



LAHORE MEDICAL AND DENTAL COLLEGE, LAHORE

STUDY GUIDE

4th Year MBBS

BLOCK-11

2026

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University of Health Sciences (UHS)



Vision Statement

UHS is a leading University aiming to keep its graduates apt with the ever emerging global health challenges evolving educational methodologies and emerging technological advancements to maintain its distinguishable position as a Medical University.

Mission Statement

UHS shall continue to strive for producing a human resource par at excellence to cater for the health needs of the people of Punjab and Pakistan.

Lahore Medical and Dental College (LMDC)



Mission Statement

To train future leaders of medicine who set new standards in knowledge, care and compass

Introduction to the Study Guide

UHS inaugurated the modular integrated MBBS curriculum 2K23 in 2023 to introduce it for first time to First Year MBBS academic session 2024-2025. As this class moved forward, the curriculum got on new version till we reached 2026 when its final version is at hand and implemented. The 4th Year curriculum contains three block 10, 11 & 12. The study guide for Block -11 is developed to introduce and guide the 4thYear MBBS students to various modules contained in it. The learning Objectives of all the subjects included in Block -11 are highlighted for the students to help them learn and concentrate on important points in all sections.

CURRICULUM FRAMEWORK FOR BLOCK 11

Modules	Title
Module 27	Neurosciences-II
Module 28	Psychiatry & Behavioral Sciences
Module 29	Renal-II
Module 30	ENT & EYE – II
Spiral	PERLS – 4 Expository –4 Portfolio -- 4 C-FRC – 4 (Clinical- Foundation, Rotation, Clerkships)

INTRODUCTION TO BLOCK 11

- Course Name:** Block -11
Year: Year - 04
Level of Students: Fourth Year MBBS
Duration of Block -11: 3rd August 2026 to 29th October 2026
- **Prep Leave:** 30th October to 8th November 2026
 - **Remedial classes:** During prep leaves
 - **Block exam:** 9th to 12th November 2026

BLOCK 11 IMPLEMENTATION TEAM

Block Incharge	Prof. Mian M. Shafique, HOD, Ophthalmology
Block Coordinator/Class Incharge	Dr. Umbreen Navied, Associate Prof. Community Medicine
Timetable Chairperson	Prof. Nighat Nadeem, HOD, DME

DEPARTMENTS RESPONSIBLE FOR IMPLEMENTATION OF BLOCK 11

MAJOR	OTHERS
Neurology	Medicine
Pathology	Surgery
Eye	Pharmacology
ENT	Pediatrics
Behavioral Sciences & Psychiatry	Obstetrics and Gynecology
	Anesthesia
	Radiology
	Urology

SUBJECT LEADS INVOLVED IN BLOCK 11 ACADEMIC ACTIVITIES

Department of Pathology

- Prof. Dr. Shazia Nilofar Ibne Rasa (HOD/Professor)
- Dr. Muhammad Rizwan (Associate Professor)

Department of Ophthalmology

- Prof. Dr. Shafique (HOD/Professor)
- Prof. Muhammad Khalil (Professor)
- Dr. Mohammad Moeen Bhatti (Associate Professor)

Department of ENT

- Prof. Dr. Athar (HOD/Professor)
- Dr. Saira Zaman (Associate Professor)

Department of Pharmacology

- Prof. Dr. Ajaz Fatima (HOD/Professor)
- Prof. Dr. Shazia Asim (Professor)
- Dr. Asia Firdous (Associate Professor)
- Dr. Quratulain Mehdi (Assistant Professor)
- Dr. Ovais Qarni (Senior Lecturer)

Department of Medicine

- Prof. Dr. Shamaail Zafar (HOD/Professor)
- Prof. Dr. Sarah Shoaib (Professor)

Department of Surgery

- Prof. Dr. Saquib Zahoor (Professor)
- Dr. Sidra Shoaib (Professor)

Department of Psychiatry

- Prof. Dr. Maj. R. Maqbool Ahmad (HOD/Professor)
- Ms. Ramla Zahoor (Senior Clinical Psychologist)

Department of Pediatrics

- Prof. Dr. Rizwan Waseem (HOD/Professor)
- Dr. Waqas Ali (Associate Professor)

Department of Obs & Ghyne

- Prof. Dr. Fozia Amber Qureshi (HOD/Professor)
- Dr. Naila Mairaj (Assistant Professor)

Department of Anesthesia

- Prof. Dr. Leena Aziz (HOD/Professor)

Department of Radiology

- Prof. Dr. Khalid Farooq (HOD/Professor)

Department of Urology

- Dr. Noman Bashir (HOD/ Associate Professor)

TEACHING CONTACT HOURS OF BLOCK 11 SUBJECTS

Subject	Module	Lecture No. & Hours	Practical No. & Hours	Ward Hours	Total Hours
Pathology	Module 27 (Neurosciences II) Module 28 (Psych & Behavioural Sciences) Module 29 (Renal-II) Module 30 Eye & ENT	44lec 33 hours	16.5 hours		50
Pharmacology	Module 27 (Neurosciences II) Module 28 (Psych & Behavioural Sciences) Module 29 (Renal-II) Module 30 Eye & ENT	22 Lec 16.5 hour 3lec 2.25 hour	Tutorial 1.25 hour	-	20
Psychiatry/ Behavioral Sciences	Module 28 (Psych & Behavioural Sciences)	BS 12 h + Psy 28 h	-	-	40
Medicine (Neurology, Nephrology)	Module 27 (Neurosciences II) Module 29 (Renal-II)	14 10			18
Surgery (Urology, Pediatric Surgery)	Module 27 (Neurosciences II) Module 29 (Renal-II)	Surg 6 Lec Uro 12 Lec			14
Radiology	Module 27 (Neurosciences II)	4			3
Anesthesia	Module 27 (Neurosciences II)	4			3
ENT (Integrate with Forensic & Pathology)	Module 30 Eye & ENT	26		34	60
EYE (Integrate with Pharmacology)	Module 30 Eye & ENT	26		34	60

TEACHING & LEARNING METHODOLOGIES

1. Interactive Lectures
2. Small Group Discussions (Tutorials Sessions) & SDL
3. Tests (MCQ's)
4. Clinico- Pathological Conference
5. Skill Laboratories
6. Laboratory Practical
7. Field Visits
8. Quiz

READING MATERIAL

1. Textbooks
2. Handouts
3. E. Books
4. Lecture Notes (Power Point)

ADDITIONAL LEARNING RESOURCES

1. Clinica Ward Works
2. Free Eye, ENT and Medical Camps
3. Research Work
4. Workshops
5. Seminars
6. Quiz

TEXTBOOKS

Pathology:

1. Pathological Basis of Disease by Kumar, Cortan and Robbins, 10th Ed., W.B. Saunders.
2. Basic Pathology by Cotran & Kumar 11th edition (Medium Robbins)
3. Review of Medical Microbiology and Immunology by Lewinson
4. Medical Microbiology and Immunology by Levinson and Jawetz 9th Ed., Mc Graw-Hill.
5. Medical Genetics by Jorde, 3rd Ed., Mosby.

Pharmacology:

1. Goodman & Gilman's - The Pharmacological Basis of Therapeutics
2. Basic & Clinical Pharmacology by Bertram G, Katzung
3. Clinical Pharmacology by DR Lawrence, PN Bennett & MJ Brown
4. Essentials of Medical Pharmacology by K.D. Tripathi
5. Lippincott Illustrated Review Pharmacology

Surgery:

1. Bailey & Love's short practice of surgery

Medicine:

1. Davidson's Principles and Practice of Medicine – 24th ed – Elsevier – 2022
2. Kumar & Clark's Clinical Medicine – Parveen Kumar & Michael Clark – 9th ed – Elsevier – 2017
3. ABC of Dermatology – 7th ed – Wiley-Blackwell – 2021 (Dermatology)
4. Clinical Skills
 - i. Hutchison's Clinical Methods: An Integrated Approach to Clinical Practice – 24th ed – Elsevier – 2022
 - ii. MacLeod's Clinical Examination – 15th ed – Elsevier – 2023

Ophthalmology:

1. Kanski's Clinical Ophthalmology: A Systematic Approach – John F. Salmon – 10th ed – Elsevier
2. Parsons' Diseases of the Eye – Ramanjit Sihota & Radhika Tandon – 24th ed – Elsevier

ENT:

1. Diseases of Ear, Nose & Throat – P.L. Dhingra – 8th ed
2. Hall & Colman's Diseases of the Ear, Nose and Throat – 15th ed
3. Logan Turner's Diseases of Nose, Throat and Ear – 11th ed

Pediatrics:

1. Nelson Textbook of Pediatrics – Robert M. Kliegman & Joseph W. St. Geme III – 22nd ed – Elsevier
2. Basis of Pediatrics – Pervez Akbar Khan – 11th ed

MODULES AIMS AND OUTCOME OBJECTIVES

MODULE 27

NEUROSCIENCES-II

Rationale:

Building upon the foundational understanding developed in Neurosciences Module I (covered in Block 6), which focused on the basic sciences of CNS, Neurosciences Module II extends this knowledge toward clinical application. This module emphasizes neurology, pharmacology, pathology, and the clinical aspects of neurological disorders, enabling students to connect underlying mechanisms with clinical presentation and management. By integrating basic concepts with pharmacological and therapeutic approaches, the module promotes deeper comprehension of disease processes, rational drug use, and patient-centred care. It also encourages the development of clinical reasoning and critical thinking by linking structure, function, and dysfunction within the nervous system. Overall, Neurosciences Module II serves as a bridge between foundational sciences and clinical practice, ensuring vertical and horizontal integration across disciplines while preparing students for future clinical rotations and decision-making in neurological care.

