معیارات میں سنگ میل و اہم تبدیلیاں *Pēshavarāna Ṣiḥḥat kē Mi'yārāt mēn Sang-i-Mīl wa Aham Tabdīliyan* (Milestones and significant changes in occupational health standards)

23.1.4 پیشہ ورانہ خطرات: طبیعی، کیمیائی، حیاتیاتی، مشینی و نفسیاتی سماجی *Pēshavarāna Khatrāt: Tabī'ī, Kīmiyā'ī, Ḥayātiyātī, Mashīnī wa Nafsiyātī Samājī* (Occupational Hazards: Physical, Chemical, Biological, Mechanical, and Psychosocial)

References: 1,5,12,14

3A	3B	3C	3D	3E	3F	3G
CO4	Discuss Occupational Health	5	Lecture	CC	Knows-how	L
CO4	Develop practical skills in identifying and assessing various occupational hazards within different work environments.	5	Practical23.1	PSY-SET	Shows-how	PT
CO4	Demonstrate the ability to use industry-standard tools and techniques to assess the health status of workers.	5	Practical23.2	PSY-SET	Shows-how	PT
CO4	Educate the employees and the community about occupational health and safety.	7	Experiential-Learning23.1	CAN	Does	PT
CO4	Observe and document how different industries handle occupational hazards and compare practices	6	Experiential-Learning23.2	PSY-MEC	Does	PT

Unit 2 پیشہ ورانہ امراض اور صحت کے تحفظ کی حکمت عملی Pēshavarāna Amrāḍ avr Ṣiḥḥat kē Taḥaffuẓ kī Ḥikmat ‘Amalī (Occupational Diseases and Health Protection Strategies)

23.2.1 پیشہ ورانہ امراض کا جائزہ: امراض بسبب طبیعی، کیمیائی، حیاتیاتی عوامل، پیشہ ورانہ جلدی التہاب، پیشہ ورانہ سرطان *Pēshavarāna Amrāḍ kā Jā’iza: Amrāḍ ba Sabab Tabī’ī, Kīmiyā’ī, Ḥayātiyātī, ‘Awāmil, Pēshavarāna Jildī Iltihāb, Pēshavarāna Saṛtān* (Overview of Occupational Diseases: Diseases due to Physical, Chemical and Biological Agents, Occupational Dermatitis, Occupational Cancers)

23.2.2 کارکنوں کے لیے صحت کے تحفظ کے اقدامات: طبی، قانونی اور دیگر اقدامات *Kārkunon kē liyē Ṣiḥḥat kē Taḥaffuẓ kē Iqdāmāt: Ṭibbī, Qānūnī avr Dīgar Iqdāmāt* (Health Protection Measures for Workers: Medical, Legislative and Other Measures)

References: 1,5,12,14

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

CO4	Define strategies to mitigate and control occupational hazards.	5	Lecture	CK	Knows-how	L
CO4	Assess the health outcomes related to occupational exposures.	5	Practical23.3	PSY-SET	Shows-how	TBL,TPW
CO4	Analyze occupational diseases through hands-on exploration, investigating their causes, symptoms, and impact on workers.	9	Experiential-Learning23.3	PSY-ADT	Does	JC
CO4	Observe and document how different industries handle occupational hazards and compare practices.	4	Experiential-Learning23.4	AFT-RES	Does	FV
CO4	Assess the health and well-being of workers through systematic evaluations.	5	Practical23.4	PSY-ADT	Shows-how	PAL,PT,PL

Practical Training Activity

Practical Training 23.1 Assessment of the occupational hazards in various environments

Total Learning Hours = 5

1. Introduction to Occupational Hazards and Risk Assessment Techniques [1 Hour]
2. Workplace Hazard Identification Exercise [1 Hour 30 Minutes]
3. Risk Assessment and Prioritization [1 Hour 30 Minutes]
4. Developing Risk Mitigation Strategies and Recommendations [1 Hour]

Practical Training 23.2 Health status of industry workers

Total Learning Hours = 5

1. Introduction to Industry-Standard Tools for Health Assessment [1 Hour]
2. Hands-On Training with Health Assessment Tools [1 Hour 30 Minutes]
3. Simulated Health Assessment of Workers [1 Hour 30 Minutes]
4. Interpretation of Results and Recommending Actions [1 Hour]

Practical Training 23.3 Occupational hazards

Total Learning Hours = 5

1. Introduction to Occupational Exposures and Health Outcomes [1 Hour]
2. Case Study Analysis on Occupational Health Outcomes [1 Hour]
3. Workplace Hazard Assessment and Risk Evaluation [1 Hour 30 Minutes]
4. Developing Risk Mitigation Strategies [1 Hour 30 Minutes]

Practical Training 23.4 Assessing the health of workers

Total Learning Hours = 5

1. Teacher will provide an overview of the importance of worker health assessments. [1 Hour]
2. Teacher will demonstrate basic health screening techniques. [1 Hour]
3. Teacher will explain how to identify red flags for common work-related health issues. [1 Hour]
4. Students will participate in health screening exercises, practicing under the teacher's supervision. [1 Hour]
5. They will record and interpret results of health screenings for different worker profiles. [1 Hour]

Experiential Learning Activity

Experiential-Learning Learning 23.1: Health Awareness Campaign

Total Learning Hours = 7

1. Introduction to Occupational Health and Safety [1 Hour 30 Minutes]
2. Developing Educational Materials [1 Hour 30 Minutes]
3. Simulate Employee Training Session [2 Hours]
4. Community Outreach Planning [1 Hour]
5. Feedback and Evaluation [1 Hour]

Experiential-Learning Learning 23.2: Field Observations

Total Learning Hours = 6

1. Field Visits or Virtual Industry Tours (Students will visit to various workplaces to observe health and safety practices.) [3 Hours]
2. Comparing Industry Practices [2 Hours]
3. Documenting Findings and Creating a Report (Students will document how different industries handle occupational hazards) [1 Hour]

Experiential-Learning Learning 23.3: Journal Club on Overview of occupational diseases

Total Learning Hours = 9

1. Introduction to Occupational Diseases [2 Hours]
2. Case Study Review and Analysis [4 Hours]
3. Workplace Risk Identification and Disease Correlation [1 Hour]
4. Developing Preventive Measures and Interventions [2 Hours]

Experiential-Learning Learning 23.4: Assessment of handling of occupational hazards by industries

Total Learning Hours = 4

1. Identify 2 Industries and Hazard Identification [1 Hour]
2. Field Visit or Virtual Tour of an Industry [1 Hour 30 Minutes]
3. Comparison of Hazard Control Methods [1 Hour]

4. Presentation of Observations [30 Minutes]	
Modular Assessment	
Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or **Quiz** on the topic related to this module. [50 Marks] [10 MCQs of 5 Marks Each; Questions types: Matching Questions, Reasoning and Assertion Questions, Multiple Correct Option Questions, and Single Correct Option Questions] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	4
Module 24 : آبادیاتی Ābādiyyātī avr خاندانی منصوبہ بندی کے طریقے Khāndānī Manṣūbabandī ke Ṭarīqe (Demography and Family Planning Methods)	
Module Learning Objectives (At the end of the module, the students should be able to) • Analyze demographic data and trends to understand population health dynamics. • Conduct surveys on family planning practices and evaluate their effectiveness. • Advocate for the importance of family planning in improving maternal and child health outcomes.	

Unit 1 آبادیاتی Ābādiyyātī (Demography)

24.1.1 آبادیاتی: تعارف، تعریف و دائرۂ کار *Ābādiyyātī: Ta'āruf, Ta'rīf-o-Dā'ira'-i-Kār* (Demography: Introduction, Definition and Scope)

24.1.2 بنیادی آبادیاتی تصورات اور اشاریے *Bunyādī Ābādiyyātī Taṣawwurāt avr Ishāriyē* (Basic Demographic Concepts and Indicators)

24.1.3 آبادیاتی اعداد و شمار کے ذرائع *Ābādiyyātī A'dād-o-Shumār kē Dharā'i'* (Sources of Demographic Data)

24.1.4 ہندستان میں آبادیاتی رجحانات *Hindustān mēn Ābādiyyātī Rujḥānāt* (Demographic Trends in India)

24.1.5 آبادیاتی اعداد و شمار کا اطلاق *Ābādiyyātī A'dād-o-Shumār kā Iṭlāq* (Application of Demographic Data)

References: 1,5,12,14

3A	3B	3C	3D	3E	3F	3G
CO8	Articulate a clear definition of demography and its significance in understanding population dynamics, and describe its relevance to various fields such as public health, sociology, and economics.	3	Lecture	CK	Knows-how	L
CO8	Describe basic demographic concepts.	10	Practical24.1	PSY-SET	Shows-how	DL
CO8	Demonstrate the ability to interpret and apply demographic data from various sources to analyze population dynamics.	8	Experiential-Learning24.1	CC	Does	DIS

Unit 2 خاندانی منصوبہ بندی Khāndānī Manṣūbabandī (Family Planning)

24.2.1 خاندانی منصوبہ بندی: تعارف، تعریف، اغراض و مقاصد *Khāndānī Manṣūbabandī: Ta'āruf, Ta'rīf, Aghrāḍ-o-Maqāṣid* (Family Planning: Introduction, Definition, Goals and Objectives)

24.2.2 خاندانی منصوبہ بندی کے صحتی پہلو *Khāndānī Manṣūbabandī kē Ṣiḥḥatī Pahlū* (Health Aspects of Family Planning)

24.2.3 زرخیزی سے متعلق اشاریے *Zarkhēzī sē Muta'alliq Ishāriyē* (Fertility Related Indicators)

24.2.4 خاندانی منصوبہ بندی کے پروگراموں کا ارتقاء *Khāndānī Manṣūbabandī kē Parogrāmon kā Irtiqā'* (Evolution of Family Planning Programs)

24.2.5 خاندانی منصوبہ بندی کے شماریات *Khāndānī Manṣūbabandī kē Shumāriyyāt* (Statistics on Family Planning)

24.2.6 خاندانی منصوبہ بندی کے فوائد *Khāndānī Manṣūbabandī kē Fawā'id* (Benefits of Family Planning)

24.2.7 مؤثر مشاورت کے اصول *Mu'aththir Mushāwirat kē Uṣūl* (Effective Counselling Principles)

24.2.7.1 مریض کی ضروریات و ترجیحات *Marīḍ kī Dharūriyyāt-o-Tarjīḥāt* (Patient Needs and Preferences)

24.2.7.2 غلط تصورات اور ثقافتی عقائد *Ghalaṭ Taṣawwurāt avr Thaqāfatī 'Aqā'id* (Misconceptions and Cultural Beliefs)

24.2.7.3 ابلاغ کے خطرات و فوائد *Iblāgh kē Khatrāt-o-Fawā'id* (Communicating Risks and Benefits)

24.2.7.4 خدمت فراہمی کے نمونے *Khidmat Farāhmī kē Namūnē* (Models of Service Delivery)

References: 5,14,15,16,17,18,19,20,21

3A	3B	3C	3D	3E	3F	3G
CO8	Define Family Planning: Articulate a clear definition of family planning and its importance in promoting reproductive health, understanding the role of family planning in individual and societal well-being, and its implications for population control.	3	Lecture	CK	Knows-how	L,L&GD
CO8	Identify and describe various family planning methods, including contraceptive options (hormonal, barrier, natural, and permanent methods), and understand their effectiveness, benefits, and potential side effects.	5	Practical24.2	PSY-MEC	Shows-how	PT
CO8	Assess the role of family planning programs in improving health outcomes, reducing unintended pregnancies, and promoting gender equity.	10	Experiential-Learning24.2	PSY-SET	Does	TBL

Unit 3 مانع حمل طریقے Mānī'-i-Ḥamal Ṭarīqē (Contraceptive Methods)

24.3.1 فاصلے کے طریقے *Fāṣilē kē Ṭarīqē* (Spacing Methods)

24.3.1.1 رکاوٹ کے طریقے: طبیعی، کیمیائی و مشترکہ طریقے *Rukāvat kē Ṭarīqē: Tabī'ī, Kīmiyā'ī wa Mushtarka Ṭarīqē* (Barrier Methods: Physical, Chemical, and Combined Methods)

24.3.1.2 آلات درون رحم *Ālāt Darūn-i-Raḥim* (Intrauterine Devices [IUDs])

24.3.1.3 ہارمونی طریقے *Hārmonī Ṭarīqē* (Hormonal Methods)

24.3.1.4 بعد استقرارحمل کے طریقے *Ba'd Istiqrār-i-Hamal kē Ṭarīqē* (Post-Conceptional Methods)

24.3.1.5 دیگر طریقے *Dīgar Ṭarīqē* (Other Methods)

24.3.2 حتمی طریقے *Ḥatmī Ṭarīqē* (Terminal Methods)

24.3.2.1 مردانہ نس بندی *Mardāna Nasbandī* (Male Sterilization)

24.3.2.2 زنانہ نس بندی *Zanāna Nasbandī* (Female Sterilization)

24.3.3 یونانی نظام طب میں تحدید تولید کے طریقے *Yūnānī Niẓām-i-Ṭibb mēn Taḥdid-i-Tawlīd kē Ṭarīqē* (Birth Control Methods in Unani System of Medicine)

24.3.4 مانع حمل طریقوں کا تجزیہ *Māni'-i-Ḥamal Ṭarīqon kā Tajziya* (Evaluation of Contraceptive Methods)

References: 1,5,14,22,23,24,25

3A	3B	3C	3D	3E	3F	3G
CO8	Identify and categorize various contraceptive methods, including hormonal (e.g., pills, implants, injections), barrier (e.g., condoms, diaphragms), intrauterine devices (IUDs), natural methods, and permanent methods (e.g., sterilization), and explain their mechanisms of action.	4	Lecture	CAN	Knows-how	L
CO8	Assess and compare the effectiveness, advantages, and potential side effects of various contraceptive methods.	5	Practical24.3	PSY-ADT	Shows-how	RLE
CO8	Analyse the barriers to access for contraceptive methods and the importance of counseling.	8	Experiential-Learning24.3	CAN	Does	BL

Practical Training Activity

Practical Training 24.1 Poster and Chart Making on Demographic Concepts

Total Learning Hours = 10

1. Introduction to Demographic Concepts. [2 Hours]
2. Students will create a population pyramid or age structure diagram for a selected country or region, illustrating the distribution of different age groups. [2 Hours]
3. Students will research the fertility and mortality rates of various countries, analyze the impact of these rates on population growth, and discuss their societal implications. [2 Hours]
4. The teacher will guide a group discussion, allowing students to share their findings and reflect on their understanding of the demographic concepts studied. [2 Hours]
5. Feedback and Reflection [2 Hours]

Practical Training 24.2 Poster-Making on Family Planning Methods

Total Learning Hours = 5

1. The teacher introduces the topic of family planning, explaining its importance and various methods. [1 Hour]
2. Each student or group of students will create a poster that clearly explains one family planning method. [2 Hours]
3. Each student or group will present their poster to the class. [1 Hour]
4. After each presentation, the teacher will provide constructive feedback on the content and design of the poster. [1 Hour]

Practical Training 24.3 Comparison of various contraceptive methods

Total Learning Hours = 5

1. Teacher will give a brief overview of common contraceptive methods. [1 Hour]
2. Students will review case studies in groups, assessing how various contraceptive methods align with the needs of the individuals in the scenarios. [1 Hour]
3. Students will practice role-playing counselling sessions with peers, simulating discussions with clients about contraceptive options. [2 Hours]
4. Reflect on the role-play, sharing insights and feedback on how individuals can be better supported in making informed contraceptive choices. [1 Hour]

Experiential Learning Activity

Experiential-Learning Learning 24.1: Interpretation of Demographic Data

Total Learning Hours = 8

1. Case Study Analysis: Population Dynamics in Different Regions [3 Hours]
    - Students will work in small groups, each analyzing the population dynamics of a different region. They will use demographic data to assess key trends.
2. Policy Implications and Population Projections [3 Hours]
    - Students will apply demographic data to create population projections.
3. Presentation of Analysis and Recommendations [2 Hours]
4. Students will present their analysis of population dynamics, including key findings from their case studies and projections.

Experiential-Learning Learning 24.2: Evaluate the Impact of Family Planning Programs

Total Learning Hours = 10

1. Introduction to Family Planning Programs [2 Hours]
    - Students will engage in a lecture or reading session on the scope and impact of family planning programs.
2. Group Discussion on Health Outcomes and Family Planning [2 Hours]
    - students will analyze data or case studies on the health outcomes of family planning programs in various countries or communities.
3. Case Study Analysis on Unintended Pregnancies [2 Hours]
4. Exploring Gender Equity and Family Planning Programs [2 Hours]
    - students will examine how family planning programs contribute to gender equality by improving women's control over their reproductive health.
5. Developing a Family Planning Awareness Campaign [1 Hour]
6. Reflection and Evaluation [1 Hour]

Experiential-Learning Learning 24.3: Barriers to Access for Contraceptive Methods

Total Learning Hours = 8

1. Introduction to Contraceptive Methods and Access Barriers [1 Hour 30 Minutes]
    - Students will review literature on global and local trends in contraceptive use, with a focus on understanding the societal and individual factors that hinder access.
2. Group Discussion on Barriers to Contraceptive Access [1 Hour 30 Minutes]
    - Students will be divided into small groups to brainstorm and list barriers.
3. Role-Playing Counselling Sessions [2 Hours]
    - In pairs or small groups, students will engage in role-playing exercises where one student acts as a healthcare provider and the other as a client.
4. Analysis of Case Studies on Contraceptive Access [1 Hour 30 Minutes]
    - Students will review real-world case studies where individuals or communities faced challenges in accessing contraceptives.
5. Developing a Comprehensive Community Outreach Plan [1 Hour]
    - students will create a community outreach plan aimed at addressing the barriers to contraceptive access.
6. Reflection and Evaluation [30 Minutes]

Modular Assessment

Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or	4

Poster presentation on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Design and Visuals-10 Marks; Delivery-10 Marks] Or **Quiz** on the topics related to this module. [50 Marks] [10 MCQs of 5 Marks Each; Questions types: Matching Questions, Reasoning and Assertion Questions, Multiple Correct Option Questions, and Single Correct Option Questions.] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	

Paper No : 4(صحت عامہ کی خدمات کا نظام اور منصوبے Ṣiḥḥat ʻĀmma kī Khidmāt kā Niẓām avr Manṣūbe (Public Health Care System and Policies))

Semester No : 3

Module 25 : معاشرتی صحت اور صحتی خدمات کا نظام Mu'āsharatī Ṣiḥḥat avr Ṣiḥḥatī K̲h̲idmāt kā Niẓām (Health Care of Community and Health Care System)

Module Learning Objectives

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

- Describe the concept of healthcare and its different levels within a community health system.
- Demonstrate the ability to assess the needs of a community to improve healthcare delivery.
- Analyze the significance of community-based healthcare and the integration of Unani Medicine in the healthcare system.

Unit 1 معاشرتی صحتی نگہداشت Mu'āsharatī Ṣiḥḥatī Nighahdāsht (Community Health Care)

25.1.1 صحتی نگہداشت کا نظریہ *Ṣiḥḥatī Nighahdāsht kā Naẓariyya* (Concept of Health Care)

25.1.2 صحتی نگہداشت کے مدارج *Ṣiḥḥatī Nighahdāsht ke Madārij* (Levels of Health Care)

25.1.3 بھارت میں ابتدائی صحتی نگہداشت Bhārat mēn̲ Ibtidā'ī Ṣiḥḥatī Nighahdāsht (Primary Health Care in India)

25.1.4 ابتدائی صحتی نگہداشت کے اجزاء اور اصول *Ibtidāʼī Ṣiḥḥatī Nighahdāsht ke Ajzāʼ avr Uṣūl* (Elements and Principles of Primary Health Care)

25.1.5 معاشرتی صحتی نگہداشت میں آیوش *Muʻāsharatī Ṣiḥḥatī Nighahdāsht mēn̲ Āyush* (Ayush in Community Health Care)

25.1.6 صحت سب کے لیے *Ṣiḥḥat Sab ke Liye* (Health for All)

25.1.7 ہزار سالہ ترقی کے اہداف *Hazār Sāla Taraqqī ke Ahdāf* (Millennium Development Goals)

25.1.8 پائیدار ترقی کے اہداف *Pāʼīdār Taraqqī ke Ahdāf* (Sustainable Development Goals)

References: 1

3A	3B	3C	3D	3E	3F	3G
CO6,CO7	Discuss the Elements and Principles of primary Health care.	2	Lecture	CC	Knows-how	L&PPT

CO7,CO8	Describe the National Health Strategy for Health for All and its significance.	3	Practical25.1	PSY-SET	Shows-how	L&GD,PER
CO6,CO7	Discuss the Healthcare Services and systems in India & Healthcare delivery by Ayush system of medicine.	2	Lecture	CC	Knows-how	L
CO6,CO7	Describe the Resources requires for efficient Health Care and suggest the possible corrective measure.	2	Lecture	CC	Knows-how	L
CO6,CO7	Evaluate the Healthcare system and healthcare delivery by Ayush.	4	Practical25.2	PSY-MEC	Shows-how	TUT,REC
CO6,CO7	Organize the visit to health care facility to understand the functionality.	8	Experiential-Learning25.1	AFT-REC	Does	FV
CO6,CO7	Evaluate the various public Health problems in the community and propose the possible solution for it.	7	Experiential-Learning25.2	CAP	Does	FV,PBL
CO6,CO7	Describe the National Health Strategy for Health for All and its significance.	3	Practical25.3	PSY-ORG	Shows-how	PT,PER

Unit 2 صحتی نگہداشت کی فراہمی کا نمونہ Ṣiḥḥatī Nighahdāsht kī Farāhamī kā Namūna (Health Care Delivery Services)

25.2.1 صحتی مسائل *Ṣiḥḥatī Masā'il* (Health Problems)

25.2.2 خدمات برائے صحتی نگہداشت *Ḵẖidmāt barā'e Ṣiḥḥatī Nighahdāsht* (Health Care Services)

25.2.3 صحتی نگہداشت کا نظام *Ṣiḥḥatī Nighahdāsht kā Niẓām* (Health Care System)

25.2.4 افرادی قوت برائے صحت *Afrādī Quwwat barā'e Ṣiḥḥat* (Health Manpower)

25.2.5پی ایچ سی، سی ایچ سی اور آیوش ہسپتال کے لیے صحت عامہ کے معیار *PHC, CHC avr Āyush Haspatāl ke liye Ṣiḥḥat-i-'Āmma ke Mi'yār* (Public Health Standard for PHC, CHC, and Ayush Hospital)

References: 1

3A	3B	3C	3D	3E	3F	3G
CO6,CO7	Evaluate the scope of Universal Health coverage in equitable distribution and Social justice.	4	Practical25.4	PSY-MEC	Shows-how	JC,REC,DIS,PER,TUT
CO6,CO7	Evaluate the Healthcare System in India & Healthcare delivery by Ayush	4	Practical25.5	PSY-GUD	Shows-how	SY
CO6,CO7	Identify the Job description of members of the Health Team.	5	Experiential-Learning25.3	PSY-MEC	Does	IBL
CO6,CO7	Discuss the Indian Public Health Standards (IPHS) in Subcenter, Primary Health Centre (PHC) and Community Health Center (CHC).	6	Experiential-Learning25.4	PSY-MEC	Does	DIS,SDL
CO6,CO7	Discuss the principles of planning and planning cycle in healthcare management.	2	Lecture	CK	Knows-how	L
CO6,CO7	Describe the health system in India at the central level, State level, and District level and evaluate the different health services in India.	2	Lecture	CC	Knows-how	L&GD
CO6,CO7	Asess role of Ayush especially Unani Institutes, and Research Centres/Hospitals in Public Health.	2	Practical25.6	PSY-ADT	Shows-how	PT

Practical Training Activity

Practical Training 25.1 Health for All

Total Learning Hours = 3

1. Under teacher's guidance, students will create a PowerPoint presentation on the concept of 'Health for All,' covering: [2 Hours]
    - The need for 'Health for All'
    - The benefits of 'Health for All'
    - The challenges associated with 'Health for All'
    - The principles of 'Health for All'
    - The policy framework supporting 'Health for All'
2. Students will present their PowerPoint to their peers. [45 Minutes]
3. Teacher will give feedback on presentation. [15 Minutes]

Practical Training 25.2 Healthcare system and health care delivery

Total Learning Hours = 4

Under the teacher's guidance, a panel discussion will be organized where:

1. Faculty and students will share thoughtful questions, relevant experiences, and insights about the healthcare system. [2 Hours]
2. The discussion will also focus on healthcare delivery by AYUSH. [2 Hours]

Practical Training 25.3 National Health Strategy for Health for All

Total Learning Hours = 3

1. Under teacher guidance students will create a PowerPoint presentation on the concept of 'Health for All,' covering its need, benefits, challenges, principles, and the policy framework supporting it. [2 Hours]
2. Students will present their PowerPoint to their peers and teachers. [1 Hour]

Practical Training 25.4 Universal Health Coverage
Total Learning Hours = 4 Under the teacher's guidance, a journal club will be organized where students will: 1. Present selected papers on Universal Health Coverage. [3 Hours] 2. Teacher will provide feedback on each presentation. [1 Hour]
Practical Training 25.5 Ayush in Healthcare Delivery
Total Learning Hours = 4 Under the teacher's guidance, a symposium will be organized where students will present on: 1. The role of Ayush in healthcare delivery. [3 Hours] 2. Teacher will give feedabck on each presentation. [1 Hour]
Practical Training 25.6 Ayush in Public Health
Total Learning Hours = 2 Poster presentation on: 1. Under the teacher's guidance, students will create informative posters highlighting the role of Unani Medicine in public health. [2 Hours]
Experiential Learning Activity
Experiential-Learning Learning 25.1: Health Care Facility Visit
Total Learning Hours = 8

1. Students will visit a local health facility to observe the basic healthcare services provided, such as immunization programs, antenatal and postnatal care, and treatment for common ailments. [4 Hours]
2. Interact with the healthcare workers to understand the challenges and standards maintained at the center. [2 Hours]
3. They will record the observations and present in the form of report. [2 Hours]

Experiential-Learning Learning 25.2: Community Survey

Total Learning Hours = 7

1. Students will conduct a house to house survey in any neraby area and collect data on prevailing health problems. [5 Hours]
2. Students will analyze the data collected during the survey, identify key health issues, and categorize them based on priority (e.g., immediate, short-term, and long-term solutions). Based on the survey data, students will propose solutions to address the health problems in the village. [2 Hours]

Experiential-Learning Learning 25.3: Job description of members of the Health Team

Total Learning Hours = 5

1. Students will interview different members of the health team to understand their roles, tasks, challenges, and how they contribute to healthcare delivery. [4 Hours]
2. Students will present a case study on a public health issue, explaining the roles of different health team members and how they would work together to address the issue. [1 Hour]

Experiential-Learning Learning 25.4: Indian Public Health Standards (IPHS)

Total Learning Hours = 6

1. Visit a Subcenter/PHC/CHC. [1 Hour]

2. Interqact with healthcare providers to learn about specialized care, medical procedures, and public health programs implemented at the community level. [3 Hours]
3. Check the facilities with IPHS. [1 Hour]
4. Provide Report [1 Hour]

Modular Assessment

Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Case Study**: Case study analyzing different healthcare systems. [50 Marks] [**Assessment Criteria:** Understanding of the Case-20 Marks; Analysis of Key issues-20 Marks; Presentation and Structure-10 Marks] Or **Presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	4

Module 26 : صحتی منصوبہ بندی وانتظام Ṣiḥḥatī Manṣūba Bandī wa Intiẓām (Health Planning and Management)

Module Learning Objectives

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

1. Describe the principles of health planning and the planning cycle in healthcare management.
2. Develop a plan for implementing health management strategies using Unani approaches for a public health intervention.
3. Value the role of effective planning and management in improving public health outcomes, particularly through Unani practices.

Unit 1 صحتی منصوبہ بندی وانتظام کی اساسیات Ṣiḥḥatī Manṣūba Bandī wa Intiẓām kī Asāsiyyāt (Foundations of Health Planning and Management)

26.1.1 تجزیہ برائے صحتی ضروریات ومطالبات *Tajzīya barā'ē Ṣiḥḥatī Ẓarūriyyāt wa Muṭālibāt* (Health Needs and Demands Assessment)

26.1.2 ذرائع تخصیص وانتظام *Dharā'i' Takhṣīṣ wa Intiẓām* (Resource Allocation and Management)

26.1.3 مقاصد، اہداف وعزائم کا تعین *Maqāṣid, Ahdāf wa 'Azā'im kā Ta'ayyun* (Setting Objectives, Targets and Goals)

26.1.4 منصوبہ بندی کے دورانیے، انتظامی طریقۂ کار اور تکنیکوں کی تفہیم *Manṣūba Bandī ke Dawrāniye, Intiẓāmī Ṭarīqa'-i Kār avr Taknīkoṉ kī Tafhīm* (Understanding the Planning Cycle, Management Process and Techniques)

References: 1

3A	3B	3C	3D	3E	3F	3G
CO6,CO7	Explain the principles of planning and planning cycle in healthcare management.	3	Lecture	CC	Knows-how	L&PPT ,L
CO6,CO7	Define Management methods and techniques to improve the efficiency of the Health care delivery.	2	Lecture	CK	Knows-how	L,L&PPT
CO6,CO7	Evaluate healthcare delivery systems at the Panchayat and District levels.	5	Practical26.1	PSY-SET	Shows-how	L&GD,DIS,SDL
CO6,CO7	Analyze the role and impact of Five-Year Plans in shaping health policies and improving healthcare outcomes.	5	Practical26.2	PSY-GUD	Shows-how	TBL

CO6,CO7	Analyze health planning at different healthcare center levels in India.	6	Experiential-Learning26.1	CAN	Does	PL,PER
CO6,CO7	Apply the steps in evaluating health services by collecting data, analyzing performance, and proposing improvements to enhance service delivery and outcome.	6	Experiential-Learning26.2	PSY-SET	Does	PrBL,TPW

Unit 2 بھارت میں صحتی منصوبہ بندی کا ڈھانچہ Bhārat mēn̲ Ṣiḥḥatī Manṣūba Bandī kā Dhān̲cha (Health Planning Framework in India)

26.2.1 بھارت میں صحتی منصوبہ بندی کے لیے تشکیل کی گئی کلیدی مجلس کا عمومی جائزہ *Bhārat mēn̲ Ṣiḥḥatī Manṣūba Bandī ke liye Tashkīl kī ga'ī Kalīdī Majlis kā 'Umūmī Jā'iza* (Overview of Key Committee Constituted in India for Health Planning)

26.2.2 پلاننگ کمیشن سے نیتی آیوگ تک کا سفر *Plān̲ing Kamīshan se Nītī Āyog tak kā Safar* (Evolution of the Planning Commission and Niti Aayog)

26.2.3 پنج سالہ منصوبوں میں صحتی منصوبہ بندی کا انضمام *Panj Sāla Manṣūbōn̲ mēn̲ Ṣiḥḥatī Manṣūba Bandī kā Inẓimām* (Integration of Health Planning in Five-Year Plans)

References: 1

3A	3B	3C	3D	3E	3F	3G
CO6,CO7	Discuss the Health planning in India and role of NITI Ayog in formulating the Health Policy in India.	3	Lecture	CC	Knows-how	L&GD
CO6,CO7	Describe the health system in India at the central level, State level, and District level and evaluate the different health services in India.	2	Lecture	PSY-SET	Knows-how	FC,ML,BL,L&GD
CO6,CO7	Assess and evaluate the accessibility and equity of healthcare services within a community.	5	Practical26.3	PSY-GUD	Shows-how	BS,DIS
CO6,CO7	Apply concepts from behavioral sciences to analyze and understand human behavior through practical observation.	5	Practical26.4	PSY-ADT	Shows-how	PAL

CO6,CO7	Analyze health needs and conduct gap assessments in healthcare services to identify areas for improvement and propose solutions to enhance health outcomes.	7	Experiential-Learning26.3	AFT-VAL	Does	PrBL
CO6,CO7	Analyze and interpret the health needs and problems of a community to develop strategies for promoting health and improving overall well-being.	7	Experiential-Learning26.4	AFT-VAL	Does	RLE,DG

Practical Training Activity

Practical Training 26.1 Healthcare delivery at Panchayat and District levels

Total Learning Hours = 5

1. Create a PowerPoint on Healthcare Delivery: Under teacher guidance, students will create a PowerPoint presentation on healthcare delivery systems at both the Panchayat and District levels. [3 Hours]
2. Present the PowerPoint: Students will present their PowerPoint to peers and teachers, explaining key aspects of healthcare delivery at both levels. [1 Hour 30 Minutes]
3. Feedback: The Teacher will provide feedback on each presentation. [30 Minutes]

Practical Training 26.2 Role of Five-Year Plans

Total Learning Hours = 5

1. Research and Overview of Five-Year Plans [2 Hours]
    - Research the key components of past and current Five-Year Plans.
    - Focus on health-related objectives and outcomes.
2. Case Study Analysis [1 Hour]
    - Analyze a specific Five-Year Plan.
    - Investigate health policies introduced and their effectiveness.

3. Group Discussion on Health Priorities [1 Hour]
    - Break into groups and discuss how health goals are incorporated into the plans.
4. Create a Presentation on Findings [1 Hour]
    - Compile findings into a PowerPoint or report.
    - Present to peers, focusing on how Five-Year Plans have influenced health policies and outcomes.

Practical Training 26.3 Equitable and Accessible Health Care

Total Learning Hours = 5

1. Survey Healthcare Accessibility: Under teacher's guidance, design a survey to assess healthcare accessibility and equity, gathering data from a diverse group. [2 Hours]
2. Interview Healthcare Providers and Leaders: Under the teacher's guidance, interview healthcare professionals and community leaders to gain insights into accessibility challenges. [1 Hour]
3. Analyze Findings and Present Recommendations: Analyze the collected data and create a presentation with recommendations for improving healthcare equity and accessibility. [2 Hours]

Practical Training 26.4 Understanding Human Behaviour

Total Learning Hours = 5

1. Create and Distribute a Survey: Under the teacher's guidance, students will design and distribute a survey to collect data on specific behavioral patterns, such as social media use [3 Hours]
2. Analyze Data and Write a Report: Students will compile and analyze the survey data, then write a comprehensive report summarizing their findings. [2 Hours]

Experiential Learning Activity

Experiential-Learning Learning 26.1: Health Planning

Total Learning Hours = 6

1. Visit to Local Healthcare Centers [2 Hours]
    - Students will visit a local Subcenter, PHC, or CHC to observe health planning in action.
2. Interviewing Health Officials [3 Hours]
    - Students will interview healthcare officials (e.g., Medical Officers) at different healthcare levels to discuss the specific health plans implemented in the area, the challenges faced, and the methods used for planning healthcare services to meet community needs.
3. Group Discussion and Presentation on Health Planning [1 Hour]
    - In groups, students will discuss their findings from the visit and interviews, highlighting the differences in health planning across various levels.

Experiential-Learning Learning 26.2: Evaluation of the Health Services

Total Learning Hours = 6

1. Data Collection and Site Observation [3 Hours]
    - Students will visit a local healthcare facility to observe and collect data on service delivery. They will focus on areas such as patient flow, quality of care, availability of resources, and patient satisfaction.
2. Data Analysis and Performance Assessment [2 Hours]
    - Students will analyze the collected data, identifying strengths and weaknesses in the healthcare services. They will assess service delivery based on efficiency, accessibility, patient outcomes, and staff performance, comparing it with the expected standards.
3. Developing an Evaluation Report and Recommendations [1 Hour]
    - Based on the analysis, students will compile an evaluation report highlighting the findings and proposing recommendations for improving healthcare services.

Experiential-Learning Learning 26.3: Health Needs Assessment and Gap Assessment in Health Care

Total Learning Hours = 7

1. Community Health Needs Survey [2 Hours]:
    - Students will design and conduct a survey to assess the health needs of a community, gathering data on prevalent health issues, and healthcare accessibility.
2. Interviewing Healthcare Providers [1 Hour 30 Minutes]:
    - Students will interview local healthcare professionals (e.g., doctors, nurses, public health workers) to understand the challenges they face in delivering care, the resources available, and gaps in the current healthcare system.
3. Gap Assessment Mapping [2 Hours]:
    - Based on the survey data and interviews, students will create a gap assessment map, highlighting the areas where healthcare services are lacking or inadequate.
4. Proposing Healthcare Solutions [1 Hour 30 Minutes]:
    - They will develop a report outlining strategies for improving healthcare access, addressing identified gaps, and enhancing health outcomes in the community.

Experiential-Learning Learning 26.4: Health Needs of a Community

Total Learning Hours = 7

1. Community Health Assessment through Surveys [2 Hours]
    - Students will conduct a health needs assessment in a local community by surveys.
2. Focus Group Discussion [1 Hour 30 Minutes]
    - Students will organize and participate in a focus group discussion with community members to gain deeper insights into the prevalent health problems, health-seeking behaviors, and community perceptions on health and wellness.
3. Health Mapping and Data Analysis [2 Hours]:
    - Based on the survey and focus group findings, students will create a community health map to visualize the areas with the highest health concerns.
4. Developing Health Promotion Strategies [1 Hour 30 Minutes]:

- Using the data from the survey and focus group discussions, students will propose practical health promotion strategies tailored to the community's needs.

Modular Assessment

Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be for 50 marks for this module. 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. **Quiz** on the topics related to this module. [50 Marks] [10 MCQs of 5 Marks Each; Questions types: Matching Questions, Reasoning and Assertion Questions, Multiple Correct Option Questions, and Single Correct Option Questions.] Or **Presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	4

Semester No : 4

Module 27 : صحتی تعلیمات اور ترسیلات Ṣiḥḥatī Ta'līmāt avr Tarsīlāt (Health Education and Communication)

Module Learning Objectives

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

- Discuss the theories and strategies behind health education and behaviour change communication.
- Design and deliver a health education campaign.
- Demonstrate empathy and cultural sensitivity in health communication efforts.

Unit 1 صحتی تعلیمات کے اصول و معمولات Ṣiḥḥatī Ta'līmāt ke Uṣūl-o-Ma'mūlāt (Principles and Practices of Health Education)

27.1.1 صحتی تعلیمات کی تعریف، اغراض و مقاصد اور حصول *Ṣiḥḥatī Ta'līmāt kī Ta'rīf, Aghrāḍ-o-Maqāṣid avr Ḥuṣūl* (Definition, Aims and Objectives, Approach to Health Education)

27.1.2 صحتی تعلیمات کا نمونہ *Ṣiḥḥatī Ta'līmāt kā Namūna* (Models of Health Education)

27.1.3 صحتی تعلیمات کے اجزاء *Ṣiḥḥatī Ta'līmāt ke Ajzā'* (Contents of Health Education)

27.1.4 صحتی تعلیمات کے اصول و طریقے *Ṣiḥḥatī Ta'līmāt ke Uṣūl-o-Ṭarīqe* (Principles of Health Education)

27.1.5 صحتی تعلیمات کے معمولات *Ṣiḥḥatī Ta'līmāt ke Ma'mūlāt* (Practices of Health Education)

27.1.6 درجات آئی ای سی (معلومات، تعلیمات و ترسیلات): منصوبہ بندی، نفاذ اور تجزیہ *Darjāt-i-*IEC *(Ma'lūmāt, Ta'līmāt wa Tarsīlāt): Manṣūba Bandī, Nifādh avr Tajzīya* (Steps in IEC (Information, Education and Communication): Planning, Implementation and Evaluation)

References: 1

3A	3B	3C	3D	3E	3F	3G
CO6,CO7	Discuss and apprise the theories and strategies behind health education and behaviour change communication.	3	Lecture	AFT-SET	Knows-how	L
CO6,CO7	Describe the communication Process, types of communication, functions of health communication.	3	Lecture	CC	Knows-how	L&GD,L
CO6,CO7	Analyze effective communication and Behavioural techniques in healthcare system.	5	Practical27.1	PSY-GUD	Shows-how	TUT,PT
CO6,CO7	Design and evaluate a health education program for the target audience.	5	Practical27.2	PSY-SET	Shows-how	SY,TUT,PT

CO6,CO7	Advocate for a health education program targeting a specific population.	8	Experiential-Learning27.1	AFT-SET	Does	D,PL,DG
CO6,CO7	Apply various health communication methods according to different approaches, evaluating their effectiveness in promoting health and engaging communities.	8	Experiential-Learning27.2	PSY-SET	Does	D,TPW,DG

Unit 2 صحتی ترسیلات کے لوازم Ṣiḥḥatī Tarsīlāt ke Lawāzim (Essentials of Health Communication)

27.2.1 ترسیلات کے طریقے *Tarsīlāt ke Ṭarīqe* (Communication Process)

27.2.2 ترسیلات کی اقسام *Tarsīlāt kī Aqsām* (Types of Communication)

27.2.3 صحتی ترسیلات کے افعال *Ṣiḥḥatī Tarsīlāt ke Afʿāl* (Functions of Health Communication)

References: 1

3A	3B	3C	3D	3E	3F	3G
CO6,CO7	Describe the Definition, Aims and Objectives, Approach to Health Education, Models of Health Education to promote the public health.	2	Lecture	CC	Knows-how	L&PPT ,L
CO6,CO7	Describethe principles of health education, practice of health education, planning, implementation and evaluation.	2	Lecture	CK	Knows-how	L
CO6,CO7	Evaluate the principles and practices of health education, focusing on how to effectively communicate health information and promote healthy behaviors.	5	Practical27.3	PSY-ADT	Shows-how	SY,PT
CO6,CO7	Evaluate the effectiveness of health education materials in schools or community settings.	5	Practical27.4	PSY-GUD	Shows-how	DIS,PL,PT

CO6,CO7	Describe the behaviour change health communication strategies by analyzing real-world examples.	5	Experiential-Learning27.3	PSY-MEC	Does	DIS,SY,JC
CO6,CO7	Evaluate the effectiveness of IEC material and strategies, and design an IEC plan targeting a specific health issue.	5	Experiential-Learning27.4	AFT-VAL	Does	TUT,DIS

Practical Training Activity

Practical Training 27.1 Communication techniques in healthcare settings

Total Learning Hours = 5

1. The teacher will teach key communication strategies in healthcare and their impact on patient outcomes. [1 Hour]
2. Students will explore behavioral techniques like motivational interviewing and reinforcement to promote health behavior change. [1 Hour]
3. Students will practice healthcare communication and behavioral techniques through role-playing exercises. [2 Hours]
4. Students will assess the effectiveness of the techniques used in role-plays and present insights. [1 Hour]

Practical Training 27.2 Health Education Material

Total Learning Hours = 5

1. Understand key components like needs assessment, goal setting, and communication strategies. [1 Hour]
2. Develop a tailored health education program for a specific audience and health issue. [2 Hours]
3. Create and simulate evaluation tools to assess the program's effectiveness. [1 Hour]
4. Present the program and evaluation findings, reflecting on strengths and areas for improvement. [1 Hour]

Practical Training 27.3 Principles and Practice of Health Education

Total Learning Hours = 5

1. The Teacher will teach key principles like health literacy, behavior change models, and cultural sensitivity. [1 Hour]

2. Review successful health education programs and strategies used in various settings. [1 Hour]
3. Create a tailored health education plan for a specific audience or health issue. [2 Hours]
4. Present the health education plan to peers, reflecting on its potential application and challenges. [1 Hour]

Practical Training 27.4 Effectiveness of health education materials

Total Learning Hours = 5

1. Research Existing Health Education Materials [2 Hours]
    - Collect examples of health education materials used in schools or local communities.
    - Identify the key health topics they address (e.g., hygiene, nutrition, mental health).
2. Evaluate Content and Design [2 Hours]
    - Assess the simplicity, clarity, and cultural relevance of the materials.
    - Evaluate the visual appeal, layout, and how well they capture attention.
3. Present Findings and Recommendations [1 Hour]
    - Under the teacher's guidance, create a presentation summarizing findings.