Outcomes

1. Explain the pathophysiological basis of common neurological disorders by linking structural and functional alterations in the nervous system to clinical manifestations.
2. Describe the pharmacological basis of drugs used in neurological conditions, including their mechanisms of action, therapeutic uses, adverse effects, and rational prescribing principles.
3. Integrate knowledge of basic neuroscience with clinical decision-making to interpret signs, symptoms, and investigations relevant to neurological diseases.
Discuss the principles of multidisciplinary management in neurological disorders, incorporating pharmacological, rehabilitative, and preventive perspectives.
4. Counsel patients with neurological diseases with empathy demonstrating effective communication skills.

Subjects Integrated in the Module

1. Neurology
2. Pathology
3. Pharmacology
4. General Medicine
5. Paediatric Surgery/ Neurosurgery

MODULE 28

PSYCHIATRY & BEHAVIORAL SCIENCES

Rationale

The Psychiatry & Behavioural Sciences module equips medical students with a holistic understanding of health and illness by integrating psychological, social, cultural, and biological perspectives. It emphasizes the Bio-Psycho-Social model, communication skills, stress management, personality, coping mechanisms, ethics, professionalism, and the doctor-patient relationship to foster empathy and compassionate practice. Building on this foundation, students are introduced to the principles of psychiatry, gaining structured knowledge of common mental disorders including organic conditions, substance use, psychotic, mood, anxiety, trauma-related, developmental, and personality disorders along with their clinical presentation, diagnosis, and evidence-based management. Focus on pharmacological and non-pharmacological interventions ensures students develop the competence to provide comprehensive, patient-centered, and ethical care in healthcare settings.

Outcomes

1. Apply the Bio-Psycho-Social model in assessing health and illness.
2. Demonstrate effective communication, empathy, and professionalism during patient interactions.
3. Analyze the influence of stress, personality, coping mechanisms, culture, and social factors on patient behaviour and treatment outcomes.
4. Adhere to ethical principles, confidentiality, and cultural sensitivity in clinical practice.
5. Describe the etiology, clinical features, and management of common psychiatric disorders and emergencies.
6. Perform a psychiatric history and mental state examination.
7. Formulate management plans for psychiatric conditions using both pharmacological and non-pharmacological approaches.
8. Collaborate with interdisciplinary teams to ensure comprehensive patient management.

Subjects Integrated in the Module

1. Psychiatry
2. Behavioral Sciences
3. Pharmacology
4. Gynecology & Obstetrics
5. Community Medicine

MODULE 29

RENAL - II

Rationale

The Renal II module builds upon the foundational knowledge acquired in Renal I, which focused on the basic sciences of the renal system, including anatomy, physiology, and biochemistry. In this second phase, students will integrate and apply that foundational understanding to clinical contexts. The module emphasizes the recognition and interpretation of signs and symptoms of renal diseases, understanding their underlying pathophysiological mechanisms, and exploring diagnostic approaches and management principles. Through an integrated approach involving pathology, nephrology, radiology, and urology perspectives, students will develop a holistic understanding of renal disorders.

Outcomes

1. Explain the pathophysiological mechanisms underlying common renal and urinary tract disorders.
2. Correlate clinical features with the underlying renal pathology.
3. Interpret relevant laboratory investigations and imaging findings to support diagnosis of renal and urinary diseases.
4. Outline the basic principles of management and prevention of common renal conditions from nephrology and urology perspectives.
5. Demonstrate essential clinical skills, including history taking, physical examination, and procedural observation related to renal disorders.
6. Counsel patients and their families with empathy regarding disease understanding, lifestyle modification, and adherence to treatment plans.

Subjects Integrated in the Module

1. Pathology
2. Pharmacology
3. Nephrology
4. Urology

MODULE 30

ENT & EYE – II

ENT – II

Rationale

The inclusion of module related to otorhinolaryngology in the undergraduate medical curriculum is imperative to ensure that future physicians acquire the essential knowledge and skills to diagnose and manage both common and potentially serious otorhinolaryngological conditions. Such training not only contributes to improved patient care but also alleviates the burden on specialized ENT (ear, nose, throat) services, thereby enhancing overall healthcare delivery and efficiency. The objective of this module is to outline the essential knowledge, skills, attitudes, and competencies in otorhinolaryngology that must be attained during undergraduate medical training.

Outcomes

1. Explain the pathophysiology and clinical features of common ear, nose, and throat disorders.
2. Identify and diagnose prevalent otorhinolaryngological conditions through history-taking and clinical evaluation.
3. Perform basic otorhinolaryngological examination techniques competently.
4. Initiate appropriate first-line management for common ENT conditions and determine indications for timely referral to specialist care.
5. Recognize and provide initial stabilization for otorhinolaryngological emergencies such as airway obstruction and severe epistaxis, followed by appropriate referral.
6. Communicate effectively with patients regarding ENT conditions, management options, and preventive strategies, ensuring clarity and patient-centered care.
7. Demonstrate professionalism, ethical conduct, and a respectful attitude in the care of patients with otorhinolaryngological conditions

Subjects Integrated in the Module

1. Anatomy
2. Physiology
3. Pharmacology
4. Forensic Medicine

EYE– II

Rationale

Ophthalmology is a vital medical specialty dedicated to the diagnosis, treatment, and prevention of eye diseases. It is essential for medical students to have a thorough understanding of the eye's basic anatomy, physiology, and pathology in order to manage common ocular conditions effectively. This module aims to equip medical students with the knowledge and clinical skills necessary to identify and manage a wide range of ophthalmic conditions frequently encountered in general practice and emergency settings.

Outcomes

1. Identify common ophthalmic diseases and disorders encountered in OPD, IPD, multi-disciplinary and emergency settings.
2. Apply fundamental clinical skills in the examination of the eye and adnexa, including visual acuity assessment and basic use of ophthalmic instruments.
3. Formulate differential diagnosis and initial management plans for common ophthalmic conditions, including appropriate referral when necessary.
4. Integrate knowledge of ophthalmic health into the broader context of systemic diseases and public health considerations.

Subjects Integrated in the Module

1. Medicine
2. Pharmacology
3. Forensic Medicine
4. Rheumatology

LEARNING OBJECTIVES

MODULE 27

NEUROSCIENCES-II

THEORY

CODE	SPECIFIC LEARNING OUTCOMES	INTEGRATING DISCIPLINE	TOPIC
NS2-Pa-001	Explain the etiology and pathophysiological mechanisms of acute viral, lymphocytic, and purulent meningitis. Describe the etiology, pathogenesis, and clinical implications of a brain abscess. Discuss the causative factors and pathophysiology of chronic meningitis. Explain the pathogenesis and complications of tuberculous meningitis. Explain the etiology, transmission, and neuropathological changes associated with viral encephalitis.	Pathology/ Microbiology	CNS Infections
NS2-Neu-002	Identify signs and symptoms of meningitis. Enlist the diagnostic approach. Outline medical management plan. Identify the potential complications.	Neurology/ Medicine	Meningitis
NS2-Neu-003	List the common viral and non-viral causes of encephalitis. Identify the typical clinical presentation. Outline the diagnostic workup. Plan the management strategies Identify short- and long-term complications.	Neurology/ Medicine	Encephalitis
NS2-Neu-004	Define ischemic stroke. Diagnose ischemic stroke based on clinical presentation. Enlist investigations to determine the cause. Describe management including emergency intervention and prevention of ischemic stroke.	Neurology/ Medicine	Ischemic stroke
NS2-Neu-005	Define subarachnoid and intracerebral hemorrhage. Enlist causes and predisposing factors.	Neurology/ Medicine	Subarachnoid and intracerebral hemorrhage