Experiential Learning Activity

Experiential-Learning Learning 27.1: Health Education Program for Specific Population

Total Learning Hours = 8

1. Research and Identify the Health Needs of a Specific Population [2 Hours]
    - Students will research and select a specific population (e.g., children, elderly, women, rural communities). They will assess their health needs, focusing on common health issues, existing health gaps, and barriers to accessing healthcare or health education.
2. Designing the Health Education Program [2 Hours 30 Minutes]
    - Students will develop a health education program tailored to the identified population’s needs.

3. Creating a Health Communication Plan [2 Hours]
    - Students will design a health communication plan to promote the education program.
4. Presentation and Advocacy [1 Hour 30 Minutes]
    - Students will present their health education program and communication plan to their peers or a panel of experts. They will advocate for the implementation of the program, explaining how their approach will benefit the target population and addressing any potential challenges to its success.

Experiential-Learning Learning 27.2: Health Communication Approaches

Total Learning Hours = 8

1. Introduction to Health Communication Methods [1 Hour]
    - Students will attend a session on different methods of health communication, including mass media, interpersonal communication, community engagement, and digital platforms. They will learn about the key approaches and how they are applied in real-world health campaigns.
2. Analyze Health Campaigns Across Approaches [2 Hours]
    - Students will review case studies of health communication campaigns that use different approaches (e.g., mass media campaigns, community-based initiatives, digital health platforms). They will analyze the methods, strategies, and outcomes of each campaign to understand how the communication approach influenced its success.
3. Field Engagement and Communication Method Practice [3 Hours]
    - Students will engage with a local community or a selected target group and apply different health communication methods based on the context.
4. Develop a Health Communication Strategy [2 Hours]
    - Students will work in groups to design a health communication strategy for a specific health issue, selecting the most appropriate methods from various communication approaches.

Experiential-Learning Learning 27.3: Behaviour Change Communication

Total Learning Hours = 5

1. Introduction to Behaviour Change Communication [1 Hour]
    - Students will attend a brief session introducing the principles of behaviour change communication.
2. Case Study Analysis of BCC Campaigns [1 Hour]
    - Students will analyze successful behaviour change health communication campaigns (e.g., anti-smoking, handwashing promotion) to identify the strategies used, target audience, messaging techniques, and their impact on behaviour change.
3. Community Engagement and Needs Assessment [2 Hours]
    - Students will engage with a local community to assess the health behaviours prevalent in the community and understand the factors influencing these behaviours.
4. Developing a BCC Plan [1 Hour]
    - Based on the community engagement findings, students will design a simple behaviour change health communication plan focused on a specific health issue (e.g., promoting physical activity, improving nutrition).

Experiential-Learning Learning 27.4: Effectiveness and Designing of IEC

Total Learning Hours = 5

1. Review and Analyze Existing IEC Materials [1 Hour 30 Minutes]:
    - Students will evaluate existing IEC materials (e.g., posters, brochures, videos) related to a specific health issue. They will assess the clarity, appeal, accuracy, and effectiveness of these materials in conveying the intended message to the target audience.
2. Focus Group Discussion on IEC Effectiveness [1 Hour]
    - Students will conduct a focus group discussion with community members to gather feedback on the existing IEC materials. They will explore community perceptions, understand which messages are most impactful, and identify any gaps in communication strategies.
3. Design an IEC Plan [2 Hours]
    - Based on the analysis and feedback, students will develop a comprehensive IEC plan for a selected health issue.

4. Presentation of IEC Plan [30 Minutes]
    - Students will present their IEC plan to peers and instructors.

Modular Assessment

Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Poster presentations** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Design and Visuals-10 Marks; Delivery-10 Marks] Or **Presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	4

Module 28 : اطلاعیات برائے صحت عامہ Iṭṭilā‘īyyāt barā’e Ṣiḥḥat ‘Āmma (Public Health Informatics)

Module Learning Objectives

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

1. Describe the principles and components of public health informatics, particularly its role in data-driven healthcare delivery.
2. Apply public health informatics tools for collecting, analysing, and interpreting health data in Unani healthcare settings.

3. Identify the importance of accurate and ethical use of health data in improving healthcare services in the Unani system.

Unit 1 اطلاعیاتِ صحت کے بنیادی اصول Iṭṭilā'īyyāt-i-Ṣiḥḥat ke Bunyādī Uṣūl (Fundamentals of Health Informatics)

28.1.1 اطلاعیاتِ صحت کا عمومی جائزہ *Iṭṭilā'īyyāt-i-Ṣiḥḥat kā 'Umūmī Jā'iza* (Overview of Health Informatics)

28.1.2 اطلاعیات برائے صحت عامہ کے اجزاء اور اصول *Iṭṭilā'īyyāt barā'e Ṣiḥḥat 'Āmma ke Ajzā' avr Uṣūl* (Principles and Components of Public Health Informatics)

28.1.3 اطلاعیات برائے صحت عامہ میں اساسی استعداد *Iṭṭilā'īyyāt barā'e Ṣiḥḥat 'Āmma mēn̲ Asāsī Isti'dād* (Core Competencies in Public Health Informatics)

28.1.4 معلوماتی نظام اور سافٹ ویئر کی ترقی کی قدر کا جائزہ *Ma'lūmātī Niẓām avr Software kī Taraqqī kī Qadr kā Jā'iza* (Assessment of the Value of Information System and Software Development)

28.1.5 بیانات، معلومات اور علم *Bayānāt, Ma'lūmāt avr 'Ilm* (Data, Information and Knowledge)

28.1.6 صحتی معلوماتی نظام *Ṣiḥḥatī Ma'lūmātī Niẓām* (Health Information Systems)

28.1.7 برقی صحتی دستاویزات *Barqī Ṣiḥḥatī Dastāwīzāt* (Electronic Health Records)

28.1.8 بیانات کی اہمیت *Bayānāt kī Ahammiyyat* (Importance of Data)

28.1.9 اے-ایچ ایم آئی ایس (آیوش صحتی انتظامی معلوماتی نظام)، تطبیب بُعادی و رعایت صحت بُعادی، رعایت صحت بذریعہ موبائل (ایم ہیلتھ) (آیوش میں صحتی اطلاعیات) ای-سنجیونی *A-HMIS (Āyush Ṣiḥḥatī Intiẓāmī Ma'lūmātī Niẓām), Taṭbīb Bu'ādī wa Ri'āyat-i-Ṣiḥḥat Bu'ādī, Ri'āyat-i-Ṣiḥḥat ba-Dhari'a'-i-Mobā'il (M-Health), Āyush mēn̲ Ṣiḥḥatī Iṭṭilā'iyyāt (E-Sanjīvanī)* (A-HMIS [Ayush-Health Management Information System], Telemedicine and Telehealth, Mobile Health [m-Health], Health Informatics in Ayush [e-Sanjeevani])

28.1.10 برقی آبادیاتی اندراجات *Barqī Ābādiyyātī Indirājāt* (Electronic Population Registries)

28.1.11 قومی حیوی شماریاتی نظام *Qawmī Ḥaywī Shumāriyyātī Niẓām* (National Vital Statistics System)

28.1.12 انتظامی نظام برائے مخزن بیانات *Intiẓāmī Niẓām barā'e Makhzan-i-Bayānāt* (Database Management System)

28.1.13 مخزن بیانات کی اقسام *Makhzan-i-Bayānāt kī Aqsām* (Types of Databases)

28.1.14 تخزین بیانات و استخراج بیانات *Takhzīn-i-Bayānāt wa Istikhrāj-i-Bayānāt* (Data Warehousing and Data Mining)

References: 1,2,3,4,7,10,74,75

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

CO6,CO7	Explain the principles and components of public health informatics, particularly its role in data-driven healthcare delivery.	3	Lecture	CC	Knows-how	L
CO6,CO7	Describe the importance of accurate and ethical use of health data in improving healthcare services in the Unani System of Medicine.	3	Lecture	CK	Knows-how	L
CO6,CO7	Analyze the role of health data and health informatics in quality improvement, focusing on how data-driven insights enhance healthcare outcomes.	5	Practical28.1	PSY-ORG	Shows-how	PT,PER
CO6,CO7	Describe the health Information dissemination Privacy, confidentiality and security of public health information.	2	Lecture	CK	Knows-how	L&GD,L
CO6,CO7	Assess the value of Health Information Systems and software development.	5	Practical28.2	PSY-GUD	Shows-how	PAL,PL,Mnt
CO6,CO7	Describe the significance of data in A-HMIS, Telemedicine, and Telehealth and their use in public health settings.	6	Experiential-Learning28.1	AFT-REC	Does	D,PAL,PSM,DL
CO6,CO7	Apply the Electronic health records (EHR), Electronic population registries and National vital statistic systems and Database management for improving healthcare delivery system.	7	Experiential-Learning28.2	CAP	Does	PAL,PL,RLE

Unit 2 صحت عامہ کے عملی اقدامات میں صحتی اطلاعیات Ṣiḥḥat ‘Āmma ke ‘Amalī Iqdāmāt mēn Ṣiḥḥatī Iṭṭilā‘iyyāt (Health Informatics in Public Health Practice)

28.2.1 امراض کی نگرانی، تتبع اور اس کے انتظام میں صحتی اطلاعیات کا کردار *Amrāḍ kī Nighrānī, Tatabbo‘ avr is ke Intiẓām mēn Ṣiḥḥatī Iṭṭilā‘iyyāt kā Kirdār* (Role of Health Information in Disease Surveillance, Disease Tracking and Management)

28.2.2 صحتی معلومات کی ترسیل *Ṣiḥḥatī Ma‘lūmāt kī Tarsīl* (Health Information dissemination)

28.2.3 معلومات صحت عامہ کی رازداری، اعتماد اور تحفظ *Ma‘lūmāt-i-Ṣiḥḥat ‘Āmma kī Rāzdārī, I‘timād avr Taḥaffuẓ* (Privacy, Confidentiality and Security of Public Health Information)

28.2.4 معلومات صحت عامہ کے نظام کا اطلاق *Ma'lūmāt-i-Ṣiḥḥat 'Āmma ke Nizām kā Iṭlāq* (Application of Public Health Information System)

References: 1,2,3,5,6,9,12,58,74,75

3A	3B	3C	3D	3E	3F	3G
CO6,CO7	Discuss the disease surveillance, disease tracking and management.	2	Lecture	CK	Knows-how	L,L&PPT
CO6,CO7	Identify the importance of Health Informatics in disease surveillance, disease tracking and management.	5	Practical28.3	AFT-RES	Shows-how	L&GD,PAL,PL
CO6,CO7	Demonstrate the application of public health information systems in managing and improving community health outcomes.	5	Practical28.4	AFT-RES	Shows-how	PAL,PL,Mnt
CO6,CO7	Apply the concept of public health information systems in disease surveillance, tracking, and management, and use these systems for effective health information dissemination.	6	Experiential-Learning28.3	CC	Does	FC,BL
CO6,CO7	Describe the importance of privacy, confidentiality, and security in managing public health information.	7	Experiential-Learning28.4	CAN	Does	PL,IBL,PAL,BL

Practical Training Activity

Practical Training 28.1 Role of health data and health informatics in quality improvement

Total Learning Hours = 5

1. Teacher will explain the role of health data and informatics in quality improvement. [1 Hour]
2. Students will learn about different health data types and quality improvement measures. [1 Hour]
3. Students will study how tools like EHRs and data analytics improve healthcare quality. [2 Hours]

4. Students will do a PowerPoint presentation of their findings to peers and teachers. [1 Hour]

Practical Training 28.2 Health Information System (HIS)

Total Learning Hours = 5

1. Teacher will explain HIS components and their role in healthcare. [1 Hour]
2. Students analyze case studies to assess HIS impact on patient care and efficiency. [3 Hours]
3. Students present insights on the value of HIS and software in healthcare in the form of posters and charts. [1 Hour]

Practical Training 28.3 Importance of Health Informatics

Total Learning Hours = 5

1. The teacher will explain the role of health informatics in disease surveillance and management. [1 Hour]
2. Students will study how health informatics supports disease tracking through case studies. [1 Hour]
3. Students will review tools like EHRs and GIS used in disease tracking and management. [2 Hours]
4. Students will prepare a chart on the impact of health informatics in disease surveillance and management. [1 Hour]

Practical Training 28.4 Public Health Information System

Total Learning Hours = 5

1. Introduction to Public Health Information Systems: The Teacher will explain the fundamentals of public health information systems and their role in managing community health. [1 Hour]
2. Explore System Components: Students will explore key components such as data collection, analysis tools, and reporting systems. [1 Hour]
3. Analyze Real-life Applications: Students will study case studies on the application of public health information systems in improving health outcomes. [2 Hours]
4. Assess and Present Findings: Students will evaluate the effectiveness of public health information systems and present their findings. [1 Hour]

Experiential Learning Activity

Experiential-Learning Learning 28.1: A-HMIS, Telemedicine, and Telehealth in Public Health settings

Total Learning Hours = 6

1. Introduction to A-HMIS, Telemedicine, and Telehealth [1 Hour 30 Minutes]
    - Students will be introduced to A-HMIS, Telemedicine, and Telehealth through a lecture or interactive session.
2. Case Study Analysis of Telemedicine and Telehealth [1 Hour 30 Minutes]
    - Students will analyze real-world case studies of Telemedicine and Telehealth implementations in rural or urban settings.
3. Hands-On Experience with A-HMIS and Telemedicine Platforms [2 Hours]
    - Students will engage with A-HMIS software and telemedicine platforms through hands-on exercises.
4. Designing a Telemedicine/Telehealth Plan for a Community [1 Hour]
    - Based on the knowledge and tools learned, students will develop a plan to implement Telemedicine or Telehealth in a specific community.

Experiential-Learning Learning 28.2: Electronic Health Records (EHR), Electronic Population Registries and National Vital Statistic Systems

Total Learning Hours = 7

1. Hands-On Training with EHR and NVSS [4 Hours]
    - Students will participate in practical exercises where they use EHR systems to input, retrieve, and manage patient data. They will also learn how to extract key data from the National Vital Statistics System (NVSS) to track birth, death, and mortality rates. Students will analyze this data to identify health trends in populations.
2. Using Electronic Population Registries for Public Health Monitoring [1 Hour 30 Minutes]
    - Students will explore how electronic population registries are used to monitor demographic trends and health outcomes.
3. Database Management and Data Analysis [1 Hour 30 Minutes]
    - Students will engage in activities involving DBMS tools to manage and analyze health-related databases.

Experiential-Learning Learning 28.3:

Health Information Dissemination

Total Learning Hours = 6

1. Introduction to Public Health Information Systems [1 Hour]
    - Students will attend a session on public health information systems, focusing on their role in disease surveillance, tracking, and management.
2. Disease Surveillance Simulation [2 Hours]
    - Students will participate in a simulation exercise where they will use a public health information system to track and monitor a disease outbreak. They will learn how to input and analyze data, identify trends, and make informed decisions based on the information available.
3. Analyzing Data for Disease Tracking and Management [2 Hours]
    - Using real or simulated disease data, students will practice analyzing disease trends, identifying potential outbreaks, and determining appropriate responses.
4. Developing a Health Information Dissemination Strategy [1 Hour]:
    - Students will develop a communication plan to disseminate health information about disease trends, preventive measures, and resources.

Experiential-Learning Learning 28.4: Privacy, Confidentiality and Security of Public Health Information

Total Learning Hours = 7

1. Case Study Analysis [3 Hours]
    - Students will analyze real-life case studies involving breaches of privacy or confidentiality in public health. They will discuss the impact of these breaches on individuals and communities, as well as the steps that could have been taken to prevent them.
2. Role-Playing Scenarios [2 Hours]
    - Students will participate in role-playing exercises where they must handle public health information in hypothetical scenarios.
3. Developing a Data Privacy and Security Plan [2 Hours]
    - Based on the knowledge gained, students will work in groups to create a data privacy and security plan for a public health initiative or organization.

Modular Assessment	
Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Quiz** on the topics related to this module. [50 Marks] [10 MCQs of 5 Marks Each; Questions types: Matching Questions, Reasoning and Assertion Questions, Multiple Correct Option Questions, and Single Correct Option Questions.] Or **Project** work on any topic related to this module. [50 Marks] [**Assessment Criteria:** Project Planning and Design-30 Marks; Presentation and Documentation-20 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	4
Semester No : 5	
Module 29 : قومی صحت کے لائحہ اعمال اور صحتی نگہداشت کے قوانین Qawmī Ṣiḥḥat ke Lā'iḥa'-i-'Amāl avr Ṣiḥḥatī Nighahdāsht ke Qawānīn (National Health Policies and Health Care Legislations)	
Module Learning Objectives (At the end of the module, the students should be able to) 1. Critically analyse the health policy framework in India, focusing on the inclusion of AYUSH systems.	

2. Participate in policy advocacy and health policy implementation projects related to Unani Medicine.
3. Demonstrate a sense of responsibility toward contributing to health policy reforms that benefit public health and Unani Medicine integration.

Unit 1 بھارت میں صحت عامہ کے قوانین Bhārat mēṉ Ṣiḥḥat ‘Āmma ke Qawānīn (Public Health Legislation in India)

29.1.1 قانون برائے مرکزی اندراج موت و پیدائش *Qānūn barā’e Markazī Indirāj-i-Mawt wa Paydā’ish* (Central Birth and Death Registration Act)

29.1.2 قانون برائے امراض وبائی *Qānūn barā’e Amrāḍ Wabā’ī* (The Epidemic Disease Act)

29.1.3 قانون برائے غذائی آمیزش کا تحفظ *Qānūn barā’e Ġhidhā’ī Āmezish kā Taḥaffuẓ* (Prevention of Food Adulteration Act)

29.1.4 قانون برائے طبی اسقاط حمل *Qānūn barā’e Ṭibbī Isqāṭ-i-Ḥaml* (The Medical Termination of Pregnancy Act)

29.1.5 قانون برائے تنصیب اعضائے انسانی *Qānūn barā’e Tanṣīb A‘ḍā’ Insānī* (Transplantation of Human Organs Act)

29.1.6 قانون برائے بھارتی مصانع *Qānūn barā’e Bhāratī Maṣānī‘* (Indian Factories Act)

References: 12

3A	3B	3C	3D	3E	3F	3G
CO6,CO7	Define public health legislation in India and its importance for the effective promotion of population health.	2	Lecture	CK	Knows-how	L&GD,L&PPT
CO6,CO7	Describe National Public health policies in India.	3	Lecture	CK	Knows-how	L&GD,L,L&PPT
CO6,CO7	Review the ethical and legal principles in Unani classical literature and their influence on medical practice.	5	Practical29.1	PSY-GUD	Shows-how	LS
CO6,CO7	Examine and analyze the various health legislations.	5	Practical29.2	AFT-REC	Shows-how	BS
CO6,CO7	Analyze and discuss legal and regulatory aspects of Prevention of Food Adulteration Act.	6	Experiential-Learning29.1	CAN	Does	PBL,PL

CO6,CO7	Appraise the National Nutrition Policy's objectives and strategies and Identify community nutritional needs and challenges.	7	Experiential-Learning29.2	AFT-SET	Does	RLE

Unit 2 قومی صحتی لائحہ اعمال Qawmī Ṣiḥḥatī Lā'iḥa'-i-'Amal (National Health Policies)

29.2.1 قومی شہری صحتی مہم *Qawmī Shahrī Ṣiḥḥatī Muhim* (National Urban Health Mission)

29.2.2 قومی دیہی صحتی مہم *Qawmī Dīhī Ṣiḥḥatī Muhim* (National Rural Health Mission)

29.2.3 قومی آیوش مہم *Qawmī Āyush Muhim* (National Ayush Mission)

29.2.4 قومی مہم برائے دوائی پودے *Qawmī Muhim barā'e Dawā'ī Pavdē* (National Mission on Medicinal Plants)

29.2.5 صاف بھارت مہم *Ṣāf Bhārat Muhim* (Swachh Bharat Mission)

29.2.6 قومی تحفظ صحت مہم (آیوشمان بھارت منصوبہ اوزیر اعظم عوامی صحت منصوبہ) *Qawmī Taḥaffuẓ-i-Ṣiḥḥat Muhim (Āyushmān Bhārat Manṣūba / Wazīr A'ẓam 'Awāmī Ṣiḥḥat Manṣūba)* (National Health Protection Mission [Ayushman Bharat Yojana/Pradhan Mantri Jan Arogya Yojana])

29.2.7 قومی مجلس برائے بھارتی نظام طب *Qawmī Majlis barā'e Bhāratī Niẓām-i-Ṭibb* (National Commission for Indian System of Medicine)

29.2.8 قومی صحتی منصوبہ *Qawmī Ṣiḥḥatī Manṣūba* (National Health Policy) 1983, 2002, 2017

29.2.9 قومی آبادیاتی منصوبہ *Qawmī Ābādiyyātī Manṣūba* (National Population Policy)

29.2.10 قومی تغذیاتی منصوبہ *Qawmī Taghdhiyyātī Manṣūba* (National Nutrition Policy)

29.2.11 قومی منصوبہ برائے بزرگ شہری *Qawmī Manṣūba barā'e Buzurg Shahrī* (National Policy for Senior Citizen)

References: 1

3A	3B	3C	3D	3E	3F	3G
CO6,CO7	Analyze and understand the National Health Policies of 1983, 2002, and 2017, focusing on their objectives, strategies, and impact.	5	Practical29.3	PSY-GUD	Shows-how	PAL,PL
CO6,CO7	Examine various National Health Policies in India and analyze their impact on public health and healthcare systems.	5	Practical29.4	PSY-GUD	Shows-how	PL,PAL,BL,DIS,Mnt

CO6,CO7	Analyze the National Policy for Senior Citizens and ensure the implementation of policy in real life experience.	7	Experiential-Learning29.3	PSY-MEC	Does	RLE
CO6,CO7	Identify the role and objectives of the National Commission for Indian System of Medicine and analyze its impact on the integration and regulation of Indian systems of medicine in healthcare delivery.	6	Experiential-Learning29.4	CE	Does	RLE,FV,IBL
CO6,CO7	Appraise National health missions.	3	Lecture	AFT-SET	Knows-how	L&GD
CO6,CO7	Illustrate Ayushman Bharat Yojana/Pradhan Mantri Jan Arogya Yojana), National Commission for Indian System of Medicine, National Health Policy, 1983, 2002, 2017, National Population Policy, National Nutrition Policy, National Policy for Senior Citizens.	2	Lecture	CK	Knows-how	L&GD

Practical Training Activity

Practical Training 29.1 Unani classical literature on medical legality and ethics

Total Learning Hours = 5

1. The teacher will introduce Unani medicine's ethical principles and historical context. [1 Hour]
2. Students will analyze key texts to understand ethical guidelines in Unani practice. [2 Hours]
3. Students will research how Unani literature addresses the legality of medical practices and regulations. [1 Hour]
4. Students will present their findings and discuss how Unani ethics apply in modern healthcare practice. [1 Hour]

Practical Training 29.2 Health Legislations

Total Learning Hours = 5

1. The teacher will introduce the key provisions and objectives of the main health acts. [1 Hour]
2. Students will research acts like the Medical Termination of Pregnancy Act, Transplantation of Human Organs Act, and Indian Factories Act, focusing on their scope and impact. [2 Hours]
3. Students will examine case studies or news reports to assess the application and challenges of each act. [1 Hour]
4. Students will present their findings, followed by a class discussion on the effectiveness and improvements needed in each act. [1 Hour]

Practical Training 29.3 National Health Policy 1983, 2002, 2017

Total Learning Hours = 5

1. The teacher will present the key objectives and strategies of the 1983, 2002, and 2017 health policies. [1 Hour]
2. Students will research and summarize one policy each (1983, 2002, 2017), focusing on objectives, strategies, and outcomes. [2 Hours]
3. Students in groups will compare the policies, emphasizing healthcare access, financing, and infrastructure, and create a visual comparison. [1 Hour]
4. Students will present their analyses. [1 Hour]

Practical Training 29.4 National Health policies

Total Learning Hours = 5

1. The teacher will provide an overview of key national health policies in India. [1 Hour]
2. Students will research policies like the National Health Policy (2017), National Population Policy, National Nutrition Policy, National AYUSH Mission, Ayushman Bharat, and the National Policy for Senior Citizens. [2 Hours]
3. Students will assess the impact of these policies on healthcare delivery and public health. [1 Hour]
4. Students will prepare and present a summary of the policies, their impacts, and areas for improvement in the form of posters. [1 Hour]

Experiential Learning Activity

Experiential-Learning Learning 29.1: Prevention of Food Adulteration Act

Total Learning Hours = 6

1. Case Study Analysis of Food Adulteration Incidents [1 Hour 30 Minutes]
    - Students will analyze case studies involving food adulteration, examining how the Prevention of Food Adulteration Act has been applied in real-world situations.
2. Field Visit to Food Testing Laboratories or Regulatory Agencies [3 Hours]
    - Students will visit a local food testing laboratory or regulatory agency to observe the processes involved in food testing and regulation. During the visit, they will learn about the methods used to detect food adulteration, the legal framework for food safety, and the responsibilities of regulatory bodies in enforcing the Act.
3. Group Discussion [1 Hour 30 Minutes]
    - Students will participate in a group discussion where they analyze the strengths and weaknesses of the Prevention of Food Adulteration Act.