	Identify key clinical manifestations and possible complications. Outline essential investigations with management and preventive measures.		
NS2-PS-003	Define neural tube defects and hydrocephalus. Classify types. Identify risk factors and clinical features. Outline management plan with early referral.	Pediatric Surgery	Hydrocephalus and spinal malformations
NS2-Neu-004	Define epilepsy. Describe clinical presentations of seizures. Enlist different investigative modalities for diagnosis of epilepsy. Outline the management plan.	Neurology	Epilepsy
NS2-Ph-005	Classify Anti-epileptics. Describe their mechanism of action, uses, adverse effects, drug interactions and contraindications. Enlist differences between sodium Valproate, Phenytoin, Carbamazepine, Gabapentin, Lamotrigine and Ethosuximide. Discuss role of antiseizure and benzodiazepines in essential tremors.	Pharmacology	Anti-epileptics
NS2-Pa-006	Classify central nervous system (CNS) tumors based on the WHO classification. Describe the genetic mutations, pathogenesis, morphology, and clinical manifestations of major primary brain tumors, including gliomas, ependymomas, medulloblastomas, and meningiomas. Discuss the pathogenesis, common primary sites, and clinical features of metastatic brain tumors.	Pathology	CNS tumors
NS2-Pa-007	Define and enlist the major types of neurodegenerative disorders affecting the central nervous system.	Pathology	Neurodegenerative diseases

	Explain the role of abnormal protein aggregation in the pathogenesis of neurodegenerative diseases. Describe the molecular genetics, pathogenic mechanisms, and morphological changes associated with Alzheimer's disease. Identify the clinical features and diagnostic criteria of Alzheimer's disease. Explain the molecular genetics and pathogenesis of Parkinson's disease. Describe the key morphological findings, clinical manifestations, and diagnostic criteria of Parkinson's disease.		
NS2-Neu-008	Describe the etiology and risk factors associated with Alzheimer's disease. Identify the key clinical features and stages of cognitive and behavioral decline. Differentiate Alzheimer's disease from other causes of dementia. Outline the diagnostic approach. Discuss the management strategies. Identify the common complications and their impact on patient quality of life and caregiver burden.	Neurology/ Medicine	Alzheimer's disease
NS2-Ph-009	Classify the drugs used in the management of Alzheimer's disease and other dementias. Explain the mechanism of action, pharmacological effects, therapeutic uses, and adverse effects of cholinesterase inhibitors. Describe the mechanism of action, clinical role, and side effects of NMDA receptor antagonist (Memantine). Discuss the rationale and benefits of combination therapy (cholinesterase inhibitor + memantine) in moderate to severe Alzheimer's disease.	Pharmacology	Pharmacotherapy of Alzheimer's Disease and Dementia

NS2-Neu-010	Describe the etiology and risk factors of Parkinson's disease. Diagnose Parkinson's disease based on the cardinal motor and non-motor symptoms. Describe the clinical stages of the disease. Differentiate Parkinson's disease from other parkinsonian syndromes. Outline the important investigations. Describe treatment options and complications.	Neurology/ Medicine	Parkinson's disease
NS2-Ph-011	Classify Anti-Parkinson drugs. Explain the mechanism of action, pharmacological effects, therapeutic uses, adverse effects, drug interactions, and contraindications of anti-Parkinsonian agents. Discuss the rationale, advantages, and disadvantages of combining Carbidopa with Levodopa therapy. Describe the On–Off phenomenon, its underlying mechanisms, and management strategies. Explain the etiology, clinical features, and pharmacological management of drug-induced parkinsonism. Outline the pharmacokinetics and therapeutic approaches for drug-induced and other dyskinesias.	Pharmacology	Anti-Parkinson Drugs
NS2-Neu-012	Classify motor neuron diseases. Describe the diagnostic criteria and key clinical features of motor neuron disease. Enlist relevant investigations. Explain supportive and disease-modifying treatment strategies.	Neurology/ Medicine	Motor neuron disease
NS2-Ph-013	Classify drugs used in the management of movement disorders (Parkinsonism, Huntington's disease, dystonias, tremors, and drug-induced dyskinesias).	Pharmacology	Pharmacotherapy of Movement disorders

	Describe the mechanism of action, pharmacological effects, clinical uses, adverse effects, drug interactions, and contraindications of drugs used for hyperkinetic movement disorders. Discuss pharmacological strategies for the management of drug-induced movement disorders, including acute dystonia, akathisia, and parkinsonism. Explain the principles of drug selection, rationale for combination therapy, and the use of newer therapeutic agents in movement disorders.		
NS2-Pa-014	Explain the pathophysiology of inflammatory neuropathies, including Guillain–Barré Syndrome (Acute Inflammatory Demyelinating Polyneuropathy). Describe the clinical features, pathological changes, and disease progression of Guillain–Barré Syndrome. Explain the pathophysiology and morphological changes of poliomyelitis, including anterior horn cell involvement. Describe the pathogenesis, morphological features, and clinical implications of prion diseases.	Pathology	Guillain–Barré Syndrome, poliomyelitis & prion diseases
NS2-Neu-015	Define neuropathy and classify peripheral neuropathies. Identify the clinical features of neuropathies. Explain the functional impact of neuropathies on gait, sensation, and daily activities. Outline the diagnostic approach and management plan.	Neurology/ Medicine	Neuropathies
NS2-Pa-016	Describe the structural and functional differences between Type I and Type II muscle fibers. Explain the pathogenesis, morphological features, and diagnostic criteria of inflammatory myopathies, including dermatomyositis and polymyositis.	Pathology/ Neurology	Myopathies

	Discuss the etiology, pathophysiology, and histopathological characteristics of inherited skeletal muscle diseases, including Duchenne and Becker muscular dystrophies. Correlate pathological findings with clinical presentation and disease progression in the above disorders.		
NS2-Neu-017	Define and classify paraplegia. Differentiate paraplegia from quadriplegia and hemiplegia. Differentiate between upper and lower motor neuron lesions. Identify the key clinical features that help localize the spinal cord lesion. Discuss the management and identify potential complications.	Neurology/ Medicine	Paraplegia
NS2-Neu-018	Describe multiple sclerosis with its types and clinical variants. Explain the etiology, immunopathogenesis, and risk factors associated with multiple sclerosis. Identify the characteristic clinical features. Outline the diagnostic approach. Describe the management strategies.	Neurology/ Medicine	Multiple Sclerosis
NS2-Ph-019	Describe the pharmacological classification of anti-migraine drugs. Explain the mechanism of action of triptans and ergot alkaloids in the management of migraine. Describe the pharmacokinetic properties and clinical uses of different triptans and ergot derivatives. Describe the adverse effects, contraindications, and drug interactions.	Pharmacology	Anti-migraine drugs

NS2-Ph-020	Classify local anesthetic agents based on their chemical structure and duration of action. Explain the mechanism of action, pharmacological effects, and clinical applications of local anesthetics. Compare amide and ester local anesthetics in terms of metabolism, stability, and allergic potential. Describe the rationale, benefits, and risks of adding vasoconstrictors to local anesthetic preparations. Identify commonly used agents for short-, intermediate-, and long-duration procedures, including minor and major peripheral nerve blocks. Discuss the adverse effects, contraindications, and significant drug interactions of local anesthetics.	Pharmacology/ Anesthesia	Local Anesthetics
NS2-Ph-021	Classify general anesthetic agents based on their route of administration and duration of action. Describe the clinical uses, adverse effects, contraindications, and major drug interactions of commonly used general anesthetics. Discuss the principles and agents used for the reversal and recovery from anesthesia.	Pharmacology/A nesthesia	General Anesthetics
NS2-Neu-022	Define coma and unconsciousness. Describe the pathophysiology underlying loss of consciousness. Apply the Glasgow Coma Scale for assessment. Outline the diagnostic approach. Discuss the complications, prognosis, and criteria for brain death determination.	Neurology/ Medicine	Coma and unconsciousness

NEUROSCIENCES-II

PRACTICAL / LAB WORK

CODE	SPECIFIC LEARNING OUTCOMES	INTEGRATING DISCIPLINE	TOPIC
NS2-Pa-008	Interpret CSF reports, including cell count, protein, glucose, and microbiological findings	Pathology	CSF interpretation
NS2-Pa-009	Identify characteristic histopathological features of tuberculous meningitis.	Pathology	Tuberculous meningitis
NS2-Pa-010	Identify the classical characteristic morphological features of meningioma and glioblastoma.	Pathology	CNS tumors
NS2-Ra-001	Interpret ultrasound findings to identify features of hydrocephalus.	Radiology	Neuroimaging: hydrocephalus
NS2-Ra-002	Interpret CT and MRI images to identify intracranial hemorrhage, cerebral infarction, and CNS tumors.	Radiology	Neuroimaging: Stroke and CNS tumors

NEUROSCIENCES-II

C-FRC / CLINICAL ROTATION

Code	Skills/Task
CFRC 4- NS2- 001	History taking Take and document history from patients presenting with stroke, epilepsy, headache/migraine, Parkinson's disease, or meningitis/encephalitis.
CFRC 4- NS2- 002	GCS Level Assess and record the patient's level of consciousness using the Glasgow Coma Scale.
CFRC 4- NS2- 003	Cranial Nerves Examine the function of all 12 cranial nerves.
CFRC 4- NS2- 004	Motor examination Perform a complete motor examination, including assessment of muscle strength, tone, bulk, reflexes, and coordination.
CFRC 4- NS2- 005	Sensory examination Perform sensory examination including touch, pain, temperature, vibration, and proprioception.
CFRC 4- NS2- 006	Cerebellar function tests Examine cerebellar function through coordination tests, balance, and fine motor tasks (e.g., finger-to-nose, heel-to-shin, Romberg test).
CFRC 4- NS2- 007	Gait Patterns Observe and assess different gait patterns (normal, hemiplegic, Parkinsonian, ataxic) and posture abnormalities, and document findings.
CFRC 4- NS2- 008	Deep tendon reflexes Assess deep tendon reflexes, superficial reflexes, and pathological reflexes.
CFRC 4- NS2- 009	Meningeal signs Examine a patient of meningitis for meningeal signs, including neck stiffness, Kernig's sign, and Brudzinski's sign.
CFRC 4-	Higher cortical functions

NS2- 010	Assess higher cortical functions including language, memory, attention, calculation, praxis, and neglect.
CFRC 4- NS2- 011	Lumbar puncture Observe and narrate the steps of lumbar puncture procedure, including patient positioning, landmark identification, needle insertion, and CSF collection with proper handling and labeling with indications, contraindications, potential complications, and precautions for lumbar puncture. (See Annexure I)

MODULE 28

BEHAVIORAL SCIENCES

THEORY

CODE	SPECIFIC LEARNING OUTCOMES	INTEGRATING DISCIPLINE	TOPIC
PsyBhS1-BhS-001	Explain the bio-psycho-social model of health and its application in patient care. Differentiate normalcy versus abnormalcy.	Behavioral Sciences	Bio-psycho-social model of health
PsyBhS1-BhS-002	Describe sensation, perception, attention, and concentration, and explain their relevance in clinical practice. Define memory, describe its stages and types, and suggest methods to improve it. Define thinking and describe its types. Define cognition and describe its levels. Discuss problem-solving and decision-making steps, barriers, and strategies in clinical practice.	Behavioral Sciences	Understanding Behavior
PsyBhS1-BhS-003	Define personality and its types. Explain developmental theories of personality. Explain defense mechanisms. Explain its significance in clinical practice. Define intelligence and describe its types. Explain the relevance of IQ and EQ in a doctor's professional and personal life. Discuss methods to enhance emotional intelligence (EQ) and intellectual intelligence (IQ).	Behavioral Sciences	Individual differences - Personality & Intelligence
PsyBhS1-BhS-004	Elaborate emotions and motivation and explain their influence on health and illness behavior. Apply basic motivational strategies to enhance patient adherence and lifestyle modification.	Behavioral Sciences	Emotions & Motivation
PsyBhS1-BhS-005	Explain the relationship between stress, stressors, and illness. Define coping skills and describe their role in managing stress.	Behavioral Sciences	Stress management

	Explain the concepts of adjustment and maladjustment in response to stress.		
PsyBhS1-BhS-006	Describe the concept of life events and their significance in daily life. Discuss conflict resolution, crisis intervention, and psychological first aid.	Behavioral Sciences	Life events - Psychotrauma
PsyBhS1-BhS-007	Discuss the concepts of transference, counter-transference, and boundaries in the doctor–patient relationship. Describe different models of doctor–patient relationship. Identify ethical dilemmas in doctor-patient relationships (e.g., confidentiality, end-of-life care, pharmaceutical interactions). Explain the rights of doctors and patients and discuss their importance in promoting ethical and safe medical practice.	Behavioral Sciences	Doctor-Patient Relationship
PsyBhS1-BhS-008	Define attitude, values, beliefs, and myths, and explain their influence on behavior. Explain the impact of social class, stigma, and the sick role on health. Describe health belief models and treatment adherence and their relevance to patient care. Describe cultural competence.	Behavioral Sciences	Culture and medical practice
PsyBhS1-BhS-009	Explain the process of grief and its impact on patients and families. Explain psychological reactions to illness and hospitalization. Explain strategies to manage them effectively.	Behavioral Sciences	Psychological reactions
PsyBhS1-BhS-010	Outline the stages of sleep and describe sleep disorders. Discuss non-pharmacological methods for sleep hygiene.	Behavioral Sciences	Sleep and consciousness

PsyBhS1-BhS-011	Define pain and describe its physical and psychological aspects relevant to patient care. Explain subjective factors influencing pain. Manage pain using non pharmacological interventions.	Behavioral Sciences	Pain
PsyBhS1-BhS-012	Define child-rearing practices and their influence on personality development. Explain the effects of child-rearing practices on health and illness.	Behavioral Sciences	Child rearing practices

PSYCHIATRY

CODE	SPECIFIC LEARNING OUTCOMES	INTEGRATING DISCIPLINE	TOPIC
PsyBhS1 -Psy-001	Describe mood and affect. Describe and classify hallucination. Describe and classify delusion. Describe the abnormalities of speech in psychiatric disorders. Describe obsession and compulsion.	Psychiatry	Introduction to Key Psychiatric Terms
PsyBhS1 -Psy-002	Classify the types of non-pharmacological interventions. Describe the principles and applications of common psychotherapies. Explain the importance of social and rehabilitative approaches. Discuss the role of somatic therapies and lifestyle modifications in psychiatry.	Psychiatry/ Behavioural sciences	Non pharmacological interventions in Psychiatry
PsyBhS1 -Psy-003	Differentiate between delirium and dementia. Discuss causes and types of dementias. State manifestations and risk associated with dementia. Enumerate mental state examination, and mini mental state examination findings of delirium and dementias.		Delirium and dementia

	Discuss prognostic factors of memory related disorders. Outline a treatment plan including pharmacological and non-pharmacological interventions.		
PsyBhS1 -Psy-004	Define Generalized anxiety disorder (GAD) and describe common risk factors. Identify typical mental state examination findings of GAD. Differentiate GAD from eustress. Outline pharmacological and psychotherapeutic treatment of GAD.	Psychiatry	Anxiety Disorders
	Identify hallmark symptoms of panic disorder based on Mental Status Examination. Differentiate panic attacks from angina, myocardial infarction, and asthma. Describe strategies for supporting patients with panic disorder.	Psychiatry	
	Define and classify phobias. Outline treatment approaches for phobias, including psychological therapies and pharmacological options.	Psychiatry	
PsyBhS1 -Ph-001	Classify anxiolytic drugs. Explain the mechanism of action of different anxiolytic drugs. Discuss the pharmacokinetics and pharmacodynamics of anxiolytics. Identify the clinical indications of anxiolytic drugs. List the contraindications and precautions for the use of anxiolytic drugs. Describe the adverse effects and risks of dependence, tolerance, and withdrawal associated with anxiolytics.	Pharmacology	Anxiolytic drugs

	Classify sedative-hypnotic drugs. Explain the mechanism of action of sedative-hypnotics. Describe the pharmacokinetics and pharmacodynamics of commonly used sedative-hypnotics. Identify the clinical indications of sedative-hypnotics. List the contraindications to the use of sedative-hypnotics in clinical practice. Identify adverse effects of sedative-hypnotics.		Sedative-hypnotics
PsyBhS1 -Psy-005	Classify depressive disorders. Describe risk factors of depressive disorders. Diagnose moderate depressive disorder on the basis of mental state examination findings. Outline management plan including pharmacological options and psychotherapy.	Psychiatry	Depressive Disorders
	Describe suicide and deliberate self-harm, including associated factors. Describe management of suicide and deliberate self-harm.	Psychiatry	
	Differentiate postpartum depression from postpartum blues. Formulate a management plan for postpartum blues and postpartum depression.	Psychiatry	
PsyBhS1 -Ph-002	Classify anti-depressants. Describe their mechanism of action, pharmacological effects, uses, adverse effects, drug interactions and contraindications. Discuss rationale of choosing an antidepressant for a particular condition	Pharmacology	Anti-depressants
PsyBhS1 -Psy-006	Describe Bipolar I and Bipolar II disorders according to standard diagnostic criteria. Differentiate the clinical features of mania and hypomania.	Psychiatry	Bipolar affective disorder