Experiential-Learning Learning 29.2: National Nutrition Policy

Total Learning Hours = 7

1. Introduction to the National Nutrition Policy [1 Hour]
    - Students will attend a session on the National Nutrition Policy, focusing on its objectives, strategies, and key programs aimed at improving nutrition in India.
2. Analyze National Nutrition Policy Strategies [2 Hours]
    - Students will review and discuss the key strategies outlined in the National Nutrition Policy, such as food fortification, nutrition education, and community involvement.
3. Field Survey on Community Nutritional Needs [3 Hours]
    - Students will conduct a survey or focus group discussions within a local community to identify nutritional challenges.
4. Develop a Nutritional Intervention Plan [1 Hour]
    - Based on the survey findings, students will work in groups to design a nutritional intervention plan targeting the identified needs and challenges.

Experiential-Learning Learning 29.3: Implementation of National Policy for Senior Citizens

Total Learning Hours = 7

1. Case Study Analysis of Senior Citizen Welfare Programs [2 Hours]
    - Students will analyze case studies of existing senior citizen welfare programs that align with the National Policy.
2. Field Visit to Senior Citizen Support Centers or Homes [3 Hours]
    - Students will visit a senior citizen care facility that is designed to support the elderly. During the visit, students will observe the services provided (e.g., healthcare, social activities, legal aid) and interact with caregivers and senior citizens to understand how well the National Policy is being implemented.
3. Group Discussion and Policy Implementation Analysis [2 Hours]
    - Students will conduct a group discussion to reflect on their field visit and case study analysis.

Experiential-Learning Learning 29.4: National Commission for Indian System of Medicine (NCISM)

Total Learning Hours = 6

1. Introduction to NCISM: Role and Objectives [1 Hour]
    - Students will attend a session that introduces the National Commission for Indian System of Medicine, covering its establishment, role, objectives, and regulatory framework.
2. Research and Case Study Analysis [2 Hours]
    - Students will analyze case studies of NCISM's implementation and policies.
3. Field Visit to ISM Institutions or Practitioners [2 Hours]
    - Students will visit a local ISM institution to understand how the NCISM's guidelines are applied. During the visit, they will interact with practitioners, students, and faculty to assess how the objectives of the NCISM are reflected in everyday practices and education.
4. Group Discussion and Analysis of ISM Integration [1 Hour]

• They will discuss the effectiveness of NCISM policies, identify gaps, and propose improvements for further integration and regulation of ISM in the healthcare system.	
Modular Assessment	
Assessment	**Hour**
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Quiz** on the topics related to this module. [50 Marks] [10 MCQs of 5 Marks Each; Questions types: Matching Questions, Reasoning and Assertion Questions, Multiple Correct Option Questions, and Single Correct Option Questions] Or **Presentation** onon any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	4
Module 30 : قومی صحتی منصوبہ جات Qawmī Ṣiḥḥatī Manṣūbajāt (National Health Programmes)	
Module Learning Objectives (At the end of the module, the students should be able to)	

1. Demonstrate an understanding of the key national health programmes in India, including their objectives, implementation strategies, and impact on public health outcomes.
2. Apply knowledge of national health programmes to design a community outreach plan, incorporating relevant health initiatives to address a local health issue effectively.
3. Assess the effectiveness of a national health programme through direct engagement with a local health organization or participation in a health-related community event.

Unit 1 تحدیدی منصوبے برائے امراض متعدی Taḥdīdī Manṣūbe barā'e Amrāḍ Muta'addī (Communicable Disease Control Programmes)

30.1.1 قومی تحدیدی منصوبہ برائے امراض بذریعہ حشرات الارض *Qawmī Taḥdīdī Manṣūba barā'e Amrāḍ ba-Dhari'a Ḥasharāt al-Arḍ* (National Vector-Borne Disease Control Programme)

30.1.2 قومی منصوبہ برائے تنسیخی دق *Qawmī Manṣūba barā'e Tansīkhī'-i-Diqq* (National Tuberculosis Elimination Programme)

30.1.3 قومی منصوبہ برائے تحدید ایڈز (علت نقص مناعت مکسبہ) *Qawmī Manṣūba barā'e Taḥdīd AIDS ('Illat Naqṣ Manā'at Maksūba)* (National AIDS (Acquired Immunodeficiency Syndrome) Control Programme)

30.1.4 قومی منصوبہ برائے خاتمۂ جذام *Qawmī Manṣūba barā'e Khātima'-i-Judhām* (National Leprosy Eradication Programme)

References: 1,12

3A	3B	3C	3D	3E	3F	3G
CO6,CO7	Discuss the aims, objectives and components of National Health Programs related to Communicable Diseases.	4	Lecture	CK	Knows-how	L&PPT ,DIS
CO6,CO7	Identify the role of the National Programmes for the control of Communicable Diseases in India with a special focus on the Tuberculosis/AIDS control programme.	6	Experiential-Learning30.1	PSY-GUD	Does	FV,CBL
CO6,CO7	Analyze health outbreaks, including their identification, impact, and response strategies.	5	Practical30.1	PSY-MEC	Shows-how	CD,CBL

CO6,CO7	Investigate the process of epidemic outbreak investigation, including identification, data collection, and response strategies.	5	Practical30.2	PSY-ORG	Shows-how	RP,PAL,PL

Unit 2 منصوبہ جات برائے انسداد امراض غیر متعدی Manṣūbajāt barā'e Insidād-i-Amrāḍ Ghayr Muta'addī (Non-Communicable Disease Control Programmes)

30.2.1 قومی منصوبہ برائے تحفظ و تحدید سرطان، ذیابیطس، امراض قلب و دوران خون اور سکتہ *Qawmī Manṣūba barā 'e Taḥaffuẓ wa Taḥdīd-i-Saraṭān, Dhayābīṭus, Amrāḍ-i-Qalb wa Dawrān-i-Khūn avr Sakta* (National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke)

30.2.2 قومی منصوبہ برائے تحدید تمباکو *Qawmī Manṣūba barā 'e Taḥdīd-i-Tambākū* (National Tobacco Control Programme)

30.2.3 قومی منصوبہ برائے دماغی صحت *Qawmī Manṣūba barā 'e Dimāghī Ṣiḥḥat* (National Mental Health Programme)

References: 1,12

3A	3B	3C	3D	3E	3F	3G
CO6,CO7	Discuss aims,objectives and components of Non-Communicable Disease Control Programmes.	2	Lecture	CC	Knows-how	L&GD,L&PPT ,DIS
CO6,CO7	Analyze and interpret the concept of surveillance, its types, and its role in public health and safety.	5	Practical30.3	PSY-MEC	Shows-how	DIS,CBL,FC
CO6,CO7	Assess non-communicable diseases (NCDs) risk factors in a community setting, using various tools and methods.	7	Experiential-Learning30.2	CAP	Does	CBL

Unit 3 منصوبہ جات برائے صحت زچہ و بچہ Manṣūbajāt barā'e Ṣiḥḥat-i-Zachcha-o-Bachcha (Maternal and Child Health Programmes)

30.3.1 منصوبہ برائے صحت دوران تولید و زچگی، نومولود، اطفال و مراہق *Manṣūba barā 'e Ṣiḥḥat Dawrān-i-Tawlīd wa Zachgī, Nav-Mawlūd, Aṭfāl-o-Murāhiq* (Reproductive and Maternal, New-born, Child, and Adolescent Health [RMNCH+A] Programmes)

30.3.2 منصوبہ برائے مادرانہ تحفظ *Manṣūba barā 'e Mādarāna Taḥaffuẓ* (Janani Suraksha Yojana [JSY])

30.3.3 قومی منصوبہ برائے صحت اطفال *Qawmī Manṣūba barā 'e Ṣiḥḥat-i-Aṭfāl* (Rashtriya Bal Swasthya Karyakram [RBSK])

30.3.4 عالمی منصوبہ برائے تحصین *'Ālamī Manṣūba barā 'e Taḥṣīn* (Universal Immunization Programme)

30.3.5 قومی منصوبہ برائے خاندانی فلاح و بہبود *Qawmī Manṣūba barā'e Khāndānī Falāḥ-o-Bahbūd* (National Family Welfare Programme)

30.3.6 ہم آہنگ منصوبہ برائے نگرانی امراض *Ham Āhang Manṣūba barā'e Nigrānī'-i-Amrāḍ* (Integrated Disease Surveillance Programme)

References: 1,12

3A	3B	3C	3D	3E	3F	3G
CO6,CO7	Discuss aims,objectives and components of Maternal and child health Programmes.	2	Lecture	AFT-RES	Knows-how	DIS,L&PPT ,PAL,L&GD
CO6,CO7	Identify the key risk factors for maternal and child morbidity and mortality in a community setting.	7	Experiential-Learning30.3	CAN	Does	RLE,FV,CD

Unit 4 قومی تغذیاتی منصوبے Qawmī Taghdhiyyātī Manṣūbey (National Nutrition Programmes)

30.4.1 ہم آہنگ خدمات برائے نمو ءِ اطفال *Ham Āhang Khidmāt barā'e Numū'-i-Aṭfāl* (Integrated Child Development Services [ICDS])

30.4.2 قومی تغذیاتی مہم *Qawmī Taghdhīyyātī Muhim* (National Nutrition Mission [Poshan Abhiyān])

30.4.3 وسط یومیہ خوراک منصوبہ *Wasṭ Yawmiyya Khorāk Manṣūba* (Mid-Day Meal Scheme)

30.4.4 حیاتین الف کی اضافی فراہمی منصوبہ *Ḥayātīn Alif kī Iḍāfī Farāhamī Manṣūba* (Vitamin A Supplementation Programme)

30.4.5 تحدیدی منصوبہ برائے اضطراب نقص الیود *Taḥdīdī Manṣūba barā'e Iḍṭirāb Naqṣ al-Yūd* (Iodine Deficiency Disorder Control Programme)

30.4.6 قومی منصوبہ برائے تحفظ و تحدید تسمم فلوری *Qawmī Manṣūba barā'e Taḥaffuẓ-o-Taḥdīd Tasammum Falorī* (National Programme for Prevention and Control of Fluorosis)

30.4.7 مرکز تغذیاتی بحالی *Markaz Taghdhiyyātī Baḥālī* (Nutritional Rehabilitation Centre)

30.4.8 فقر الدم آزاد بھارت *Faqr al-Dam Āzād Bhārat* (Anaemia Mukt Bharat)

References: 1,12

3A	3B	3C	3D	3E	3F	3G
CO6,CO7	Discuss aims,objectives and components of National Nutrition Programmes.	2	Lecture	CAP	Knows-how	PAL,L&GD,DIS,BL,L& PPT

CO6,CO7	Familiarize with National Nutrition Programs in India, analyze their impact on improving nutrition, and critically assess their shortcomings.	5	Practical30.4	PSY-ORG	Shows-how	BL,IBL,DL,EDU
CO6,CO7	Analyze the impact of National nutrition programmes in promotion of community nutrition with special focus to integrated child development services, Mid day meals program.	6	Experiential-Learning30.4	PSY-GUD	Does	FV

Practical Training Activity

Practical Training 30.1 Analysis of health outbreaks

Total Learning Hours = 5

1. The teacher explains the process of identifying and understanding health outbreaks, including causes and impact. [1 Hour]
2. Students will research and analyze case studies of past health outbreaks (e.g., Ebola, COVID-19, Zika), identifying key factors that contributed to the spread. [3 Hours]
3. Students present their findings and propose strategies for managing and preventing future outbreaks. [1 Hour]

Practical Training 30.2 Epidemic outbreak investigation and Surveillance

Total Learning Hours = 5

1. The teacher will explain the steps of an epidemic investigation (confirming, defining cases, collecting data). [1 Hour]
2. Students will work in groups to investigate a mock epidemic scenario, define cases, collect data, and identify the source. [2 Hours]
3. Students will analyze the data, develop hypotheses, and identify the cause and spread. [1 Hour]
4. Groups will present findings and suggest control measures to manage the outbreak. [1 Hour]

Practical Training 30.3 Analysis and interpretation of the concept of surveillance

Total Learning Hours = 5

1. The teacher will explain the definition, purpose, and types of surveillance in public health. [1 Hour]
2. Students will explore various surveillance systems (e.g., passive, active, sentinel) and their uses. [2 Hours]
3. Students will analyze a real-world surveillance case (e.g., COVID-19 tracking) and its impact. [1 Hour]
4. Students will present their findings through a PowerPoint presentation. [1 Hour]

Practical Training 30.4 National Nutrition Programs

Total Learning Hours = 5

1. The teacher will introduce key national nutrition programs (e.g., ICDS, Mid-Day Meal Scheme, National Nutrition Mission), their objectives, and their goals. [1 Hour]
2. Students will research the programs, focusing on their impact on nutritional improvement across different demographics (children, women, and vulnerable groups). [2 Hours]
3. Students will critically assess the shortcomings of these programs, focusing on challenges like implementation gaps, resource allocation, and coverage. [1 Hour]
4. Students will present their findings in the form of posters/charts/infographics. [1 Hour]

Experiential Learning Activity

Experiential-Learning Learning 30.1: National Programmes for the Control of Communicable Diseases

Total Learning Hours = 6

1. Introduction to the National Program for the Control of Communicable Diseases [1 Hour]
    - Students will study the National Program for the Control of Communicable Diseases, its objectives, and its importance in India's public health strategy.
2. Detailed Study of the Tuberculosis Control Program [1 Hour]

- Students will participate in a session dedicated to the National Tuberculosis Elimination Program (NTEP).

3. Understanding the National AIDS Control Programme [1 Hour]
    - Students will explore the National AIDS Control Program (NACP), focusing on its key components, such as prevention, treatment, and support for individuals living with HIV.
4. Field Visit to a TB/AIDS Care Facility or Community Program [3 Hours]
    - Students will visit a local health center, TB care facility, or a community-based AIDS prevention program. During the visit, they will observe the implementation of TB and AIDS control measures, interact with healthcare workers, and observe how these programs are delivered at the grassroots level.

Experiential-Learning Learning 30.2: NCDs Risk Factors Assessment

Total Learning Hours = 7

1. Survey and Data Collection on NCD Risk Factors [4 Hours]
    - Students will conduct a survey in a local community or group to assess common NCD risk factors.
2. Risk Factor Analysis and Identification [2 Hours]
    - Based on the data collected, students will analyze and identify the most prevalent NCD risk factors in the community.
3. Developing a Community-Based Intervention Plan [1 Hour]
    - After assessing the NCD risk factors, students will work in groups to design a community-based intervention plan aimed at reducing one or more risk factors.

Experiential-Learning Learning 30.3: Risk Factor Analysis for Maternal and Child Morbidity and Mortality

Total Learning Hours = 7

1. Field Survey and Data Collection [4 Hours]

- Students will conduct a survey within a local community to identify maternal and child health risks. They will use structured questionnaires to collect data.

2. Risk Factor Analysis and Prioritization [2 Hours]
    - After collecting the data, students will analyze it to identify the most significant risk factors contributing to maternal and child morbidity and mortality in the community.
3. Developing a Maternal and Child Health Intervention Plan [1 Hour]
    - Based on the analysis, students will work in groups to create a community-based intervention plan aimed at reducing maternal and child health risks.

Experiential-Learning Learning 30.4: Impact of National Nutrition Programmes

Total Learning Hours = 6

1. Introduction to National Nutrition Programs [1 Hour]
    - Students will be introduced to key national nutrition programs like ICDS and MDM, understanding their objectives, strategies, and target groups.
2. Case Study Analysis of ICDS and MDM Programs [1 Hour 30 Minutes]
    - Students will review case studies from different regions where ICDS and MDM have been implemented.
3. Field Visit to an ICDS Centre and School [3 Hours]
    - Students will visit a local ICDS centre and/or school participating in the Mid-Day Meal program. They will observe the delivery of services, interact with staff, and gather feedback from beneficiaries to assess the impact of these programs on the community's nutritional status.
4. Group Discussion [30 Minutes]
    - After the field visit, students will engage in a group discussion to analyze the effectiveness of the ICDS and MDM programs.