	Differentiate bipolar disorders from schizophrenia and substance-induced mania on the basis of clinical presentation and course. Interpret mental state examination (MSE) findings in mania. Formulate a basic management plan for bipolar disorder.		
PsyBhS1-Ph-003	Classify and enumerate mood stabilizers. Describe their mechanism of action, pharmacological effects, uses, adverse effects, drug interactions and contraindications.	Pharmacology	Mood Stabilizers
PsyBhS1-Psy-007	Describe the etiology, risk factors, and underlying neurobiological, psychological, and social factors contributing to Obsessive–Compulsive Disorder (OCD). Enumerate the diagnostic criteria of OCD according to ICD-11/DSM-5 TR. Identify the common clinical features and course of illness. Interpret the characteristic findings on mental state examination in OCD. Discuss the impact of OCD on daily functioning and quality of life. Outline the treatment options including pharmacological and psychological approaches.	Psychiatry	Obsessive–Compulsive and Related Disorders
	Define Body Dysmorphic Disorder (BDD) Differentiate from BDD from eating disorders Explain the clinical findings of a case of BDD based on mental state examination. Outline the management plan to treat BDD.	Psychiatry	
PsyBhS1-Psy-008	Define and classify dissociative disorders Identify key clinical features of dissociative disorders Describe principles of management of dissociative disorders	Psychiatry	Dissociative and somatoform disorders (conversion disorder)

	Define and classify somatoform disorders with emphasis on conversion disorder Identify key clinical features of conversion disorder Describe principles of management of conversion disorder		
PsyBhS1 -Psy-009	Explain the characteristic mental state examination (MSE) findings in PTSD. Differentiate PTSD from acute stress disorder. Outline the management plan for PTSD. Define adjustment disorder. Identify the emotional and behavioral symptoms that occur within three months of an identifiable stressor.	Psychiatry	Trauma- and Stressor-Related Disorders
PsyBhS1 -Psy-010	Define schizophrenia. Describe the positive and negative symptoms of schizophrenia. Outline the differential diagnosis of schizophrenia. Explain the characteristic mental state examination (MSE) findings in schizophrenia. Outline the management plan to treat a patient of schizophrenia.	Psychiatry	Schizophrenia and Psychotic Disorders
PsyBhS1 -Ph-004	Classify antipsychotic drugs. Explain the mechanism of action of typical and atypical antipsychotics. Describe the pharmacokinetics and pharmacodynamics of antipsychotic drugs. Identify the clinical indications of antipsychotic drugs. List the contraindications and precautions for the use of antipsychotics. Describe the adverse effects of antipsychotics.	Pharmacology	Antipsychotic Drugs
PsyBhS1 -Psy-011	Define paranoid, schizoid, and schizotypal personality disorders. Describe the characteristic symptoms and behavioral patterns of each disorder.	Psychiatry	Personality Disorders I

	Interpret relevant findings on the mental state examination in these disorders. Differentiate Cluster A disorders from schizophrenia and delusional disorders. Outline the principles of management, including psychotherapy and pharmacotherapy where appropriate.		
PsyBhS1 -Psy-012	Define antisocial, borderline, histrionic, and narcissistic, anxious avoidant, dependent, and obsessive compulsive personality disorders. Explain the clinical features and psychopathology of each disorder. Identify mental state examination findings typical of Cluster B and C personality disorders. Differentiate these disorders from mood disorders, substance use, and other psychiatric conditions. Summarize management strategies, including risk assessment, crisis intervention, and psychotherapy.	Psychiatry	Personality Disorders II
PsyBhS1 -Psy-013	Classify commonly abused substances (e.g., alcohol, opioids, cannabis, stimulants, sedatives, caffeine, nicotine). Describe the clinical features and diagnostic criteria of substance-related disorders. Identify signs and symptoms of intoxication and withdrawal for common substances. Explain the psychological, social, and medical complications associated with substance use. Outline the approach to assessment, including history, examination, and mental state examination. Explain the principles of management for substance use disorders. Discuss preventive strategies and the role of psychoeducation in reducing substance use. Manage the patients of acute and chronic alcoholism.	Psychiatry	Substance-Related Disorders

PsyBhS1 -Ph-005	Classify CNS stimulants. Explain the mechanism of action. Discuss the clinical indications for the therapeutic use of CNS stimulants. Identify the common contraindications to CNS stimulant use. Describe the signs and symptoms of overdose of CNS stimulants. Summarize the adverse effects and toxic manifestations of CNS stimulants.	Pharmacology	CNS Stimulants
PsyBhS1 -Ph-006	Classify types of alcohol. Describe the mechanism of action, pharmacological effects, uses, adverse effects, drug interactions and contraindications of Ethyl Alcohol. Enlist the enzyme systems involved in ethanol and methanol metabolism. Describe treatment of methanol and ethanol poisoning with alcohol. Describe pharmacological treatment of acute alcohol intoxication, alcohol withdrawal syndrome and Wernicke Korsakoff syndrome Identify the clinical features of the disulfiram–ethanol reaction and list the drugs that produce a disulfiram-like effect when combined with alcohol. Describe fetal-alcohol syndrome.	Pharmacology	Alcohol
PsyBhS1 -Psy-014	Define and classify psychosexual disorders Identify key clinical features of psychosexual disorders Describe principles of management of psychosexual disorders	Psychiatry	Psychosexual disorders
PsyBhS1 -Psy-015	Describe the characteristic clinical features of anorexia nervosa. Differentiate anorexia nervosa from hyperthyroidism and depression. Explain the typical mental state examination findings.	Psychiatry	Eating Disorders

	Outline the management plan to treat a patient diagnosed with anorexia nervosa.		
	Diagnose bulimia nervosa on the basis of signs and symptoms and mental state examination findings. Describe the binge–purge cycle. Outline management strategies, including pharmacotherapy and psychotherapy.	Psychiatry	
PsyBhS1 -Psy-016	Describe the clinical signs and symptoms in children and adolescents with Attention Deficit Hyperactivity Disorder (ADHD). Analyze mental state examination (MSE) findings in individuals with ADHD. Explain the etiological factors contributing to the development of ADHD. Differentiate ADHD from normal childhood behavior. Formulate a management plan to treat individuals with ADHD.	Psychiatry	Neurodevelopmental Disorders
	Describe the clinical presentation of Autism Spectrum Disorder (ASD) in children. Identify early signs of ASD. Interpret behavioral observations relevant to diagnosis during assessment. Develop a basic management plan for children with Autism Spectrum Disorder incorporating early intervention and multidisciplinary care.	Psychiatry	
	Differentiate types of learning disorders, including dyslexia, dysgraphia, and dyscalculia. Discuss the academic difficulties despite normal intelligence as a feature of learning disorders. Identify the emotional and behavioral consequences of learning disorders.	Psychiatry	

	Outline the role of mental state examination in evaluating children with learning disorders. Explain the management strategies for learning disorders.		
	Define enuresis and differentiate between primary and secondary types. Explain the psychological and psychosocial factors that contribute to enuresis in children. Describe the emotional and behavioral consequences of enuresis. Identify psychiatric comorbidities commonly associated with enuresis. Outline the psychological and pharmacological management strategies for enuresis.	Psychiatry	

PSYCHIATRY & BEHAVIORAL SCIENCES

C-FRC / CLINICAL ROTATION

Code	Skills/Task
CFRC 4- PsyB hS- 001	Take a detailed psychiatric history from patients with common psychiatric disorders. (Depressive disorder, bipolar affective disorder, schizophrenia, generalized anxiety disorder, panic disorder, obsessive-compulsive disorder (OCD), alcoholism, ADHD, autism, personality disorders, acute suicidal ideation/attempt, acute aggression or violent behavior) Apply the non-pharmacological interventions in clinical settings (information care, breaking bad news, crisis intervention, disaster management, conflict resolution, progressive muscle relaxation & breathing exercises, and informed consent). Provide differential diagnosis based on history, MSE, and relevant investigations. Formulate a preliminary diagnosis and outline management plan.
CFRC 4- PsyB hS- 002	Mental state examination Perform mental state examination (MSE), assessing appearance, behavior, speech, mood, thought, perception, cognition, insight, and judgment. Interpret findings of MSE in common psychiatric conditions.
CFRC 4- PsyB hS- 003	Suicide risk assessment Conduct suicide risk assessment. Propose immediate management steps.
CFRC 4- PsyB hS- 004	Aggression/violence risk assessment Identify and assess risk of aggression or violence in psychiatric patients. Propose immediate management steps.
CFRC 4- PsyB hS- 005	Rapport building Establish rapport with patients and their families in a respectful, non-judgmental manner. Demonstrate empathetic listening and supportive communication in sensitive situations.
CFRC 4- PsyB hS- 006	Demonstrate respect for patient autonomy and confidentiality in psychiatric practice. Apply ethical principles in managing patients with impaired capacity or in involuntary treatment settings.

MODULE 29

RENAL-II

THEORY

GLOMERULAR DISEASES

CODE	SPECIFIC LEARNING OUTCOMES	INTEGRATING DISCIPLINE	TOPIC
Re2-Pa-001	Describe the etiological factors causing nephrotic syndrome (primary and secondary including diabetic nephropathy). Explain the pathogenesis of proteinuria, hypoalbuminemia, and edema. Describe the gross and microscopic changes in glomeruli associated with nephrotic syndrome. Diagnose nephrotic syndrome based on clinical presentation and findings.	Pathology	Nephrotic Syndrome
Re2-Pa-002	Explain the etiopathogenesis and morphology of podocytopathies: - Minimal Change Disease - Focal Segmental Glomerulosclerosis (FSGS)	Pathology	Podocytopathies
Re2-Pa-003	Enumerate the etiological factors including idiopathic and secondary causes. Explain the pathogenesis and morphology of membranous nephropathy.	Pathology	Membranous Nephropathy
Re2-Neph-004	Enumerate the common causes of nephritic syndrome. Explain the pathophysiological mechanisms of glomerular inflammation and injury. Correlate the clinical presentation with underlying morphological changes. Analyze the laboratory findings characteristic of nephritic presentations. Outline the management strategies and potential complications.	Nephrology	Nephritic Syndrome

Re2-Pa-005	Describe the etiology and precipitating infections leading to PSGN. Explain the immunopathogenesis involving immune complex deposition. Identify the gross and microscopic features characteristic of PSGN.	Pathology	Post-Streptococcal Glomerulonephritis (PSGN)
Re2-Neph-006	Describe the etiological factors and risk associations of IgA-mediated renal disease. Explain the pathogenesis focusing on IgA immune complex deposition in the mesangium and small vessels. Identify the characteristic gross and microscopic changes in renal tissue. Correlate histopathological features with clinical manifestations. Outline the relevant laboratory investigations for diagnosis, monitoring, and follow-up. Discuss the management plan. Describe prognostic factors and potential progression to chronic kidney disease. Differentiate IgA nephropathy from Henoch–Schönlein Purpura based on clinical presentation, systemic involvement, and severity.	Nephrology/ Pathology	IgA Nephropathy (Berger's Disease) and Henoch - Schönlein Purpura (IgA Vasculitis)
Re2-Pa-007	Enumerate the etiological and immunological types of RPGN. Explain the pathogenesis of crescent formation and rapid renal failure. Describe the gross and microscopic features of each type.	Pathology	Rapidly Progressive Glomerulonephritis (RPGN)

TUBULOINTERSTITIAL DISORDERS

Re2-Pa-008	Define acute tubular necrosis and differentiate it from other causes of acute kidney injury. Describe the etiological factors of ischemic and nephrotoxic ATN.	Pathology/ Nephrology	Acute tubular necrosis
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	Explain the pathogenesis and sequence of tubular injury and repair. Describe the gross and microscopic changes in ischemic and nephrotoxic ATN. Correlate pathological changes with clinical features and laboratory findings. Outline the principles of management and prognosis.		
Re2-Pa-009	Classify tubulointerstitial nephritis (TIN) into acute and chronic forms. Describe the etiological factors, predisposing conditions, and commonly implicated drugs causing renal injury. Explain the pathogenesis and mechanisms of tubular and interstitial injury, including drug-induced nephritis. Correlate pathological changes with clinical presentation and laboratory findings. Outline the principles of diagnosis, management, and prognosis for both idiopathic and drug-induced forms.	Nephrology	Tubulointerstitial and drug-induced nephritis
Re2-Pa-010	Describe the etiological and genetic factors of polycystic kidney disease. Explain the pathogenesis of cyst formation in PKD. Describe the gross and microscopic morphological features. Correlate pathological features with clinical manifestations. Enumerate the laboratory and imaging investigations used in diagnosis. Outline the principles of management and prognosis.	Pathology	Polycystic kidney disease

RENAL FAILURE AND ITS PROGRESSION

Re2-Neph-001	Describe the etiology and risk factors of Acute Renal Failure. Explain the underlying mechanism. Identify the clinical features and potential complications. Interpret the laboratory investigations. Outline the management plan. Discuss the role and limitations of diuretics in the management of Acute Renal Failure.	Nephrology	Acute Renal failure
Re2-Neph-002	Describe the etiology and risk factors of Chronic Renal Failure. Identify the clinical features and systemic manifestations. Interpret the laboratory investigations and diagnostic criteria. Outline management plan.	Nephrology	Chronic Renal failure (Chronic Kidney Disease)
Re2-Neph-003	Describe end-stage renal disease. Discuss the pathophysiology and progression of chronic kidney disease to ESRD. Enumerate the indications for initiating dialysis. Describe types of dialysis. Explain the purpose, and care of an arteriovenous fistula. Discuss the treatment options for ESRD. Identify the complications associated with dialysis and their management principles. Outline the principles of patient education and long-term follow-up in dialysis care.	Nephrology	End-stage renal disease and Dialysis (hemodialysis and peritoneal dialysis)

METABOLIC AND SYSTEMIC RENAL DISORDERS

Re2-Neph-004	Describe diabetic nephropathy with its clinical significance. Identify the structural and functional renal changes.	Nephrology	Diabetic nephropathy
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	Enlist the laboratory investigations used for diagnosis and monitoring. Outline the principles of prevention, early detection, and management. Describe the complications and prognosis.		
Re2-Neph-005	Define hypertensive nephrosclerosis. Differentiate benign and malignant forms. Describe the structural and functional renal changes. Correlate clinical manifestations with renal function impairment. Outline investigations and management plan. Discuss the prognosis and long-term outcomes.	Nephrology	Hypertensive nephrosclerosis
Re2-Neph-006	Describe the role of kidneys in electrolyte and acid–base balance regulation. Explain the pathophysiological mechanisms underlying hypo- and hypernatremia, and hypo- and hyperkalemia. Describe the compensatory responses in metabolic acidosis and metabolic alkalosis. Interpret clinical and laboratory findings in common electrolyte and acid–base disorders. Correlate abnormalities in serum electrolytes and arterial blood gases with underlying renal dysfunction. Outline the investigations, management and complications.	Nephrology	Electrolyte and Acid–Base Disorders

OCSTRUCTIVE AND INFECTIVE DISORDERS OF URINARY TRACT

Re2-Uro-007	Define obstructive uropathy and hydronephrosis. Describe etiology and clinical presentation. Enlist the investigations. Outline management plan. Identify complications.	Urology/ Surgery	Obstructive Uropathy and Hydronephrosis
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Re2-Uro-008	Define urolithiasis and classify urinary stones by composition. Explain the pathogenesis and predisposing factors for stone formation. Describe the clinical presentation and diagnostic evaluation. Discuss the principles of medical and surgical management. Outline preventive strategies and patient education.	Urology/ Surgery/ Pediatric Surgery	Urolithiasis
Re2-Neph-009	Identify etiological factors and predisposing conditions of acute and chronic pyelonephritis. Explain the pathogenesis of ascending and hematogenous spread of infection. Correlate pathological features with clinical manifestations and complications. Outline relevant investigations and management plan.	Nephrology	Acute and Chronic Pyelonephritis
Re2-Uro-010	Classify urinary tract infections by site and severity. Explain the clinical features of acute cystitis and prostatitis. Discuss diagnostic investigations and interpretation of urine analysis. Outline management principles, antibiotic stewardship, and prevention.	Urology	Cystitis and Prostatitis
Re2-Uro-011	Define hematuria and differentiate between microscopic and macroscopic types. Enumerate common causes of hematuria. Describe the diagnostic approach and interpretation of investigations. Correlate clinical features with underlying renal or urological pathology.	Urology/ Nephrology	Hematuria