Modular Assessment

Assessment	**Hour**

Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] **Quiz** on the topics related to this module. [50 Marks] [10 MCQs of 5 Marks Each; Questions types: Matching Questions, Reasoning and Assertion Questions, Multiple Correct Option Questions, and Single Correct Option Questions.] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	4
Semester No : 6	
Module 31 : صحتی تنظیمات Ṣiḥḥatī Tanẓīmāt (Health Organizations)	
Module Learning Objectives (At the end of the module, the students should be able to) • Identify the roles and responsibilities of major health organizations like WHO and UNICEF. • Analyze the contributions of a health organization in addressing global health challenges. • Appreciate international collaboration in health care.	
Unit 1 بین الاقوامی صحتی تنظیمات Bayn al-Aqwāmī Ṣiḥḥatī Tanẓīmāt (International Health Organizations)	

31.1.1 *Bhārat mēṉ Ṣiḥḥatī Nighahdāshtī Sharākat Dārī avr Āyush Sho'be kī Taraqqī* بھارت میں صحتی نگہداشتی شراکت داری اور آیوش شعبے کی ترقی (Contributions to Health Care in India and Development of Ayush Sector)

31.1.1.1 *Ālamī Idāra'-i- Ṣiḥḥat* عالمی ادارۂ صحت (World Health Organization) (WHO)

31.1.1.2 Aqwām Muttaḥida kā Fund barā'e Aṭfāl اقوامِ متحدہ کا فنڈ برائے اطفال United Nations Children's Fund (UNICEF)

31.1.1.3 Aqwām-e-Muttaḥidah kā Taraqqiyātī Prugrām اقوامِ متحدہ کا ترقیاتی منصوبہ United Nations Development Programme (UNDP)

31.1.1.4 Idāra'-i-Bayn al-Aqwāmī Taraqqī, Riyāsathā'e Muttaḥida ادارۂ بین الاقوامی ترقی، ریاست ہائے متحدہ (United States Agency for International Development [USAID])

31.1.1.5 Idāra'-i-Khurāk-o-Zarā'at ادارۂ خوراک و زراعت (Food and Agriculture Organization [FAO])

31.1.1.6 Bayn al-Aqwāmī Idāra'-i-Miḥnat بین الاقوامی ادارۂ محنت (International Labour Organization [ILO])

31.1.1.7 *Ālamī Baynk* عالمی بینک (World Bank)

31.1.1.8 Ḍanish Bayn al-Aqwāmī Taraqqiyyātī Idāra ڈینش بین الاقوامی ترقیاتی ادارہ (Danish International Development Agency [DANIDA])

31.1.1.9 Swedish Bayn al-Aqwāmī Taraqqiyyātī Ta'āwun kā Idāra سویڈش بین الاقوامی ترقیاتی تعاون کا ادارہ (Swedish International Development Cooperation Agency [SIDA])

31.1.1.10 *Ta'āwunī Idāra'-i-Rāḥat-o-Imdād barā'e Hama Jā* تعاونی ادارۂ راحت و امداد برائے ہمہ جا (Cooperative for Assistance and Relief Everywhere [CARE])

31.1.1.11 *Idāra'-i-Rockefeller* ادارۂ راک فیلر (Rockefeller Foundation)

31.1.1.12 *Idāra'-i-Forḍ* ادارۂ فورڈ (Ford Foundation)

31.1.1.13 *Bayn al-Aqwāmī Red Cross* بین الاقوامی ریڈ کراس (International Red Cross)

References: 1,12,75

3A	3B	3C	3D	3E	3F	3G
CO6,CO7	Justify the role of International Health Organizations in imparting Health to the population with its aims, ojectives and functions these organizations.	3	Lecture	CK	Knows-how	L&PPT ,L,L&GD

CO6,CO7	Role of International and National Health organization the development of the AYUSH sector.	2	Lecture	CC	Knows-how	L&PPT ,DIS
CO6,CO7	Evaluate the functioning of International Health Organizations and their Contributions to Health care in India.	7	Experiential-Learning31.1	CE	Does	FV
CO6,CO7	Justify the Role of UNICEF to improving the lives of children worldwide.	6	Experiential-Learning31.2	CC	Does	SDL

Unit 2 بھارت میں قومی صحتی تنظیمات Bhārat mēn̲ Qawmī Ṣiḥḥatī Tanẓīmāt (National Health Organizations in India)

31.2.1 بھارت میں صحتی نگہداشتی شراکت داری اور آیوش شعبے کی ترقی *Bhārat mēn̲ Ṣiḥḥatī Nighahdāshtī Sharākat Dārī avr Āyush Sho'be kī Taraqqī* (Contributions to Health Care in India and Development of Ayush Sector)

31.2.1.1 بھارتی ریڈ کراس *Bhāratī Red Cross* (Indian Red Cross)

31.2.1.2 ہیلپ ایج انڈیا *Helpej Indiā* (HelpAge India)

31.2.1.3 ادارہ اکشیا پاترا *Idāra Akshaya Pātrā* (Akshaya Patra Foundation)

31.2.1.4 ادارہ اسمائل *Idāra Ismā'il* (Smile Foundation)

31.2.1.5 آکسفورڈ مجلس برائے قحط سے راحت، بھارت *Oxford Majlis barā'e Qaḥaṭ se Rāḥat* (Oxford Committee for Famine Relief India, [Oxfam India])

31.2.2 غیرحکومتی تنظیمیں (و صحتی شعبوں، خصوصاً آیوش میں کام کرنے والے ادارے این جی اوز *Ghayr Ḥukūmatī Tanẓīmēn̲ (NGOs) wa Ṣiḥḥatī Sho'bon̲, Khuṣūṣan Āyush mēn̲ Kām Karne Vāle Idāre* (NGOs [Non-Government Organizations] and Foundations in Health Sector, Especially in Ayush)

References: 1,12,55,75

3A	3B	3C	3D	3E	3F	3G
CO6,CO7	Justify the role of National Health Organizations in India for the Contributions effective and efficient Health care in India like Indian Red Cross, HelpAge	3	Lecture	CK	Knows-how	BL,BS

	India, Akshaya Patra Foundation, Smile Foundation, Oxfam India, Other NGOs.					
CO6,CO7	Evaluate Contributions of Ayush sector to Health care in India.	2	Lecture	CAN	Knows-how	L&PPT ,DIS,L&GD,BL
CO6,CO7	Discuss important International health organizations in promoting global health and in combating diseases.	5	Practical31.1	CK	Shows-how	Mnt,DIS,L&PPT ,PAL,L&GD
CO6,CO7	Justify the role of the FAO in fighting hunger and the role of the World Bank in supporting developing countries.	5	Practical31.2	CAP	Shows-how	BL,BS
CO6,CO7	Justify the role of National Health Agencies in India in promoting health and welfare, analyzing their contributions to public health outcomes.	5	Practical31.3	AFT-SET	Shows-how	Mnt,L&GD,BL,DIS,L& PPT
CO6,CO7	Measure the impact of the integrated approach and modality through Ayush at the community level.	5	Practical31.4	CAP	Shows-how	L,L&GD,EDU,DIS
CO6,CO7	Explore the significance of Akshay Patra foundation in addressing malnutrition and reducing Hunder Index.	7	Experiential-Learning31.3	PSY-GUD	Does	BL
CO6,CO7	Identify the role of Unani Institutions in healthcare delivery, understanding their contributions to the healthcare system, educational programs, research, and integration with public health policies.	6	Experiential-Learning31.4	CC	Does	FV
Practical Training Activity						

Practical Training 31.1 International health organizations
Total Learning Hours = 5 1. The teacher will provide an overview of key international health organizations. [1 Hour] 2. Students research WHO's contributions to global health, focusing on disease prevention, health policy, and emergency health responses. [1 Hour] 3. Students explore the roles of UNICEF, Global Fund, and the World Bank in combating specific diseases and promoting global health initiatives. [2 Hours] 4. Students present their findings, followed by a discussion on their collaborative efforts and challenges in combating diseases. [1 Hour]
Practical Training 31.2 Role of FAO
Total Learning Hours = 5 1. The teacher will provide an overview of the Food and Agriculture Organization and the World Bank, explaining their missions, goals, and global influence. [1 Hour] 2. Students will research the FAO's programs and initiatives focused on combating hunger. [1 Hour 30 Minutes] 3. Students will research the World Bank's contributions to developing countries, focusing on its projects in infrastructure, education, health, and poverty reduction. [1 Hour 30 Minutes] 4. Students will present their findings, justifying how FAO and World Bank contribute to global development and fighting hunger. [1 Hour]
Practical Training 31.3 Role of National Health Agencies
Total Learning Hours = 5 1. The teacher will provide an overview of key national health agencies in India (NITI Aayog, National Health Mission, FSSAI, ICMR). [1 Hour] 2. Students will research the specific roles and functions of these agencies in promoting health and welfare. [2 Hours] 3. Students will analyze recent health programs led by these agencies, focusing on their impact on improving health outcomes and welfare in India. [1 Hour] 4. Students will present their findings in the form of a chart/poster. [1 Hour]
Practical Training 31.4 Impact of Ayush at Community Level

Total Learning Hours = 5

1. Students will research the role of various Ayush modalities in community health. [3 Hours]
2. Under the teacher's guidance, Students will analyze the collected data, measure the impact of Ayush interventions, and present findings to peers and teachers. [2 Hours]

Experiential Learning Activity

Experiential-Learning Learning 31.1: International Health Organizations

Total Learning Hours = 7

1. Case Study of International Health Organization Contributions in India [2 Hours]
    - Students will review and discuss case studies that highlight the contributions of international health organizations in India.
2. Field Visit to a Health Program Supported by an International Organization [4 Hours]
    - Students will visit a local healthcare facility or program supported by an international health organization (e.g., vaccination clinics, maternal and child health programs, or sanitation initiatives). During the visit, they will observe how international organizations' initiatives are implemented on the ground and interact with program staff and beneficiaries to understand the local impact.
3. Group Discussion on Challenges and Future Directions [1 Hour]
    - After the field visit, students will participate in a discussion on the challenges faced by international health organizations in India, such as cultural barriers, funding limitations, or government collaboration.

Experiential-Learning Learning 31.2: Role of UNICEF

Total Learning Hours = 6

1. Case Study Review of UNICEF's Programs [1 Hour 30 Minutes]
    - Students will review case studies of UNICEF programs from different regions, including their impact on child survival, education, and protection.
2. Field Visit to a UNICEF-supported Program or Partner Organization [3 Hours]

- Students will visit a local organization or community where UNICEF programs are implemented, such as a child vaccination camp, school program, or nutrition initiative. During the visit, students will observe the programs in action, speak to program coordinators, and interact with beneficiaries to understand the real-life impact of UNICEF's efforts.

3. Group Discussion on UNICEF's Global Impact and Challenges [1 Hour 30 Minutes]
    - After the visit, students will participate in a group discussion to evaluate the effectiveness of UNICEF's work globally and locally.

Experiential-Learning Learning 31.3: Role of Akshay Patra Foundation in Addressing Malnutrition

Total Learning Hours = 7

1. Field Visit to a School [5 Hours]: Studentswill visit a local school or community where the Akshaya Patra Foundation's Mid-Day Meal Program is operational. They will observe the meal distribution process, interact with students and teachers, and collect data or testimonials on how the program affects children's health and academic performance.

2. Group Discussion and Analysis [2 Hours]: After the field visit, students will engage in a discussion or analysis of how the Akshaya Patra Foundation's initiative is addressing the Malnutrition and Hunger Index.

Experiential-Learning Learning 31.4: Role of Unani Institutions in healthcare delivery

Total Learning Hours = 6

1. Visit to an Unani Healthcare Facility [4 Hours]
    - Students will visit a local Unani healthcare facility, or hospital. During the visit, students will observe how Unani medicine is practiced, and interact with healthcare providers to understand the integration of Unani practices in healthcare delivery.
2. Discussion and Reflection [2 Hours]
    - Students will engage in a group discussion or reflection session on how Unani institutions contribute to integrated healthcare.

Modular Assessment

Assessment	**Hour**

Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Quiz** on Health Organizations. [50 Marks] [10 MCQs of 5 Marks Each; Questions types: Matching Questions, Reasoning and Assertion Questions, Multiple Correct Option Questions, and Single Correct Option Questions.] Or **Poster Presentation** on Health Organizations. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Design and Visuals-10 Marks; Delivery-10 Marks] Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	4

Module 32 : صحتی بیمہ اور طبی سیاحت Ṣiḥḥatī Bīma avr Ṭibbī Siyāḥat (Health Insurance and Medical Tourism)

Module Learning Objectives

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

- Discuss the principles of health insurance and the concept of medical tourism.
- Describe different health insurance models and evaluate their benefits.
- Identify the ethical challenges of medical tourism in healthcare equity.

Unit 1 صحتی بیمہ اور طبی سیاحت کا تعارف Ṣiḥḥatī Bīma avr Ṭibbī Siyāḥat kā Ta'āruf (Introduction to Medical Tourism and Health Insurance)

32.1.1 عمومی جائزہ اور اہمیت *'Umūmī Jā'iza avr Ahammiyyat* (Overview and Significance)

32.1.2 اقسام صحتی بیمہ برائے طبی سیاحت *Aqsām-i-Ṣiḥḥatī Bīma barā'e Ṭibbī Siyāḥat* (Types of Health Insurance for Medical Tourism)

32.1.3 صحتی بیمہ کے نمونے *Ṣiḥḥatī Bīmā ke Namūne* (Health Insurance Models)

References: 1,52,75

3A	3B	3C	3D	3E	3F	3G
CO6,CO7	Explain Medical Tourism and Health Insurance.	5	Lecture	CE	Knows-how	L
CO6,CO7	Analyze the relationship between medical tourism and health insurance, focusing on coverage, challenges, and opportunities.	5	Practical32.1	PSY-GUD	Shows-how	DIS
CO6,CO7	Educate the community on health screening practices and promote the upliftment of health behaviour patterns.	5	Experiential-Learning32.1	PSY-GUD	Does	FV
CO6,CO7	Assess and highlight the awareness of a healthy, positive lifestyle by promoting the concept of wellness tourism.	5	Practical32.2	PSY-MEC	Shows-how	DIS
CO6,CO7	Analyze key factors that can boost medical tourism in Unani System of Medicine.	7	Experiential-Learning32.2	PSY-MEC	Does	FV

Unit 2 ضابطہ جاتی ڈھانچہ اور آیوش شعبے کا انضمام Ḍābiṭajātī Dhān̲cha avr Āyush Shobe kā Inḍimām (Regulatory Framework and Ayush Sector Integration)

32.2.1 بھارتی بیمہ ضابطہ جاتی و ترقیاتی محکمہ *Bhārtī Bīma Ḍābiṭajātī wa Taraqqiyyātī Muḥakma* (Insurance Regulatory and Development Authority of India [IRDAI])

32.2.2 صحتی بیمہ میں آیوش شعبے کی شمولیت *Ṣiḥḥatī Bīma mēn̲ Āyush Shobe kī Shumūliyyat* (Coverage of Ayush Sector in Health Insurance)

32.2.3 طبی سیاحت میں صحتی بیمہ کے اقتصادی جہات *Ṭibbī Siyāḥat mēn̲ Ṣiḥḥatī Bīma ke Iqtiṣādī Jihāt* (Economic Aspects of Health Insurance in Medical Tourism)

References: 1,47,55

3A	3B	3C	3D	3E	3F	3G
CO6,CO7	Explain Regulatory Framework and Ayush Sector Integration.	5	Lecture	CAP	Knows-how	DIS,L

CO6,CO7	Analyze the coverage of the Ayush sector in health insurance and its implications for healthcare access.	5	Practical32.3	PSY-ADT	Shows-how	DIS
CO6,CO7	Assess Economic Aspects of Health Insurance in Medical Tourism.	5	Practical32.4	PSY-MEC	Shows-how	D
CO6,CO7	Promote medical insurance in Ayush by understanding its benefits, developing strategies to raise awareness, and creating campaigns.	7	Experiential-Learning32.3	AFT-RES	Does	FV
CO6,CO7	Analyze Economic Aspects of Health Insurance in Medical Tourism.	7	Experiential-Learning32.4	AFT-VAL	Does	PrBL

Practical Training Activity

Practical Training 32.1 Discussion on Medical Tourism and Health Insurance

Total Learning Hours = 5

1. Under teacher guidance, students, working in groups, will create a PowerPoint presentation on medical tourism and health insurance, focusing on aspects like coverage, challenges, and opportunities. [3 Hours]
2. Students will present their PowerPoint presentations to their peers and teachers, discussing their analysis and findings. [1 Hour 30 Minutes]
3. The teacher will provide feedback on each presentation, highlighting strengths and areas for improvement. [30 minutes]

Practical Training 32.2 Concept of wellness Tourism

Total Learning Hours = 5

1. The teacher will provide an overview of wellness tourism, focusing on how it promotes a healthy, positive lifestyle through physical, mental, and emotional well-being. [1 Hour]
2. Students will research how wellness tourism contributes to healthier lifestyles. [2 Hours]

3. Students will conduct interviews to assess public awareness and interest in wellness tourism. [1 Hour 30 Minutes]
4. Students will present their findings on the impact of wellness tourism in promoting a healthy lifestyle, followed by a group discussion. [30 Minutes]

Practical Training 32.3 Health Insurance in Ayush Sector

Total Learning Hours = 5

1. The teacher will provide an overview of Ayush (Ayurveda, Yoga, Unani, Siddha, and Homeopathy) and its growing inclusion in health insurance policies. [1 Hour]
2. Students will research the current status of AYUSH coverage in various health insurance plans in India, including which services and treatments are typically covered. [1 Hour 30 Minutes]
3. Students will analyze case studies of health insurance policies that include AYUSH treatments, comparing them with conventional health insurance coverage. [1 Hour 30 Minutes]
4. Students will present their findings on AYUSH coverage in health insurance, discussing the benefits, challenges, and potential for expansion. [1 Hour]

Practical Training 32.4 Economic Aspects of Health Insurance in Medical Tourism

Total Learning Hours = 5

1. Under teacher guidance, students will create a poster/chart on the economic aspects of health insurance in medical tourism, focusing on key concepts such as cost benefits, insurance coverage, and its impact on the global healthcare market. [3 Hours]
2. Students will present their posters to their peers and teachers, highlighting their findings and analysis of the economic implications of health insurance in medical tourism. [1 Hour 30 Minutes]
3. The teacher will provide feedback on each presentation, offering insights for improvement. [30 minutes]

Experiential Learning Activity

Experiential-Learning Learning 32.1: Health Behaviour Patterns

Total Learning Hours = 5

1. Field Visit for Community Health Screening Program [3 Hours]
    - Students will participate in a community health screening program organized in a local area.
2. Promoting Healthy Behaviour Patterns [1 Hour]
    - After the field visit, students will conduct a workshop or seminar in the community, focusing on healthy lifestyle habits such as balanced nutrition, physical activity, mental well-being, smoking cessation, and stress management.
3. Evaluation and Feedback Session [1 Hour]
    - Students will engage in a feedback session where they assess the impact of their health education efforts in the community.

Experiential-Learning Learning 32.2: Medical Tourism in Unani System of Medicine

Total Learning Hours = 7

1. Analysis of Global Trends in Medical Tourism and Unani System of Medicine [2 Hours]
    - Students will analyze global trends in medical tourism, particularly focusing on the growing demand for alternative and traditional medicine.
2. Identifying Opportunities for Promoting Unani System of Medicine in Medical Tourism [3 Hours]
    - Students will work in groups to identify opportunities for boosting medical tourism in Unani System of Medicine. This will include exploring factors such as affordable treatment, cultural acceptance, integration with wellness tourism, and the increasing demand for natural and holistic therapies. They will also identify target markets and key countries where Unani System of Medicine can gain popularity as a treatment option.
3. Developing a Promotional Strategy to Boost Unani Medicine in Medical Tourism [2 Hours]
    - Based on their analysis, students will develop a promotional strategy aimed at boosting medical tourism in Unani System of Medicine.

Experiential-Learning Learning 32.3: Medical Insurance in Ayush Sector

Total Learning Hours = 7

1. Study of Existing AYUSH Medical Insurance Models [2 Hours]

- Students will review case studies and examples of existing AYUSH medical insurance models, such as those provided by government schemes (e.g., Ayushman Bharat) and private insurers. They will analyze the coverage, pricing, accessibility, and challenges faced by insurers in promoting AYUSH treatments.

2. Campaign Development for Promoting AYUSH Medical Insurance [4 Hours]
    - Students will work in groups to create a promotional campaign for medical insurance in Ayush.
3. Presentation and Discussion on Campaigns and Strategies [1 Hour]
    - After developing their campaigns, students will present their strategies to the class, highlighting how AYUSH medical insurance can be promoted to the public, the potential benefits for patients, and how to make AYUSH more accessible.
    - They will receive feedback from peers and instructors, which will help refine their approach and further enhance their promotional strategies.

Experiential-Learning Learning 32.4: Ayush in Medical Tourism

Total Learning Hours = 7

1. Introduction to Medical Tourism and Health Insurance [1 Hour]
    - Students will explore the concept of medical tourism and its growing role in the global healthcare landscape.
2. Case Study Analysis of Health Insurance Models for Medical Tourism [1 Hour 30 Minutes]
    - Students will analyze case studies of different countries or organizations that offer health insurance packages for medical tourism.
3. Field Visit to a Medical Tourism Facility [3 Hours]
    - Students will visit a hospital or clinic specializing in medical tourism. During the visit, they will observe the healthcare services provided to international patients, learn about the role of health insurance in attracting medical tourists, and discuss pricing strategies with administrators or providers. They will also gather information on the economic benefits and challenges faced by the healthcare facility in catering to medical tourists.
4. Group Discussion on the Economic Impact of Health Insurance in Medical Tourism [1 Hour 30 Minutes]
    - After the visit, students will engage in a group discussion to analyze the economic aspects of health insurance in medical tourism.

Modular Assessment

Assessment	Hour
Instructions: Conduct a structured modular assessment. Assessment will be of 50 marks for this module. 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. **Structured Essay** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Organization-10 Marks; Presentation and Language-10 Marks] Or **Presentation** on any topic related to this module. [50 Marks] [**Assessment Criteria:** Content-30 Marks; Delivery-10 Marks; Clarity and Engagement-10 Marks] Or Any practical in converted form can be taken for assessment. [25 Marks] & Any of the experiential, such as portfolios/reflections/presentations, can be taken as assessment. [25 Marks]	4

Table 4 : Practical Training Activity

(*Refer table 3 of similar activity number)

Practical No*	Practical name	Hours
1.1	Milestones of Epidemiology	2
1.2	Epidemiological Methods	2
1.3	Incidence and Prevalence	3
1.4	Principles of Causality	3
1.5	Rates, Ratios, and Proportions	2
1.6	Public Health Dataset	2
1.7	Public Health Intervention	3
1.8	Public Health Policies	3
2.1	Cross-Sectional Study	2
2.2	Case Report	2
2.3	Cohort Study	3
2.4	Case-Control Study	3
2.5	Randomized Controlled Trial	2
2.6	RCT Conduction	2
2.7	Biases in Clinical Trials	3
2.8	Evidence-Based Guidelines	3
3.1	Measures of Disease Frequency	3
3.2	Relative Risk and Odds Ratios	3
3.3	Comparing Measures of Association	2
3.4	Case-Control Study	4

3.5	Attributable Risk and Population Attributable Risk	4
3.6	Measures of Impact	4
4.1	Hands-on exercises involving datasets	2
4.2	Practical Exercises	2
4.3	Practical activities focusing on detecting biases	2
4.4	Key association measures	2
4.5	Practical experience in using causal inference methods	3
4.6	Evaluation and Critique of published epidemiological studies	3
4.7	Designing of an epidemiological study	2
4.8	Developing proficiency in using statistical software	4
5.1	Transmission Models for Communicable Diseases	3
5.2	Case Study of a Communicable Disease	3
5.3	Classifying Communicable Diseases	2
5.4	Developing Fact Sheets for Communicable Diseases	2
5.5	Handling of vaccines	2
5.6	Adverse Events Following Immunization	2
5.7	Controlling Strategies for Disease	3
5.8	Disinfection Procedures	3
6.1	Case Study Analysis	3
6.2	Comparison of Epidemiology of Airborne Diseases	3
6.3	Preventive Measures for Airborne Diseases	2
6.4	Identification of Airborne Diseases	2
6.5	Case Study Analysis of Waterborne Disease	2

6.6	Comparison of Epidemiology of Waterborne Diseases	2
6.7	Preventive Measures for Waterborne Diseases	3
6.8	Identification of Waterborne Diseases	3
7.1	Case-Study Analysis of Vector-Borne Disease	2
7.2	Comparison of Epidemiology of Vector-Borne Diseases	2
7.3	Identification of Vector-Borne Diseases	3
7.4	Preventive Measures for Vector-Borne Diseases	3
7.5	Case Study Analysis of Zoonotic Disease	3
7.6	Identification of Zoonotic Diseases	3
7.7	Preventive Measures For Zoonotic Diseases	2
7.8	Clinical Simulations for Zoonotic Diseases	2
8.1	Outbreak Investigation in Simulated Environment	2
8.2	Utilization of Outbreak Response Tools	2
8.3	Effective communication and coordination strategies during an outbreak	3
8.4	Reviewing Real-World Field Epidemiology Case Studies	3
8.5	Designing a Disease Surveillance System	2
8.6	Evaluating Existing Surveillance System	2
8.7	Analysis and Interpretation of Surveillance Data	3
8.8	Reliability of surveillance data	3
9.1	Nutritive Value of Different Foods	10
9.2	Meal Planning for healthy, sick and sports persons	10
10.1	Nutritional Assessment	10
10.2	Nutritional Factors of Non-Communicable Diseases (NCDs)	10

11.1	Unani Nutraceuticals	10
11.2	Diet Planning	10
12.1	Food Hygiene	10
12.2	Personal Hygiene of Food Handlers	10
13.1	Impact of Food Fortification	5
13.2	Identification of Food Adulteration.	5
13.3	Guidelines for Food Standards	5
13.4	Comparison of adulterated and non-adulterated food items	5
14.1	Lifestyle Assessment	4
14.2	Strategies for lifestyle interventions and community-based prevention in NCDs	4
14.3	Asbāb Sitta Ḍarūriyya nd NCDs	8
14.4	Mental relaxation techniques and Sound sleep practices	4
15.1	Risk Assessment for CVDs	10
15.2	Risk Assessment for Diabetes and Obesity	5
15.3	Assessment of risk factors of cancers and cancer registry	5
16.1	Screening of Cancers	10
16.2	Primary Healthcare Module for NCDs in Unani Medicine	10
17.1	Environmental Health Case Study Analysis	5
17.2	Case Studies Analysis	5
17.3	Quality Assessment and Purification Techniques	10
17.4	Air Quality Monitoring	5
17.5	Ventilation Systems Assessment	5
18.1	Social Media Impact Survey	7

18.2	Housing Quality Assessment	3
19.1	Identifying common arthropods under a microscope	5
19.2	Mosquito Breeding Site Identification and Larvae Sampling	5
19.3	Life Cycle of common Arthropods	6
19.4	Safe and effective application of different classes of insecticides	4
20.1	Healthy living plan for different seasons by taking into consideration the Mizāj of Individuals	5
20.2	Tadābīr (Regimens) in different seasons with relation to age groups and Mizāj	5
20.3	Video-clips/ Presentation on health issues and their solution during natural calamities	5
20.4	Mock Drills and Simulation Exercises	5
21.1	Strategies for improving sanitation and waste management	10
21.2	Group Discussion on Waste Disposal Methods	5
21.3	Health implications of improper waste disposal	5
22.1	Health concerns and Risks associated with improper biomedical waste management	5
22.2	Safe Handling for Biomedical Waste	5
22.3	Segregation of e-waste	5
22.4	Health risks associated with e-waste exposure	5
23.1	Assessment of the occupational hazards in various environments	5
23.2	Health status of industry workers	5
23.3	Occupational hazards	5
23.4	Assessing the health of workers	5
24.1	Poster and Chart Making on Demographic Concepts	10
24.2	Poster-Making on Family Planning Methods	5
24.3	Comparison of various contraceptive methods	5

25.1	Health for All	3
25.2	Healthcare system and health care delivery	4
25.3	National Health Strategy for Health for All	3
25.4	Universal Health Coverage	4
25.5	Ayush in Healthcare Delivery	4
25.6	Ayush in Public Health	2
26.1	Healthcare delivery at Panchayat and District levels	5
26.2	Role of Five-Year Plans	5
26.3	Equitable and Accessible Health Care	5
26.4	Understanding Human Behaviour	5
27.1	Communication techniques in healthcare settings	5
27.2	Health Education Material	5
27.3	Principles and Practice of Health Education	5
27.4	Effectiveness of health education materials	5
28.1	Role of health data and health informatics in quality improvement	5
28.2	Health Information System (HIS)	5
28.3	Importance of Health Informatics	5
28.4	Public Health Information System	5
29.1	Unani classical literature on medical legality and ethics	5
29.2	Health Legislations	5
29.3	National Health Policy 1983, 2002, 2017	5
29.4	National Health policies	5
30.1	Analysis of health outbreaks	5

30.2	Epidemic outbreak investigation and Surveillance	5
30.3	Analysis and interpretation of the concept of surveillance	5
30.4	National Nutrition Programs	5
31.1	International health organizations	5
31.2	Role of FAO	5
31.3	Role of National Health Agencies	5
31.4	Impact of Ayush at Community Level	5
32.1	Discussion on Medical Tourism and Health Insurance	5
32.2	Concept of wellness Tourism	5
32.3	Health Insurance in Ayush Sector	5
32.4	Economic Aspects of Health Insurance in Medical Tourism	5

Table 5 : Experiential learning Activity

(*Refer table 3 of similar activity number)

Experiential learning No*	Experiential name	Hours
1.1	Historical Disease Timeline Creation	1
1.2	Epidemiology Film Screening	1
1.3	Evolution of Epidemiological Approaches	2
1.4	Decision-making regarding risk factors	2
1.5	Designing a Survey	4
1.6	Concept Mapping Exercise	3
1.7	Epidemiological tools for public health interventions	2
1.8	Geographic Investigation	2
1.9	Rates, Ratio, and Proportion	2
1.10	Public Health Policy	3
1.11	Community Health Assessment	2
1.12	Public Health Issues	2
2.1	Descriptive Epidemiological Technique	1
2.2	Cross-Sectional Study Simulation	1
2.3	Data Interpretation	2
2.4	Evidence-Based Medicine	2
2.5	Simulate Cohort and Case-Control Study	3
2.6	Journal Review	3
2.7	Analytical Cross-Sectional Study	3

2.8	Interactive RCT Workshop	2
2.9	Clinical Trial Simulation	2
2.10	Randomized Controlled Trial	2
2.11	Community Trials	3
2.12	Evidence-Based Medicine	2
3.1	Classroom Epidemiological Survey	2
3.2	Data Interpretation Exercise	2
3.3	Disease Data Management	3
3.4	Odds Ratio and Risk Ratio	2
3.5	Odds Ratio and Risk Ratio	2
3.6	Odds Ratio versus Risk Ratio	3
3.7	Attributable Risk and Population Attributable Risk	3
3.8	Attributable Risk and Population Attributable Risk	5
3.9	Relative Risk versus Attributable Risk	4
4.1	Designing an epidemiological study	2
4.2	Reviewing published studies	2
4.3	Presenting a report on the study's findings	2
4.4	Critical review of an epidemiological study	2
4.5	Challenges in establishing associations	2
4.6	Analysis of case studies	2
4.7	Analysis of Epidemiological Data	2
4.8	Group discussions on causal inference	3
4.9	Causal Pathway Model	2

4.10	Impact of confounding, bias, and interaction	2
4.11	Challenges of establishing causality	2
4.12	Mock observational study	3
5.1	Interactive Transmission Model Workshop	4
5.2	Case Study Analysis	3
5.3	Interactive Mapping of Disease Spread	2
5.4	Interactive Disease Classification Exercise	2
5.5	Communicable Disease Infographic Design	2
5.6	Exploration of Virtual Disease Database	2
5.7	Insights on Vaccination Practices	2
5.8	Vaccine Awareness Campaign	2
5.9	Impact of herd immunity in a community	2
5.10	Public Health Surveillance System	1
5.11	Infection Control Measures in Health Care Facilities	2
5.12	Disease Prevention Campaign	2
6.1	Airborne Diseases Infographic	3
6.2	Public Awareness About Airborne Diseases	2
6.3	Health Education Campaigns on Airborne Diseases	4
6.4	Simulate Outbreak Management Scenarios for Airborne Diseases	2
6.5	Community-Based Intervention Plans for Airborne Diseases	2
6.6	Healthcare Response for Airborne Disease Outbreak	2
6.7	Waterborne Diseases Infographic	1
6.8	Health Education Campaigns on Waterborne Diseases	3

6.9	Public Awareness on Waterborne Diseases	2
6.10	Outbreak Management of Waterborne Diseases	2
6.11	Community-Based Intervention Plans for Waterborne Diseases	1
6.12	Healthcare Response for Waterborne Disease Outbreak	2
7.1	Vector-Borne Diseases Infographic	2
7.2	Public Awareness About Vector-Borne Diseases	1
7.3	Health Education Material on Vector-Borne Diseases	1
7.4	Outbreak Management Scenarios for Vector-Borne Diseases	2
7.5	Community-Based Intervention Plans For VBDs	2
7.6	Healthcare Response For Dengue Outbreak	3
7.7	Zoonotic Diseases Infographic	3
7.8	Health Education Campaign on Zoonotic Diseases	3
7.9	Survey on Zoonotic Diseases	3
7.10	Outbreak Management of Zoonotic Diseases	2
7.11	Community Intervention Plan For Zoonotic Diseases	2
7.12	Healthcare Response During Zoonotic Disease Outbreak	2
8.1	Role of technology in outbreak response	1
8.2	Applied Case Study	1
8.3	Ethical dilemmas in epidemic and pandemic management	2
8.4	Role Play in Simulated Outbreak Investigation	3
8.5	Effectiveness of different containment strategies	2
8.6	Interactive Outbreak Drill	2
8.7	Critical Evaluation of Surveillance Systems	2

8.8	Ethical and privacy concerns in surveillance systems	2
8.9	Interactive Surveillance Simulation	2
8.10	Surveillance systems in managing public health emergencies	4
8.11	Digital tools in public health surveillance	3
8.12	Interpreting complex surveillance data	2
9.1	Nutrition Awareness Programs	8
9.2	Applicability of Kulliyyāt-i-Akl-i-Ṭa‘ām in Community Nutrition	8
9.3	Assessment of Dietary Plans	10
10.1	Identification of Nutritional Risk Factors and Areas for Intervention	10
10.2	Nutritional Risk Factors of NCDs	8
10.3	Assessment of Nutritional Deficiency Disorders	8
11.1	Nutrition in Real-Life Scenarios	10
11.2	Health Education on Nutrition in NCDs	10
11.3	Impact of Dietary Modifications on Health Promotion	6
12.1	Sources of Foodborne Intoxications	10
12.2	Counselling Session for Food Stakeholders	10
12.3	Sanitary Status of Public Food Establishments	6
13.1	Field Visit	5
13.2	Food Fortification Methods Analysis	5
13.3	Food Fortification Methods in Unani Classical Literature	4
13.4	Identification of Food Adulterants	5
13.5	Awareness on Food Adulteration	4
13.6	IEC Material on Food Aduleration and Food Standards	3

14.1	Analysis of lifestyle modification strategies in Unani Medicine	5
14.2	Observation of palliative care methods	5
14.3	Counseling for Healthy Living	8
14.4	Health Education on Lifestyle Mangement	8
15.1	Health Awareness Campaign on CVDs and Stroke	10
15.2	Health Awareness Campaign on Diabetes and Obesity Prevention	10
15.3	Health Awareness Camapign on Cancer Prevention	6
16.1	Screening for NCDs	10
16.2	Apllicability of Unani Medicine Modules of Primary Health Care in NCDs	6
16.3	Training of Community Health Workers	10
17.1	Workshop / Seminar on Environmental Health (Student-Led)	7
17.2	Environmental Health Assessment & Action Plan	7
17.3	Water Purification Plant Visit	7
17.4	Journal club on Water Quality Assessment	5
17.5	Workshop on Emerging Techniques for Air Quality Improvement	8
17.6	Air Quality Assessment	5
18.1	Group Discussion on Health Equity	5
18.2	Field Observation on Housing and Health	8
19.1	Knowledge, Attitudes, and Practices (KAP) Survey	8
19.2	Discussion on Arthopod-borne Diseases	5
19.3	Field Visit to public health facilities to observe vector control strategies	8
19.4	Symposium on Herbal Repellents	5
20.1	Community Awareness Campaign	3

20.2	Climatic Changes in Unani Classical Literature vs. Present Advances	5
20.3	Journal Club on Global Warming and its Impact on Health	5
20.4	Workshop on disaster preparedness	5
20.5	Health Awareness Campaign	5
20.6	Discussion on Relief Organizations	3
21.1	Community clean-up drives	7
21.2	Visit to Sewage Treatment Plant	6
21.3	Field Visit	8
21.4	Health Impact of Sanitation and Waste Management	5
22.1	Analysis of different biomedical waste treatment and disposal methods	6
22.2	Colour coding practices for biomedical waste management	4
22.3	Management of BMW in Unani Health care facility	6
22.4	Safe disposal options for e-waste management	7
22.5	Experts Discussion on e-waste management	3
23.1	Health Awareness Campaign	7
23.2	Field Observations	6
23.3	Journal Club on Overview of occupational diseases	9
23.4	Assessment of handling of occupational hazards by industries	4
24.1	Interpretation of Demographic Data	8
24.2	Evaluate the Impact of Family Planning Programs	10
24.3	Barriers to Access for Contraceptive Methods	8
25.1	Health Care Facility Visit	8
25.2	Community Survey	7

25.3	Job description of members of the Health Team	5
25.4	Indian Public Health Standards (IPHS)	6
26.1	Health Planning	6
26.2	Evaluation of the Health Services	6
26.3	Health Needs Assessment and Gap Assessment in Health Care	7
26.4	Health Needs of a Community	7
27.1	Health Education Program for Specific Population	8
27.2	Health Communication Approaches	8
27.3	Behaviour Change Communication	5
27.4	Effectiveness and Designing of IEC	5
28.1	A-HMIS, Telemedicine, and Telehealth in Public Health settings	6
28.2	Electronic Health Records (EHR), Electronic Population Registries and National Vital Statistic Systems	7
28.3	Health Information Dissemination	6
28.4	Privacy, Confidentiality and Security of Public Health Information	7
29.1	Prevention of Food Adulteration Act	6
29.2	National Nutrition Policy	7
29.3	Implementation of National Policy for Senior Citizens	7
29.4	National Commission for Indian System of Medicine (NCISM)	6
30.1	National Programmes for the Control of Communicable Diseases	6
30.2	NCDs Risk Factors Assessment	7
30.3	Risk Factor Analysis for Maternal and Child Morbidity and Mortality	7
30.4	Impact of National Nutrition Programmes	6

31.1	International Health Organizations	7
31.2	Role of UNICEF	6
31.3	Role of Akshay Patra Foundation in Addressing Malnutrition	7
31.4	Role of Unani Institutions in healthcare delivery	6
32.1	Health Behaviour Patterns	5
32.2	Medical Tourism in Unani System of Medicine	7
32.3	Medical Insurance in Ayush Sector	7
32.4	Ayush in Medical Tourism	7

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-TST	4	100 x 4 Papers = 400	400	800

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

Credit frame work

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

Formative Assessment : Module wise Assessment: will be done at the end of each module. Evaluation includes learners active participation to get Credits and Marks. Each Module may contain one or more credits.

Summative Assessment: Summative Assessment (University examination) will be carried out at the end of Semester VI.

6 C : Calculation Method for Modular Grade Points (MGP)

Module Number & Name (a)	Credits (b)	Actual No. of Notional Learning Hours (c)	Attended Number of notional Learning hours (d)	Maximum Marks of assessment of modules (e)	Obtained Marks per module (f)	MGP =d*f/c*e*100
Semester No : 3						
Paper No : 1 (طریقہائے وبائیات ووبائیات امراض ساریہ Tarīqahā'ē Waba'iyyāt wa Waba'iyyāt Amrāḍ Sārīya (Epidemiological Methods and Communicable Diseases))						
M 1 اساسیات علم الوبائیات Asāsiyyāt-i-'Ilm al-Waba'iyyāt (Foundations of Epidemiology)	2	60		50		
M 2 علم الوبائیات میں تصامیم مطالعہ 'Ilm al-Wabā'iyyāt mēn Taṣāmīm-i Muṭāla'a (Epidemiological Study Designs)	2	60		50		
Paper No : 2 (تغذیہ، طرز زندگی اور امراض غیر ساریہ Taghdhiya, Ṭarz-i-Zindagī avr Amrāḍ Ghayr Sārīyya (Nutrition, Lifestyle and Non-Communicable Diseases))						
M 9 اصول تغذیہ وغذائی ضروریات Uṣūl-i-Taghdhiya wa Ghidhā'ī Ḍarūriyyāt (Principles of Nutrition and Nutritional Requirements)	2	60		50		
M 10 غذائی تجزیہ وتغذیہ برائے صحت عامہ Ghidhā'ī Tajziyya wa Taghdhiya barā'ē Ṣiḥḥat 'Āmma (Nutritional Assessment and Public Health Nutrition)	2	60		50		
Paper No : 3 (ماحولیاتی صحت، آبادیات اور حرکیات آبادی MAḤAWLIYĀTĪ ṢIḤḤAT, ĀBĀDIYYĀT AVR ḤARAKIYYĀT-I-ĀBĀDĪ (ENVIRONMENTAL HEALTH, DEMOGRAPHY AND POPULATION DYNAMICS))						
M 17 طبیعی ماحول Ṭabī'ī Maḥawl (Physical Environment)	3	90		75		
M 18 سماجی ماحول Samājī Maḥawl (Social Environment)	1	30		25		
Paper No : 4 (صحت عامہ کی خدمات کا نظام اور منصوبے Ṣiḥḥat 'Āmma kī Khidmāt kā Niẓām avr Manṣūbe (Public Health Care System and Policies))						
M 25 معاشرتی صحت اور صحتی خدمات کا نظام Mu'āsharatī Ṣiḥḥat avr Ṣiḥḥatī Ḵẖidmāt kā Niẓām (Health Care of Community and Health Care System)	2	60		50		
M 26 صحتی منصوبہ بندی وانتظام Ṣiḥḥatī Manṣūba Bandī wa Intiẓām (Health Planning and Management)	2	60		50		

	16	480		400		
Semester No : 4						
Paper No : 1 (طریقہائے وبائیات و وبائیات امراض سار یہ Tarīqahā'y Waba'iyyāt wa Waba'iyyāt Amrāḍ Sārīya (Epidemiological Methods and Communicable Diseases))						
M 3 علم الوبائیات میں پیمائشیں Ilm al-Wabā'iyyāt meṉ Paymā'isheṉ (Measures of Epidemiology)	2	60		50		
M 4 علم الوبائیات میں مشارکہ و سببیّت Ilm al-Wabā'iyyāt meṉ Mushāraka wa Sababiyyat (Association and Causation in Epidemiology)	2	60		50		
Paper No : 2 (تغذیہ، طرز زندگی اور امراض غیر سار یہ Taghdhiya, Ṭarz-i-Zindagī avr Amrāḍ Ghayr Sārīyya (Nutrition, Lifestyle and Non-Communicable Diseases))						
M 11 اطلاقی تغذیہ برائے صحت و مرض Iṭlāqī Taghdhiyya barā'e Ṣiḥḥat-o-Maraḍ (Applied Nutrition in Health and Disease)	2	60		50		
M 12 امراض بذریعہ غذائی آلودگی و غذائی حفظان صحت Amrāḍ ba Dhari'a Ghidhā'ī Ālūdgī wa Ghidhā'ī Ḥifẓān-i-Ṣiḥḥat (Foodborne Diseases and Food Hygiene)	2	60		50		
Paper No : 3 (ماحولیاتی صحت، آبادیات اور حرکیات آبادی MAḤAWLIYĀTĪ ṢIḤḤAT, ĀBĀDIYYĀT AVR ḤARAKIYYĀT-I-ĀBĀDĪ (ENVIRONMENTAL HEALTH, DEMOGRAPHY AND POPULATION DYNAMICS))						
M 19 حیاتیاتی ماحول Ḥayātiyātī Maḥawl (Biological Environment)	2	60		50		
M 20 صحت پر موسمیاتی تبدیلی کے اثرات اور آفات کا نظم و نسق Ṣiḥḥat par Mavsamiyyātī Tabdīlī ke Atharāt avr Āfāt ka Naẓm-o-Nasq (Impacts of Climate Change on Health and Disaster Management)	2	60		50		
Paper No : 4 (صحت عامہ کی خدمات کا نظام اور منصوبے Ṣiḥḥat 'Āmma kī Khidmāt ka Niẓām avr Manṣūbe (Public Health Care System and Policies))						
M 27 صحتی تعلیمات اور ترسیلات Ṣiḥḥatī Ta'līmāt avr Tarsīlāt (Health Education and Communication)	2	60		50		
M 28 اطلاعیات برائے صحت عامہ Iṭṭilā'īyyāt barā'e Ṣiḥḥat 'Āmma (Public Health Informatics)	2	60		50		
	16	480		400		
Semester No : 5						

Paper No : 1 (طریقہائے وبائیات ووبائیات امراض سار یہ Tarīqahā'y Waba'iyyat wa Waba'iyyat Amrāḍ Sārīya (Epidemiological Methods and Communicable Diseases))						
M 5 علم الوبائیات برائے امراض متعدی Ilm al-Wabā'iyyāt barā'e Amrāḍ Muta'add ī (Infectious Disease Epidemiology)	2	60		50		
M 6 امراض سار یہ: امراض ہوائی و آبی Amrāḍ Sāriya: Amrāḍ Hawā'ī wa Ābī (Communicable Diseases: Airborne and Waterborne Diseases)	2	60		50		
Paper No : 2 (تغذیہ، طرز زندگی اور امراض غیر سار یہ Taghdhiya, Ṭarz-i-Zindagī avr Amrāḍ Ghayr Sārīyya (Nutrition, Lifestyle and Non-Communicable Diseases))						
M 13 غذائی تحصین و غذائی سلامتی کے معیارات Ghidhā'ī Taḥṣīn wa Ghidhā'ī Salāmatī kē Mi'yārāt (Food Fortification and Food Safety Standards)	2	60		50		
M 14 طرز زندگی سے پیدا ہونے والے امراض کا تعارف Ṭarz-i-Zindagī sē Paydā hone vālē Amrāḍ kā Ta'ārūf (Introduction to Lifestyle Disorders)	2	60		50		
Paper No : 3 (ماحولیاتی صحت، آبادیات اور حرکیات آبادی MAḤAWLIYĀTĪ ṢIḤḤAT, ĀBĀDIYYAT AVR ḤARAKIYYAT-I-ĀBĀDĪ (ENVIRONMENTAL HEALTH, DEMOGRAPHY AND POPULATION DYNAMICS))						
M 21 صفائی اور ٹھوس فضلات کا انتظام Ṣafā'ī avr Thos Fuḍlāt kā Intiẓām (Sanitation and Solid Waste Management)	2	60		50		
M 22 حیاتیاتی طبی اور برقی فضلات کا انتظام Ḥayātiyatī Ṭibbī avr Barqī Fuḍlāt kā Intiẓām (Biomedical and E-Waste Management)	2	60		50		
Paper No : 4 (صحت عامہ کی خدمات کا نظام اور منصوبے Ṣiḥḥat 'Āmma kī Khidmāt kā Niẓām avr Manṣūbe (Public Health Care System and Policies))						
M 29 قومی صحت کے لائحۂ اعمال اور صحتی نگہداشت کے قوانین Qawmī Ṣiḥḥat ke Lā'iḥa'-i-'Amāl avr Ṣiḥḥatī Nighahdāsht ke Qawānīn (National Health Policies and Health Care Legislations)	2	60		50		
M 30 قومی صحتی منصوبہ جات Qawmī Ṣiḥḥatī Manṣūbajāt (National Health Programmes)	2	60		50		
	16	480		400		
Semester No : 6						
Paper No : 1 (طریقہائے وبائیات ووبائیات امراض سار یہ Tarīqahā'y Waba'iyyat wa Waba'iyyat Amrāḍ Sārīya (Epidemiological Methods and Communicable Diseases))						