FUNCTIONAL BLADER DISORDERS

Re2-Uro-012	Define neurogenic bladder and describe its types based on neurological involvement.	Urology	Neurogenic Bladder
	Explain the pathophysiology of bladder dysfunction in neurological diseases. Correlate clinical features with the level of neural lesion. Discuss diagnostic methods and management principles, including catheterization and rehabilitation		
Re2-Uro-013	Define urinary retention and urinary incontinence. Classify types of incontinence based on mechanism. Describe the etiological factors and pathophysiology of each condition. Discuss clinical features, investigations, and management approaches.	Urology	Urinary Retention and Incontinence
Re2-Ph-014	Enumerate the drugs used in the management of urinary retention, including α-adrenergic blockers 5-α reductase inhibitors - Muscarinic agonists - Cholinesterase inhibitors - Phosphodiesterase inhibitors Explain the mechanism of action, indications, and adverse effects of each drug class in improving bladder emptying or relieving outlet obstruction.	Pharmacology	Pharmacotherapy of Urinary Retention
Re2-Ph-015	Enlist the drugs used in the management of urinary incontinence. Explain the mechanism of action of antimuscarinic agents and β3-adrenergic agonists in overactive bladder. Describe the role of duloxetine and estrogen in stress urinary incontinence. Outline the use of botulinum toxin in neurogenic detrusor overactivity. State the common adverse effects and contraindications of these drugs.	Pharmacology	Pharmacotherapy of Urinary Incontinence
	Discuss the rationale for drug selection based on the type of urinary incontinence (OAB, stress, mixed, neurogenic).		

PROSTATE AND MALE GENITOURINARY DISORDERS

Re2-Pa-007	Explain the etiology, pathogenesis, and morphology of benign prostatic hyperplasia (BPH), prostatitis, and prostate cancer. Identify the tumor marker for prostate cancer and its use in diagnosis and monitoring.	Pathology	Prostatic Diseases (BPH, Prostatitis, Prostate Cancer)
Re2-Uro-008	Describe the anatomy and physiology of the prostate gland. Differentiate between benign and malignant prostatic diseases. Describe clinical features of: • BPH • Prostatitis • Prostate cancer Discuss diagnostic evaluation, including PSA testing and imaging. Outline management plan.	Urology	
Re2-PS-008a	Enlist contraindications to circumcision. Plan circumcision (methods). Discuss counselling points regarding timing of surgery and follow-up.	Pediatric Surgery	Circumcision

RENAL, UROTHELIAL AND TESTICULAR TUMORS

Re2-Pa-009	Classify renal tumors into benign and malignant types. Describe the etiological factors and risk associations of renal cell carcinoma. Explain the pathogenesis and molecular mechanisms involved in renal tumor development. Describe the gross and microscopic features of renal cell carcinoma.	Pathology/ Nephrology	Renal Cell Carcinoma (RCC)
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	Correlate pathological features with clinical manifestations and complications. Discuss the prognostic factors influencing outcome and survival. Outline the principles of diagnosis and management.		
Re2-Pa-010	Define Wilms' tumor and describe its epidemiological features. Explain the genetic and developmental basis of its pathogenesis. Describe the gross and microscopic morphological features of Wilms' tumor. Correlate the pathological findings with clinical manifestations. Discuss the prognostic factors influencing outcome and survival. Outline the basic principles of diagnosis and management.	Pathology/ Nephrology	Wilms Tumor (Nephroblastoma)
Re2-Pa-011	Describe the etiology and risk factors of Urothelial cell carcinoma. Explain the pathogenesis and morphological features (gross and microscopic).	Pathology	Urothelial cell carcinoma
Re2-Uro-012	Describe the clinical features and common presentations of Urothelial cell carcinoma Enlist the diagnostic investigations used in the evaluation. Outline management plan and factors affecting prognosis.	Urology	
Re2-Pa-013	Classify testicular tumors. Describe etiology, pathogenesis, and morphology of germ cell and sex cord tumors of testis. Describe the lab diagnosis of testicular tumors including tumor markers.	Pathology	Testicular tumors

TRUAMA AND EMERGENCY UROLOGY

Re2-Uro-014	Describe the mechanisms and patterns of renal, ureteric, bladder, and urethral trauma. Discuss clinical presentation and diagnostic evaluation. Outline principles of initial management and surgical repair. Identify the potential complications and rehabilitation needs.	Urology	Genitourinary Injuries
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CONGENITAL GENETOURINARY ANOMALIES

Re2-Uro-015	Describe the embryological basis and classification of congenital urinary tract anomalies including PUJ obstruction and vesicoureteric reflux. Explain the pathophysiology and potential renal complications. Identify the diagnostic modalities. Outline management plan. Counsel parents regarding prognosis, long-term renal monitoring, and preventive strategies.	Urology	PUJ obstruction and vesicoureteric reflux
Re2-PS-016	Define Posterior urethral valve. Describe clinical features. Outline investigations and management plan.	Pediatric Surgery	Posterior urethral valve
Re2-PS-017	Define and classify hypospadias and epispadias. Identify associated anomalies. Outline management plan.	Pediatric Surgery	Hypospadias and epispadias
Re2-PS-018	Classify the types of Undescended testis. Identify complications. Outline management and timing of surgery and referral.	Pediatric Surgery	Undescended testis
Re2-PS-019	Describe testicular torsion considering it as surgical emergency. Describe its pathophysiology. Identify the clinical presentation. Outline investigations and management plan including timely referral.	Pediatric Surgery	Torsion testis

RENAL-II

PRACTICAL / LAB WORK

CODE	SPECIFIC LEARNING OUTCOMES	INTEGRATING DISCIPLINE	TOPIC
Re2-Pa-020	Interpret urine analysis report, including protein, RBCs, casts, infection markers, and microscopic examination of urine sediment.	Pathology	Urine Examination
Re2-Pa-021	Interpret renal function tests, including serum creatinine, blood urea, electrolytes, and eGFR.	Pathology	Renal Function Test
Re2-Pa-022	Identify the classical microscopic features of nephritic diseases (PSGN) and nephrotic diseases (minimal change, membranous, FSGS). (pictorial)	Pathology	Glomerulonephritis
Re2-Pa-023	Identify the classical gross and microscopic features of cystic disease of kidney, renal cell carcinoma, Wilm's tumor, and urothelial neoplasm. (pictorial)	Pathology	Cystic diseases and renal tumors
Re2-Pa-024	Identify the classical gross and microscopic features of seminoma, teratoma, and benign prostatic hyperplasia (BPH). (pictorial)	Pathology	Testicular tumors

C-FRC / CLINICAL ROTATION

Code	Skills/Task
CFRC 4-Re2-001	Take and record detailed history of patients with nephrotic syndrome, CKD, UTI, hematuria, urinary retention, BPH, or urolithiasis.
CFRC 4-Re2-002	Examination of kidneys and urinary bladder Inspect for abdominal distension, edema, and skin changes. Palpate kidneys and bladder for size, tenderness, and masses. Percuss kidneys and bladder for enlargement or fluid. Auscultate renal arteries (bruits).
CFRC 4-Re2-003	Urine sample collection, storage, and transport Narrate proper techniques for urine sample collection, including midstream clean-catch urine, catheterized urine samples, and pediatric urine bag collection, and correctly label and transport the specimens. (See Annexure II)
CFRC 4-Re2-004	Renal imaging Interpret ultrasound report for hydronephrosis, stones, polycystic kidneys. Interpret CT findings for obstruction, calculi, renal masses.
CFRC 4-Re2-005	Fluid balance Measure and interpret fluid balance: urine input/output monitoring.
CFRC 4-Re2-006	Urinary catheterization Observe/Assist in urinary catheterization. Identify indications, contraindications, and precautions (for adult and pediatric patients).
CFRC 4-Re2-007	Counsel patients regarding disease, management plan, lifestyle modifications, treatment adherence.