M 7 امراض ساریہ: امراض بذریعہ حشرات الارض وحیوانات Amrāḍ Sāriyya: Amrāḍ ba-Dhari'a Ḥasharāt al-Arḍ wa Ḥaywānāt (Communicable Diseases: Vector-Borne and Zoonotic Diseases)	2	60		50		
M 8 اطلاقی علم الوبائیات Iṭlāqī 'Ilm al-Wabā'iyyāt (Applied Epidemiology)	2	60		50		
Paper No : 2 (تغذیہ، طرز زندگی اور امراض غیر ساریہ Taghdhiya, Ṭarz-i-Zindagī avr Amrāḍ Ghayr Sāriyya (Nutrition, Lifestyle and Non-Communicable Diseases))						
M 15 وبائیت امراض غیر ساریہ Wabā'iyat-i-Amrāḍ Ghayr Sāriya (Epidemiology of Non-Communicable Diseases)	2	60		50		
M 16 امراض غیر ساریہ کی نخل اور بنیادی نگہداشت Amrāḍ Ghayr Sāriya kī Nakhl avr Bunyādī Nigahdāsht (Screening and Primary Care for Non-Communicable Diseases)	2	60		50		
Paper No : 3 (ماحولیاتی صحت، آبادیات اور حرکیات آبادی MAḤAWLIYĀTĪ ṢIḤḤAT, ĀBĀDIYYĀT AVR ḤARAKIYYĀT-I-ĀBĀDĪ (ENVIRONMENTAL HEALTH, DEMOGRAPHY AND POPULATION DYNAMICS))						
M 23 پیشہ ورانہ صحت اور خطرات Peshavarāna Ṣiḥḥat avr Khatrāt (Occupational Health and Hazards)	2	60		50		
M 24 آبادیاتی اور خاندانی منصوبہ بندی کے طریقے Ābādiyyātī avr Khāndānī Manṣūbabandī ke Ṭarīqe (Demography and Family Planning Methods)	2	60		50		
Paper No : 4 (صحت عامہ کی خدمات کا نظام اور منصوبے Ṣiḥḥat 'Āmma kī Khidmāt kā Niẓām avr Manṣūbe (Public Health Care System and Policies))						
M 31 صحتی تنظیمات Ṣiḥḥatī Tanẓīmāt (Health Organizations)	2	60		50		
M 32 صحتی بیمہ اور طبی سیاحت Ṣiḥḥatī Bīma avr Ṭibbī Siyāḥat (Health Insurance and Medical Tourism)	2	60		50		
	16	480		400		
MGP = ((Number of Notional learning hours attended in a module) X (Marks obtained in the modular assessment) / (Total number of Notional learning hours in the module) X (Maximum marks of the module)) X 100						

6 D : Semester Evaluation Methods for Semester Grade Point Average (SGPA)

SGPA will be calculated at the end of the semester as an average of all Module MGPs. Average of MGPS of the Semester For becoming eligible for Summative assessment of the semester, student should get minimum of 60% of SGPA

SGPA = Average of MGP of all modules of all papers = add all MGPs in the semester/ no. of modules in the semester Evaluation Methods for Modular Assessment

Semester No : 3

Paper No : 1 طریقہائے وبائیات و وبائیات امراض ساریہ Tarīqahā'ē Waba'iyyāt wa Waba'iyyāt Amrāḍ Sārīya (Epidemiological Methods and Communicable Diseases)

A S.No	B Module number and Name	C MGP
1	M1. اساسیات علم الوبائیات Asāsiyyāt-i-'Ilm al-Waba'iyyāt (Foundations of Epidemiology)	C 1
2	M2. علم الوبائیات میں تصامیم مطالعہ 'Ilm al-Wabā'iyyāt mēn Taṣāmīm-i Muṭāla'a (Epidemiological Study Designs)	C 2

Paper No : 2 تغذیہ، طرز زندگی اور امراض غیر ساریہ Taghdhiya, Ṭarz-i-Zindagī avr Amrāḍ Ghayr Sārīyya (Nutrition, Lifestyle and Non-Communicable Diseases)

A S.No	B Module number and Name	C MGP
3	M9. اصول تغذیہ و غذائی ضروریات Usūl-i-Taghdhiya wa Ghidhā'ī Ḍarūriyyāt (Principles of Nutrition and Nutritional Requirements)	C 3
4	M10. غذائی تجزیہ و تغذیہ برائے صحت عامہ Ghidhā'ī Tajziyya wa Taghdhiya barā'ē Ṣiḥḥat 'Āmma (Nutritional Assessment and Public Health Nutrition)	C 4

Paper No : 3 ماحولیاتی صحت، آبادیات اور حرکیات آبادی MAḤAWLIYĀTĪ ṢIḤḤAT, ĀBĀDIYYĀT AVR ḤARAKIYYĀT-I-ĀBĀDĪ (ENVIRONMENTAL HEALTH, DEMOGRAPHY AND POPULATION DYNAMICS)

A S.No	B Module number and Name	C MGP

5	M17.طبیعی ماحول Ṭabī'ī Maḥawl (Physical Environment)	C 5
6	M18.سماجی ماحول Samāj̄ī Maḥawl (Social Environment)	C 6
Paper No : 4 صحت عامہ کی خدمات کا نظام اور منصوبے Ṣiḥḥat 'Āmma kī Khidmāt kā Niẓām avr Manṣūbe (Public Health Care System and Policies)		
A S.No	B Module number and Name	C MGP
7	M25.معاشرتی صحت اور صحتی خدمات کا نظام Mu'āsharatī Ṣiḥḥat avr Ṣiḥḥatī K̲h̲idmāt kā Niẓām (Health Care of Community and Health Care System)	C 7
8	M26.صحتی منصوبہ بندی و انتظام Ṣiḥḥatī Manṣūba Bandī wa Intiẓām (Health Planning and Management)	C 8
	Semester Grade point Average (SGPA)	(C1+C2+C3+C4+C5+C6+C7+C8) / Number of modules(8)
Semester No : 4		
Paper No : 1 طریقہائے وبائیات و وبائیات امراض ساریہ Tarīqahā'ȳ Waba'iyyāt wa Waba'iyyāt Amrāḍ Sārīya (Epidemiological Methods and Communicable Diseases)		
A S.No	B Module number and Name	C MGP
1	M3.علم الوبائیات میں پیمائشیں Ilm al-Wabā'iyyāt mē̲n̲ Paymā'ishē̲n̲ (Measures of Epidemiology)	C 1
2	M4.علم الوبائیات میں مشارکہ و سببیّت Ilm al-Wabā'iyyāt mē̲n̲ Mushāraka wa Sababiyyat (Association and Causation in Epidemiology)	C 2
Paper No : 2 تغذیہ، طرزِ زندگی اور امراض غیر ساریہ Taghdhiya, Ṭarz-i-Zindagī avr Amrāḍ Ghayr Sārīyya (Nutrition, Lifestyle and Non-Communicable Diseases)		
A S.No	B Module number and Name	C MGP

3	M11.اطلاقی تغذیہ برائے صحت ومرض Iṭlāqī Taghdhiyya barā'e Ṣiḥḥat-o-Maraḍ (Applied Nutrition in Health and Disease)	C 3
4	M12.امراض بذریعہ غذائی آلودگی وغذائی حفظان صحت Amrāḍ ba Dhari'a Ghidhā'ī Ālūdgī wa Ghidhā'ī Ḥifẓān-i-Ṣiḥḥat (Foodborne Diseases and Food Hygiene)	C 4
Paper No : 3 ماحولیاتی صحت، آبادیات اور حرکیات آبادی MAḤAWLIYĀTĪ ṢIḤḤAT, ĀBĀDIYYAṬ AVR ḤARAKIYYAṬ-I-ĀBĀDĪ (ENVIRONMENTAL HEALTH, DEMOGRAPHY AND POPULATION DYNAMICS)		
A **S.No**	**B** **Module number and Name**	**C** **MGP**
5	M19.حیاتیاتی ماحول Ḥayātiyatī Maḥawl (Biological Environment)	C 5
6	M20.صحت پر موسمیاتی تبدیلی کے اثرات اور آفات کا نظم ونسق Ṣiḥḥat par Mavsamiyyatī Tabdīlī ke Atharāt avr Āfāt ka Naẓm-o-Nasq (Impacts of Climate Change on Health and Disaster Management)	C 6
Paper No : 4 صحت عامہ کی خدمات کا نظام اور منصوبے Ṣiḥḥat 'Āmma kī Khidmāt ka Niẓām avr Manṣūbe (Public Health Care System and Policies)		
A **S.No**	**B** **Module number and Name**	**C** **MGP**
7	M27.صحتی تعلیمات اور ترسیلات Ṣiḥḥatī Ta'līmāt avr Tarsīlāt (Health Education and Communication)	C 7
8	M28.اطلاعیات برائے صحت عامہ Iṭṭilā'īyyāt barā'e Ṣiḥḥat 'Āmma (Public Health Informatics)	C 8
	Semester Grade point Average (SGPA)	(C1+C2+C3+C4+C5+C6+C7+C8) / Number of modules(8)
Semester No : 5		
Paper No : 1 طریقہائے وبائیات ووبائیات امراض سار یہ Tarīqahā'y Waba'iyyāt wa Waba'iyyāt Amrāḍ Sārīya (Epidemiological Methods and Communicable Diseases)		

A S.No	B Module number and Name	C MGP
1	M5.علم الوبائیات برائے امراض متعدی 'Ilm al-Wabā'iyyāt barā'e Amrāḍ Muta'add ī (Infectious Disease Epidemiology)	C 1
2	M6.امراض ساریہ: امراض ہوائی و آبی Amrāḍ Sāriya: Amrāḍ Hawā'ī wa Ābī (Communicable Diseases: Airborne and Waterborne Diseases)	C 2
Paper No : 2 تغذیہ، طرزِ زندگی اور امراض غیر ساریہ Taghdhiya, Ṭarz-i-Zindagī avr Amrāḍ Ghayr Sāriyya (Nutrition, Lifestyle and Non-Communicable Diseases)		
A S.No	B Module number and Name	C MGP
3	M13.غذائی تحصین و غذائی سلامتی کے معیارات Ghidhā'ī Taḥṣīn wa Ghidhā'ī Salāmatī ke Mi'yārāt (Food Fortification and Food Safety Standards)	C 3
4	M14.طرز زندگی سے پیدا ہونے والے امراض کا تعارف Ṭarz-i-Zindagī se Paydā hone vāle Amrāḍ kā Ta'āruf (Introduction to Lifestyle Disorders)	C 4
Paper No : 3 ماحولیاتی صحت، آبادیات اور حرکیات آبادی MAḤAWLIYĀTĪ ṢIḤḤAT, ĀBĀDIYYĀT AVR ḤARAKIYYĀT-I-ĀBĀDĪ (ENVIRONMENTAL HEALTH, DEMOGRAPHY AND POPULATION DYNAMICS)		
A S.No	B Module number and Name	C MGP
5	M21.صفائی اور ٹھوس فضلات کا انتظام Safā'ī avr Thos Fuḍlāt kā Intiẓām (Sanitation and Solid Waste Management)	C 5
6	M22.حیاتیاتی طبی اور برقی فضلات کا انتظام Ḥayātiyātī Ṭibbī avr Barqī Fuḍlāt kā Intiẓām (Biomedical and E-Waste Management)	C 6
Paper No : 4 صحت عامہ کی خدمات کا نظام اور منصوبے Ṣiḥḥat 'Āmma kī Khidmāt kā Niẓām avr Manṣūbe (Public Health Care System and Policies)		
A S.No	B Module number and Name	C MGP

7	M29.قومی صحت کے لائحۂ اعمال اور صحتی نگہداشت کے قوانین Qawmī Ṣiḥḥat ke Lā'iḥa'-i-'Amāl avr Ṣiḥḥatī Nighahdāsht ke Qawānīn (National Health Policies and Health Care Legislations)	C 7
8	M30.قومی صحتی منصوبہ جات Qawmī Ṣiḥḥatī Manṣūbajāt (National Health Programmes)	C 8
	Semester Grade point Average (SGPA)	(C1+C2+C3+C4+C5+C6+C7+C8) / Number of modules(8)

Semester No : 6

Paper No : 1 طریقہائے وبائیات ووبائیات امراض سار یہ Tarīqahā'ē Wabā'iyyāt wa Wabā'iyyāt Amrāḍ Sārīya (Epidemiological Methods and Communicable Diseases)

A S.No	B Module number and Name	C MGP
1	M7.امراض سار یہ: امراض بذریعہ حشرات الارض وحیوانات Amrāḍ Sāriyya: Amrāḍ ba-Dhari'a Ḥasharāt al-Arḍ wa Ḥaywānāt (Communicable Diseases: Vector-Borne and Zoonotic Diseases)	C 1
2	M8.اطلاقی علم الوبائیات Iṭlāqī 'Ilm al-Wabā'iyyāt (Applied Epidemiology)	C 2

Paper No : 2 تغذیہ، طرزِ زندگی اور امراض غیر سار یہ Taghdhiya, Ṭarz-i-Zindagī avr Amrāḍ Ghayr Sārīyya (Nutrition, Lifestyle and Non-Communicable Diseases)

A S.No	B Module number and Name	C MGP
3	M15.وبائیت امراض غیر سار یہ Wabā'iyat-i-Amrāḍ Ghayr Sārīya (Epidemiology of Non-Communicable Diseases)	C 3
4	M16.امراض غیر سار یہ کی نخل اور بنیادی نگہداشت Amrāḍ Ghayr Sārīya kī Nakhl avr Bunyādī Nigahdāsht (Screening and Primary Care for Non-Communicable Diseases)	C 4

Paper No : 3 ماحولیاتی صحت، آبادیات اور حرکیات آبادی MAḤAWLIYĀTĪ ṢIḤḤAT, ĀBĀDIYYĀT AVR ḤARAKIYYĀT-I-ĀBĀDĪ (ENVIRONMENTAL HEALTH, DEMOGRAPHY AND POPULATION DYNAMICS)

A S.No	B Module number and Name	C MGP
5	M23.پیشہ ورانہ صحت اور خطرات Pēshavarāna Ṣiḥḥat avr Khatrāt (Occupational Health and Hazards)	C 5
6	M24.آبادیاتی اور خاندانی منصوبہ بندی کے طریقے Ābādiyyātī avr Khāndānī Manṣūbabandī kē Ṭarīqē (Demography and Family Planning Methods)	C 6
Paper No : 4 صحت عامہ کی خدمات کا نظام اور منصوبے Ṣiḥḥat ‘Āmma kī Khidmāt kā Niẓām avr Manṣūbe (Public Health Care System and Policies)		
A S.No	B Module number and Name	C MGP
7	M31.صحتی تنظیمات Ṣiḥḥatī Tanẓīmāt (Health Organizations)	C 7
8	M32.صحتی بیمہ اور طبی سیاحت Ṣiḥḥatī Bīma avr Ṭibbī Siyāḥat (Health Insurance and Medical Tourism)	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-TST

Sem VI

Time: 3 Hours ,**Maximum Marks:** 100

INSTRUCTIONS: All questions compulsory

		Number of Questions	Marks per question	Total Marks
Q 1	Application-based Questions (ABQ)	1	20	20
Q 2	Short answer questions (SAQ)	8	5	40
Q 3	Analytical based structured Long answer question (LAQ)	4	10	40
				100

6 F : Distribution for summative assessment (University examination)

S.No	List of Module/Unit	ABQ	SAQ	LAQ
Paper No : 1 (طریقہائے وبائیات ووبائیات امراض سار یہ Tarīqahā'y Waba'iyyāt wa Waba'iyyāt Amrāḍ Sāriya (Epidemiological Methods and Communicable Diseases))				
(M-1) اساسیات علم الوبائیات Asāsiyyāt-i-'Ilm al-Waba'iyyāt (Foundations of Epidemiology) (Marks: Range 5-20)				
1	**(U-1)** تاریخ علم الوبائیات Tārīkh-i-'Ilm al-Wabā'iyyāt (History of Epidemiology)	No	Yes	No
2	**(U-2)** علم الوبائیات کے نظریات 'Ilm al-Wabā'iyyāt ke Naẓariyyāt (Epidemiological Concepts)	No	Yes	No
3	**(U-3)** علم الوبائیات میں پیمائش کے آلات 'Ilm al-Wabā'iyyāt mein Paymā'ish ke Ālāt (Tools of Measurement in Epidemiology)	No	Yes	Yes
4	**(U-4)** صحت عامہ میں علم الوبائیات کے استعمالات Ṣiḥḥat-i 'Āmma mein 'Ilm al-Wabā'iyyāt ke Isti'mālāt (Applications of Epidemiology in Public Health)	Yes	Yes	Yes
(M-2) علم الوبائیات میں تصامیم مطالعہ 'Ilm al-Wabā'iyyāt mein Taṣāmīm-i Muṭāla'a (Epidemiological Study Designs) (Marks: Range 5-20)				
1	**(U-1)** توصیفی مطالعات Tawṣīfī Muṭāla'āt (Descriptive Studies)	Yes	Yes	Yes
2	**(U-2)** تجزیاتی مطالعات Tajziyyātī Muṭāla'āt (Analytical Studies)	Yes	Yes	Yes
3	**(U-3)** تجربی مطالعات Tajrībī (Experimental Studies)	Yes	Yes	Yes
(M-3) علم الوبائیات میں پیمائشیں 'Ilm al-Wabā'iyyāt mein Paymā'ishein (Measures of Epidemiology) (Marks: Range 5-20)				
1	**(U-1)** اموات وامراض کی پیمائشیں Amwāt wa Amrāḍ kī Paymā'ishein (Measures of Mortality and Morbidity)	Yes	Yes	Yes
2	**(U-2)** مُشارَکہ کی پیمائشیں Mushārakah kī Paymā'ishein (Measures of Association)	Yes	Yes	Yes
3	**(U-3)** تاثیر کی پیمائشیں Ta'thīr kī Paymā'ishein (Measures of Impact)	Yes	Yes	Yes
(M-4) علم الوبائیات میں مشارکہ وسببیّت 'Ilm al-Wabā'iyyāt mein Mushāraka wa Sababiyyat (Association and Causation in Epidemiology) (Marks: Range 5-20)				

1	**(U-1)** علم الوبائیات میں مشارکہ Ilm al-Wabā'iyyāt mēn̲ Mushāraka (Association in Epidemiology)	Yes	Yes	Yes
2	**(U-2)** علم الوبائیات میں سببیّت Ilm al-Wabā'iyyāt mēn̲ Sababiyyat (Causation in Epidemiology)	Yes	Yes	Yes
(M-5) علم الوبائیات برائے امراض متعدی Ilm al-Wabā'iyyāt barā'e Amrāḍ Muta'add ī (Infectious Disease Epidemiology) (Marks: Range 5-20)				
1	**(U-1)** انتقال مرض کی حرکیات Intiqāl-i-Maraḍ kī Ḥarakiyyāt (Dynamics of Disease Transmission)	Yes	Yes	Yes
2	**(U-2)** قوت مدافعت اور مدافعتی عوامل Quwwat-i-Mudāfi'at avr Mudāfi'atī 'Awāmil (Immunity and Immunizing Agents)	Yes	Yes	Yes
3	**(U-3)** تحفظ و تحدید مرض Taḥaffuẓ wa Taḥdīd-i-Maraḍ (Disease Prevention and Control)	Yes	Yes	Yes
(M-6) امراض ساریہ: امراض ہوائی و آبی Amrāḍ Sāriya: Amrāḍ Hawā'ī wa Ābī (Communicable Diseases: Airborne and Waterborne Diseases) (Marks: Range 5-20)				
1	**(U-1)** امراض ہوائی Amrāḍ Hawā'ī (Airborne Diseases)	Yes	Yes	Yes
2	**(U-2)** امراض آبی Amrāḍ Ābī (Waterborne Diseases)	Yes	Yes	Yes
(M-7) امراض ساریہ: امراض بذریعہ حشرات الارض و حیوانات Amrāḍ Sāriyya: Amrāḍ ba-Dhari'a Ḥasharāt al-Arḍ wa Ḥaywānāt (Communicable Diseases: Vector-Borne and Zoonotic Diseases) (Marks: Range 5-20)				
1	**(U-1)** امراض بذریعہ حشرات الارض Amrāḍ ba-Dhari'a Ḥasharāt al-Arḍ (Vector borne Diseases)	Yes	Yes	Yes
2	**(U-2)** امراض بذریعہ حیوانات Amrāḍ ba-Dhari'a Ḥaywānāt (Zoonotic Diseases)	No	Yes	Yes
(M-8) اطلاقی علم الوبائیات Iṭlāqī 'Ilm al-Wabā'iyyāt (Applied Epidemiology) (Marks: Range 5-20)				
1	**(U-1)** افشاء وباء کی تفتیش اور ردعمل Afshā'-i-Wabā' kī Taftīsh avr Radd-i-'Amal (Outbreak Investigation and Response)	Yes	Yes	Yes
2	**(U-2)** نظامہائے نگرانی Niẓāmhā'e Nigrānī (Surveillance Systems)	Yes	Yes	Yes
S.No	**List of Module/Unit**	**ABQ**	**SAQ**	**LAQ**

Paper No : 2 (تغذیہ، طرزِ زندگی اور امراض غیر سار یہ Taghdhiya, Ṭarz-i-Zindagī avr Amrāḍ Ghayr Sārīyya (Nutrition, Lifestyle and Non-Communicable Diseases))				
(M-9) اصول تغذیہ و غذائی ضروریات Usṭūl-i-Taghdhiya wa Ghidhāʾī Ḍarūrīyyāt (Principles of Nutrition and Nutritional Requirements) (Marks: Range 5-20)				
1	**(U-1)** تغذیہ کے بنیادی نظریات Taghdhiya kē Bunyādī Naẓarīyyāt (Core Concepts in Nutrition)	Yes	Yes	Yes
2	**(U-2)** متوازن غذا اور غذائی ضرورت Mutawāzin Ghidhāʾ avr Ghidhāʾī Ḍarūrat (Balanced Diet and Nutritional Needs)	No	Yes	Yes
(M-10) غذائی تجزیہ و تغذیہ برائے صحت عامہ Ghidhāʾī Tajzīyya wa Taghdhiya barāʾē Ṣiḥḥat ʻĀmma (Nutritional Assessment and Public Health Nutrition) (Marks: Range 5-20)				
1	**(U-1)** غذائی احوال کا تجزیہ Ghidhāʾī Aḥwāl kā Tajzīyya (Assessment of Nutritional Status)	Yes	Yes	Yes
2	**(U-2)** تغذیہ برائے صحت عامہ Taghdhiya barāʾē Ṣiḥḥat ʻĀmma (Public Health Nutrition)	Yes	Yes	Yes
(M-11) اطلاقی تغذیہ برائے صحت و مرض Iṭlāqī Taghdhiyya barāʾē Ṣiḥḥat-o-Maraḍ (Applied Nutrition in Health and Disease) (Marks: Range 5-20)				
1	**(U-1)** تغذیہ برائے افزائش صحت Taghdhiyya barāʾē Ifzāʾish-i-Ṣiḥḥat (Nutrition for Health Promotion)	Yes	Yes	Yes
2	**(U-2)** تغذیہ برائے مداوات امراض Taghdhiya barāʾē Madāwāt-i-Amrāḍ (Nutrition for Disease Management)	Yes	Yes	Yes
(M-12) امراض بذریعہ غذائی آلودگی و غذائی حفظان صحت Amrāḍ ba Dhariʻa Ghidhāʾī Ālūdgī wa Ghidhāʾī Ḥifẓān-i-Ṣiḥḥat (Foodborne Diseases and Food Hygiene) (Marks: Range 5-20)				
1	**(U-1)** تسمم غذائی Tasammum Ghidhāʾī (Foodborne Intoxications)	No	Yes	Yes
2	**(U-2)** تعدیہ بذریعہ غذائی آلودگی Taʻdiyya ba Dhariʻa Ghidhāʾī Ālūdgī (Foodborne Infections)	Yes	Yes	Yes
(M-13) غذائی تحصین و غذائی سلامتی کے معیارات Ghidhāʾī Taḥṣīn wa Ghidhāʾī Salāmatī kē Miʻyārāt (Food Fortification and Food Safety Standards) (Marks: Range 5-15)				

1	**(U-1)** غذائی تحصین وصحت عامہ Ghidhā'ī Taḥṣīn wa Ṣiḥḥat 'Āmma (Food Fortification and Public Health)	No	Yes	Yes
2	**(U-2)** غذائی سلامتی اور اس کے معیارات Ghidhā'ī Salāmatī avr us kē Mi'yārāt (Food Safety and Standards)	No	Yes	Yes
(M-14) طرز زندگی سے پیدا ہونے والے امراض کا تعارف Ṭarz-i-Zindagī sē Paydā honē vālē Amrāḍ kā Ta'āruf (Introduction to Lifestyle Disorders) (Marks: Range 5-15)				
1	**(U-1)** عوامل طرز زندگی وامراض غیر سار یہ Awāmil-i-Ṭarz-i-Zindagī wa Amrāḍ Ghayr Sārīya (Lifestyle Factors and Non-Communicable Diseases)	No	Yes	Yes
2	**(U-2)** امراض غیر سار یہ کا یونانی طبی نقطۂ نظر Amrāḍ Ghayr Sārīya kā Ūnānī Ṭibbī Nuqta Naẓar (Unani Medicine Approach to Non-Communicable Diseases)	No	Yes	Yes
(M-15) وبائیت امراض غیر سار یہ Wabā'iyat-i-Amrāḍ Ghayr Sārīya (Epidemiology of Non-Communicable Diseases) (Marks: Range 5-20)				
1	**(U-1)** وبائیت امراض قلب ودوران خون وسکتہ Wabā'iyat-i-Amrāḍ-i-Qalb-o-Dawrān-i-Khūn wa Sakta (Epidemiology of Cardiovascular Diseases and Stroke)	Yes	Yes	Yes
2	**(U-2)** وبائیت ذیابیطس وسمن مفرط Wabā'iyat-i-Dhayābīṭus wa Siman Mufriṭ (Epidemiology of Diabetes and Obesity)	Yes	Yes	Yes
3	**(U-3)** وبائیت سرطان Wabā'iyat-i-Saṛtān (Epidemiology of Cancers)	Yes	Yes	Yes
(M-16) امراض غیر سار یہ کی نخل اور بنیادی نگہداشت Amrāḍ Ghayr Sārīya kī Nakhl avr Bunyādī Nigahdāsht (Screening and Primary Care for Non-Communicable Diseases) (Marks: Range 5-20)				
1	**(U-1)** نظریۂ نخل Naẓariya'-i-Nakhl (Concept of Screening)	Yes	Yes	Yes
2	**(U-2)** امراض غیر سار یہ میں بنیادی صحت کی نگہداشت کے مناہج Amrāḍ Ghayr Sārīya mēn Bunyādī Ṣiḥḥat kī Nigahdāsht kē Manāhij (Primary Healthcare Approach to NCDs)	Yes	Yes	Yes
S.No	**List of Module/Unit**	**ABQ**	**SAQ**	**LAQ**
Paper No : 3 (ماحولیاتی صحت، آبادیات اور حرکیات آبادی MAḤAWLIYĀTĪ ṢIḤḤAT, ĀBĀDIYYĀT AVR ḤARAKIYYĀT-I-ĀBĀDĪ (ENVIRONMENTAL HEALTH, DEMOGRAPHY AND POPULATION DYNAMICS))				

(M-17) Ṭabī'ī Maḥawl (Physical Environment) (Marks: Range 5-20)				
1	**(U-1)** Maḥawliyātī Ṣiḥḥat kī Asāsiyāt (Foundations of Environmental Health)	No	Yes	Yes
2	**(U-2)** Khūbi'-i-Āb wa Ṣiḥḥat (Water Quality and Health)	Yes	Yes	Yes
3	**(U-3)** Khūbi'-i-Hawā' wa Ṣiḥḥat (Air Quality and Health)	Yes	Yes	Yes
(M-18) Samājī Maḥawl (Social Environment) (Marks: Range 5-15)				
1	**(U-1)** Ṣiḥḥat ke Samājī 'Awāmil (Social Determinants of Health)	No	Yes	Yes
2	**(U-2)** Ṣiḥḥat avr Masākin (Housing and Health)	No	Yes	Yes
(M-19) Ḥayātiyātī Maḥawl (Biological Environment) (Marks: Range 5-20)				
1	**(U-1)** Mafṣalīyyāt/Hasharāt se Paydā hone wale Amrāḍ kā Jā'iza (Overview of Arthropods/Insects-Borne Diseases)	No	Yes	Yes
2	**(U-2)** Ahamm Mafṣalīyyāt/Hasharāt avr un kā Insidād (Key Arthropods/Insects and their Control)	No	Yes	Yes
3	**(U-3)** Qāriḍ (Chūhā) avr Hasharāt Kush Adwiya (Rodents and Insecticides)	Yes	Yes	Yes
(M-20) Ṣiḥḥat par Mavsamiyyātī Tabdīlī ke Atharāt avr Āfāt kā Naẓm-o-Nasq (Impacts of Climate Change on Health and Disaster Management) (Marks: Range 5-20)				
1	**(U-1)** Mavsamiyyātī Tabdīlī avr us ke Insānī Ṣiḥḥat par Atharāt (Climate Change and its Effects on Human Health)	Yes	Yes	Yes
2	**(U-2)** Āfāt kā Naẓm-o-Nasq avr Ṣiḥḥatī Iqdāmāt (Radd-i-'Amal) (Disaster Management and Health Response)	Yes	Yes	Yes
(M-21) Safā'ī avr Thos Fuḍlāt kā Intiẓām (Sanitation and Solid Waste Management) (Marks: Range 5-20)				

1	**(U-1)** صفائی کے معمولات اور صحت عامہ Safā'ī kē Ma'mulāt avr Ṣiḥḥat 'Āmma (Sanitation Practices and Public Health)	Yes	Yes	Yes
2	**(U-2)** ٹھوس فضلات کا انتظام Thos Fuḍlāt kā Intiẓām (Solid Waste Management)	Yes	Yes	Yes
(M-22) حیاتیاتی طبی اور برقی فضلات کا انتظام Ḥayātiyatī Ṭibbī avr Barqī Fuḍlāt kā Intiẓām (Biomedical and E-Waste Management) (Marks: Range 5-20)				
1	**(U-1)** حیاتیاتی طبی فضلات کا انتظام Ḥayātiyatī Ṭibbī Fuḍlāt kā Intiẓām (Biomedical Waste Management)	Yes	Yes	Yes
2	**(U-2)** برقی فضلات کا انتظام Barqī Fuḍlāt kā Intiẓām (E-Waste Management)	Yes	Yes	Yes
(M-23) پیشہ ورانہ صحت اور خطرات Pēshavarāna Ṣiḥḥat avr Khatrāt (Occupational Health and Hazards) (Marks: Range 5-20)				
1	**(U-1)** پیشہ ورانہ صحت کی بنیادیں Pēshavarāna Ṣiḥḥat kī Bunyādēn (Foundations of Occupational Health)	No	Yes	Yes
2	**(U-2)** پیشہ ورانہ امراض اور صحت کے تحفظ کی حکمت عملی Pēshavarāna Amrāḍ avr Ṣiḥḥat kē Taḥaffuẓ kī Ḥikmat 'Amalī (Occupational Diseases and Health Protection Strategies)	Yes	Yes	Yes
(M-24) آبادیاتی اور خاندانی منصوبہ بندی کے طریقے Ābādiyyatī avr Khāndānī Manṣūbabandī kē Ṭarīqē (Demography and Family Planning Methods) (Marks: Range 5-20)				
1	**(U-1)** آبادیاتی Ābādiyyatī (Demography)	Yes	Yes	Yes
2	**(U-2)** خاندانی منصوبہ بندی Khāndānī Manṣūbabandī (Family Planning)	No	Yes	Yes
3	**(U-3)** مانع حمل طریقے Māni'-i-Ḥamal Ṭarīqē (Contraceptive Methods)	No	Yes	Yes
S.No	**List of Module/Unit**	**ABQ**	**SAQ**	**LAQ**
Paper No : 4 (صحت عامہ کی خدمات کا نظام اور منصوبے Ṣiḥḥat 'Āmma kī Khidmāt kā Niẓām avr Manṣūbe (Public Health Care System and Policies))				
(M-25) معاشرتی صحت اور صحتی خدمات کا نظام Mu'āsharatī Ṣiḥḥat avr Ṣiḥḥatī Ḵẖidmāt kā Niẓām (Health Care of Community and Health Care System) (Marks: Range 5-20)				
1	**(U-1)** معاشرتی صحتی نگہداشت Mu'āsharatī Ṣiḥḥatī Nighahdāsht (Community Health Care)	No	Yes	Yes

2	**(U-2)** صحتی نگہداشت کی فراہمی کا نمونہ Ṣiḥḥatī Nighahdāsht kī Farāhamī kā Namūna (Health Care Delivery Services)	Yes	Yes	Yes
(M-26) صحتی منصوبہ بندی وانتظام Ṣiḥḥatī Manṣūba Bandī wa Intiẓām (Health Planning and Management) (Marks: Range 5-20)				
1	**(U-1)** صحتی منصوبہ بندی وانتظام کی اساسیات Ṣiḥḥatī Manṣūba Bandī wa Intiẓām kī Asāsiyyāt (Foundations of Health Planning and Management)	No	Yes	Yes
2	**(U-2)** بھارت میں صحتی منصوبہ بندی کا ڈھانچہ Bhārat mēn̲ Ṣiḥḥatī Manṣūba Bandī kā Dhān̲cha (Health Planning Framework in India)	No	Yes	Yes
(M-27) صحتی تعلیمات اور ترسیلات Ṣiḥḥatī Ta'līmāt avr Tarsīlāt (Health Education and Communication) (Marks: Range 5-20)				
1	**(U-1)** صحتی تعلیمات کے اصول ومعمولات Ṣiḥḥatī Ta'līmāt ke Uṣūl-o-Ma'mūlāt (Principles and Practices of Health Education)	No	Yes	Yes
2	**(U-2)** صحتی ترسیلات کے لوازم Ṣiḥḥatī Tarsīlāt ke Lawāzim (Essentials of Health Communication)	Yes	Yes	Yes
(M-28) اطلاعیات برائے صحت عامہ Iṭṭilā'īyyāt barā'e Ṣiḥḥat 'Āmma (Public Health Informatics) (Marks: Range 5-20)				
1	**(U-1)** اطلاعیات صحت کے بنیادی اصول Iṭṭilā'īyyāt-i-Ṣiḥḥat ke Bunyādī Uṣūl (Fundamentals of Health Informatics)	No	Yes	Yes
2	**(U-2)** صحت عامہ کے عملی اقدامات میں صحتی اطلاعیات Ṣiḥḥat 'Āmma ke 'Amalī Iqdāmāt mēn̲ Ṣiḥḥatī Iṭṭilā'iyyāt (Health Informatics in Public Health Practice)	Yes	Yes	Yes
(M-29) قومی صحت کے لائحۂ اعمال اور صحتی نگہداشت کے قوانین Qawmī Ṣiḥḥat ke Lā'iḥa'-i-'Amāl avr Ṣiḥḥatī Nighahdāsht ke Qawānīn (National Health Policies and Health Care Legislations) (Marks: Range 5-15)				
1	**(U-1)** بھارت میں صحت عامہ کے قوانین Bhārat mēn̲ Ṣiḥḥat 'Āmma ke Qawānīn (Public Health Legislation in India)	No	Yes	Yes
2	**(U-2)** قومی صحتی لائحۂ اعمال Qawmī Ṣiḥḥatī Lā'iḥa'-i-'Amal (National Health Policies)	No	Yes	Yes
(M-30) قومی صحتی منصوبہ جات Qawmī Ṣiḥḥatī Manṣūbajāt (National Health Programmes) (Marks: Range 5-20)				
1	**(U-1)** تحدیدی منصوبے برائے امراض متعدی Taḥdīdī Manṣūbe barā'e Amrāḍ Muta'addī (Communicable Disease Control Programmes)	Yes	Yes	Yes

2	**(U-2)** منصوبہ جات برائے انسداد امراض غیر متعدی Manṣūbajāt barā'e Insidād-i-Amrāḍ Ghayr Muta'addī (Non-Communicable Disease Control Programmes)	Yes	Yes	Yes
3	**(U-3)** منصوبہ جات برائے صحت زچہ و بچہ Manṣūbajāt barā'e Ṣiḥḥat-i-Zachcha-o-Bachcha (Maternal and Child Health Programmes)	Yes	Yes	Yes
4	**(U-4)** قومی تغذیاتی منصوبے Qawmī Taghdhiyyātī Manṣūbey (National Nutrition Programmes)	Yes	Yes	Yes
(M-31) صحتی تنظیمات Ṣiḥḥatī Tanẓīmāt (Health Organizations) (Marks: Range 5-20)				
1	**(U-1)** بین الاقوامی صحتی تنظیمات Bayn al-Aqwāmī Ṣiḥḥatī Tanẓīmāt (International Health Organizations)	No	Yes	Yes
2	**(U-2)** بھارت میں قومی صحتی تنظیمات Bhārat mēn_Qawmī Ṣiḥḥatī Tanẓīmāt (National Health Organizations in India)	Yes	Yes	Yes
(M-32) صحتی بیمہ اور طبی سیاحت Ṣiḥḥatī Bīma avr Ṭibbī Siyāḥat (Health Insurance and Medical Tourism) (Marks: Range 5-20)				
1	**(U-1)** صحتی بیمہ اور طبی سیاحت کا تعارف Ṣiḥḥatī Bīma avr Ṭibbī Siyāḥat kā Ta'āruf (Introduction to Medical Tourism and Health Insurance)	No	Yes	Yes
2	**(U-2)** ضابطہ جاتی ڈھانچہ اور آیوش شعبے کا انضمام Ḍābiṭajātī Dhāṉcha avr Āyush Shobe kā Inḍimām (Regulatory Framework and Ayush Sector Integration)	Yes	Yes	Yes

6 G : Instruction for the paper setting & Blue Print for Summative assessment (University Examination)

Instructions for the paper setting.

1. University examination shall have 4 papers of 100 marks.

Each 100 marks question paper shall contain:-

• Application Based Question: 1 No (carries 20 marks)

• Short Answer Questions: 8 Nos (each question carries 05 marks)

• Long Answer Questions: 4 Nos (each question carries 10 marks)

2. Questions should be drawn based on the table 6F.

3. Marks assigned for the module in 6F should be considered as the maximum marks. No question shall be asked beyond the maximum marks.

4. Refer table 6F before setting the questions. Questions should not be framed on the particular unit if indicated “NO”.

5. There will be a single application-based question (ABQ) worth 20 marks. No other questions should be asked from the same module where the ABQ is framed.

6. Except the module on which ABQ is framed, at least one Short Answer Question should be framed from each module.

7. Long Answer Question should be analytical based structured questions assessing the higher cognitive ability.

8. Create Blueprint based on instructions 1 to 7.

6 H : Distribution of Practical Exam (University Examination)

S.No	Heads	Marks
1	**Long Case or Case Scenario [1 No.]** **Duration:** 1 hour The scenarios or cases or major practical may be drawn from or based on any of the following modules: • M1: U2, M1:U4 • M2:U1, M2: U2, M2:U3, M2:U4 • M3:U1 • M4:U1, M4: U2, M4:U3, M4:U4 • M8: U2, M8: U3 • M9: U2 • M10: U1 • M11: U1, M11: U2 • M14: U2 • M15: U1, M15: U2, M15: U3 • M16: U2 • M17: U2, M17: U3 • M19: U2 • M20: U1, M20: U2 • M21: U1, M21: U2 • M22: U1, M22: U2 • M23: U2 • M27: U2 • M28: U2 • M30: U1, M30: U2, M30: U3, M30: U4	100
2	**Short case or Case Scenario or Minor Practical [1 No.]** **Duration:** 30 minutes The case, scenarios or practical may be drawn from or based on any of the following modules: • M3:U1, M3:U3	50

	• M5: U2 • M7: U2 • M10: U2 • M12: U2 • M13:U1, M13: U2 • M16: U1 • M18: U2 • M19: U2, M19:U3 • M24:U1, M24: U2, M24:U3 • M25:U1, M25: U2 • M29:U1, M29: U2 • M31:U1, M31: U2	
3	**Spotters [5 Nos.; 5 x 10]** from Module 4, 5, 10. 12. 13. 17. 18. 19, 21, 22, 24 (**Duration:** 30 minutes)	50
4	**Assessment of Teaching Skills**	25
5	**Assessment of Presentation Skills**	25
6	**Viva Voce:** [4 Examiners; 4 x 25]#	100
7	**Logbook**	25
8	**Practical/Clinical Record:** Minimum one practical from each module.	25
Total Marks		**400**

No separate marks for dissertation viva.

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Abbreviations

Domain		T L Method		Level	
CK	Cognitive/Knowledge	L	Lecture	K	Know
CC	Cognitive/Comprehension	L&PPT	Lecture with PowerPoint presentation	KH	Knows how
CAP	Cognitive/Application	L&GD	Lecture & Group Discussion	SH	Shows how
CAN	Cognitive/Analysis	L_VC	Lecture with Video clips	D	Does
CS	Cognitive/Synthesis	REC	Recitation		
CE	Cognitive/Evaluation	SY	Symposium		
PSY-SET	Psychomotor/Set	TUT	Tutorial		
PSY-GUD	Psychomotor/Guided response	DIS	Discussions		
PSY-MEC	Psychomotor/Mechanism	BS	Brainstorming		
PSY-ADT	Psychomotor Adaptation	IBL	Inquiry-Based Learning		
PSY-ORG	Psychomotor/Origination	PBL	Problem-Based Learning		
AFT-REC	Affective/ Receiving	CBL	Case-Based Learning		
AFT-RES	Affective/Responding	PrBL	Project-Based Learning		
AFT-VAL	Affective/Valuing	TBL	Team-Based Learning		
AFT-SET	Affective/Organization	TPW	Team Project Work		
AFT-CHR	Affective/ characterization	FC	Flipped Classroom		
		BL	Blended Learning		
		EDU	Edutainment		
		ML	Mobile Learning		
		ECE	Early Clinical Exposure		
		SIM	Simulation		
		RP	Role Plays		
		SDL	Self-directed learning		
		PSM	Problem-Solving Method		

		KL	Kinaesthetic Learning		
		W	Workshops		
		GBL	Game-Based Learning		
		LS	Library Session		
		PL	Peer Learning		
		RLE	Real-Life Experience		
		PER	Presentations		
		D-M	Demonstration on Model		
		PT	Practical		
		X-Ray	X-ray Identification		
		CD	Case Diagnosis		
		LRI	Lab Report Interpretation		
		DA	Drug Analysis		
		D	Demonstration		
		D-BED	Demonstration Bedside		
		DL	Demonstration Lab		
		DG	Demonstration Garden		
		FV	Field Visit		
		JC	Journal Club		
		Mnt	Mentoring		
		PAL	Peer Assisted Learning		
		C_L	Co Learning		