MODULE 30

EYE & ENT-II

ENT-II (NOSE)

THEORY

CODE	SPECIFIC LEARNING OUTCOMES	INTEGRATING DISCIPLINE	TOPIC
ENT2-Nose-001	Identify important structures in the surgical anatomy of the nose that require care during surgery. Describe the surgical anatomy of the paranasal sinuses, emphasizing relations with vital structures. Describe mucociliary clearance and its role in sinus health and postoperative outcomes. Correlate surgical anatomy and physiology with common clinical conditions (e.g., epistaxis, sinusitis) and their surgical management.	ENT/Anatomy/ Physiology	Surgical anatomy and physiology of nose and paranasal sinuses
ENT2-Nose-002	Describe the clinical features, management, and complications of following infections. - Boil - Cellulitis - Vestibulitis Diagnose on basis of the clinical features, outline management plan, and discuss the complications of following: - Foreign bodies in nose - Maggots nose - Rhinolith	ENT	Diseases of the External Nose and Nasal Vestibule
ENT2-Nose-003	Differentiate between simple snoring and obstructive sleep apnea syndrome (OSAS). Explain the underlying mechanisms and causes. Describe the clinical presentation and complications. Identify the diagnostic methods and investigations. Discuss the various treatment options.		Snoring and Sleep Apnea
ENT2-Nose-004	Identify the etiology of Deviated Nasal Septum (DNS) and its types. Describe clinical presentation.		Nasal Septum Deformities

	Enlist the surgical procedures to correct DNS. Identify complications of nasal septal surgery. Enlist the causes of Septal Perforation. Describe its clinical presentation. Enlist investigations to rule out cause of septal perforation. Outline the management plan. Enlist the causes of Septal Abscess. Identify its clinical presentation and complications. Outline the treatment of septal abscess.		
ENT2-Nose-005	Define and classify Rhinitis. Describe clinical features of infective rhinitis with management. Describe the clinical features of following types of non-infective rhinitis and their management: - Allergic Rhinitis - Vasomotor Rhinitis - Atrophic Rhinitis - Hypertrophic Rhinitis - Rhinitis Medicamentosa	ENT	Rhinitis (Infective and Non-infective)
ENT2-Nose-006	Define Sinusitis. Describe clinical presentation. Enlist investigations. Describe the treatment of acute and chronic Sinusitis. Enlist the surgical procedures done in case of chronic Sinusitis. Identify complications of Sinusitis.	ENT	Infections of the Paranasal Sinuses
ENT2-Nose-007	Define Nasal Polyp. Describe its etiology and clinical features. Differentiate between Antro choanal and ethmoidal polyps. Outline the management plan.		Nasal Polyps
ENT2-Nose-008	Enlist the causes of Epistaxis. Describe its clinical features. Outline initial management and preventive strategies.		Epistaxis

ENT2-Nose-009	Identify clinical features of maxillofacial trauma. Enlist necessary investigations. Outline steps for initial management. Discuss the management of the following: - Fracture nasal bone - Mandibular fracture - Maxillary bone fracture - Zygomatic fracture - Orbital blowout fracture Enlist the etiology of CSF Rhinorrhoea. Describe its clinical presentation. Outline investigations and management plan. Describe the medico-legal implications of maxillofacial trauma, including proper documentation, reporting requirements, and preservation of evidence for legal purposes. (Integrate with Forensic Medicine-see annexure A)	ENT/Forensic medicine	Facial Trauma (Maxillofacial)
ENT2-Nose-010	Describe the clinical features and ENT manifestations of Nasal Tuberculosis. Explain the pathology, clinical presentation, and complications of leprosy involving the nose. Discuss the clinical features, diagnosis, and management of invasive Aspergillosis of the paranasal sinuses. Describe the presentation, rapid progression, and surgical importance of Mucormycosis. Explain the nasal and systemic manifestations of Wegener's granulomatosis and its diagnostic approach. Describe ENT features of Systemic Lupus Erythematosus with emphasis on nasal involvement. Discuss the clinical features and diagnostic findings of Sarcoidosis affecting the nose and paranasal sinuses.	ENT	Granulomatous Disorders of Nose & Paranasal Sinuses
ENT2-Nose-011	Describe the pathology, clinical features, and surgical importance of Inverted Papilloma. Explain the clinical presentation, diagnosis, and management principles of Transitional cell carcinoma of the sinonasal region. Correlate the surgical anatomy of the sinonasal region with the spread and complications of these neoplasms.	ENT/Pathology	Sino nasal neoplasm

ENT-II

C-FRC / CLINICAL ROTATION

Code	NOSE
	Skills/Task
CFRC 4- Nose- 001	• History taking - Obtain a focused history from patients presenting with nasal complaints • Clinical examination/management skills • Perform external examination of nose and paranasal sinuses by inspection and palpation. • Assess nasal patency and olfaction. • Perform anterior and posterior rhinoscopy and identify normal and abnormal findings. • Identify nasal septum deviations, turbinate hypertrophy, polyps, and foreign bodies. • Observe and assist in nasal packing for epistaxis. • Observe and assist in foreign body removal from nose. • Identify nasal fractures and their immediate and definite management. • Identify red flag symptoms requiring urgent referral (proptosis and sudden vision changes, high fever with sinusitis, massive epistaxis). • Observe and assist in surgery of nasal polypectomy, septoplasty, and FESS. • Counselling • Explain common nasal procedures to patients in simple language. • Take informed consent. • Counsel patients on preventive measures. • Medicolegal Aspects of ENT trauma • Perform medicolegal examination and documentation of ear, nose, and throat injuries, correlating clinical findings with possible mechanisms and medicolegal implications. (See Annexure III)

MODULE 30

EYE & ENT-II

EYE-II

THEORY

CODE	SPECIFIC LEARNING OUTCOMES	INTEGRATING DISCIPLINE	TOPIC
Eye2-001	Define uveitis and classify based on anatomical location and etiology. Describe the pathophysiology of uveitis. Identify the key clinical features of uveitis. Differentiate uveitis from other causes of red eye using history and clinical examination. Explain the principles of treatment, including corticosteroid therapy, immunosuppressive agents, and management of complications.	Ophthalmology	Uveal tract
Eye2-002	Describe the normal pupillary reactions (direct light reflex, consensual light reflex, and accommodation reflex). Describe abnormal pupillary reactions (Marcus Gunn pupil/RAPD, Argyll Robertson pupil, Adie's pupil and Horner's syndrome with their underlying causes).		Pupil
Eye2-003	Classify cataract. Describe cataract secondary to systemic diseases. Explain the symptoms, signs, investigations, and management plan for congenital cataract. Diagnose acquired cataract based on symptoms, signs, pathophysiology and investigation findings. Justify selection of treatment options for acquired cataract. Enumerate the pre and post-operative complications of cataract surgery Explain congenital cataract secondary to TORCH infections.		Lens
Eye2-004	Define glaucoma. Classify the different types of glaucoma.	Ophthalmology	Glaucoma

	Describe the anatomy of the anterior chamber angle and aqueous humor outflow/ Drainage pathways in relation to glaucoma. Explain the etiology and pathophysiology of various types of glaucoma. (open, close, primary, secondary, congenital, acquired) Enumerate the different types of secondary glaucoma. Describe the details of lens induced glaucoma. Identify the characteristic clinical features of angle-closure glaucoma./ different types of glaucoma (open, close, primary, secondary, congenital, acquired) Formulate the differential diagnosis of glaucoma. Outline the diagnostic investigations used for glaucoma. Outline the treatment plan for angle-closure glaucoma. Outline the treatment plan for open-angle and other types of glaucoma. Explain pathophysiology of congenital glaucoma Outline the treatment plan for congenital glaucoma		
	Classify anti-glaucoma medications. Explain the mechanisms of action of antiglaucoma drugs and their effect on intraocular pressure. Discuss the indications, contraindications, and adverse effects of antiglaucoma medications. Write prescription of glaucoma.(Pharmacology)	Ophthalmology/ Pharmacology	
Eye2-005	Define retinitis pigmentosa and describe its pathophysiology. Identify the characteristic signs and symptoms, including night blindness, peripheral field loss, and typical fundus changes (classical triad). Outline the treatment and supportive management options for patients with retinitis pigmentosa. Discuss the important counselling points in retinitis pigmentosa.	Ophthalmology	Retina and Vitreous

	Describe the pathophysiology of diabetic retinopathy, including microvascular changes. Outline the clinical signs and imaging methods used for diagnosis, including fundus examination and optical coherence tomography, fundus fluorescein angiography, ultrasound B scan. Explain the principles of management, including glycemic control, laser photocoagulation, intravitreal therapy, and vitrectomy.		
	Define retinal detachment and classify its types. Describe the pathophysiology and risk factors for retinal detachment. Recognize the clinical features and warning symptoms of different types of retinal detachments. Outline the diagnostic methods, including direct and indirect fundoscopy/ ophthalmoscopy and imaging including ultrasound B scan and OCT. Explain the principles of management, including medical and surgical options and postoperative care.	Ophthalmology	
	Define retinopathy of prematurity and describe its pathophysiology. Identify the risk factors and etiological factors associated with retinopathy of prematurity. Recognize/ Explain the clinical features, grading and complications of retinopathy of prematurity. Outline the methods for diagnosis and screening protocols in retinopathy of prematurity. Describe the management options, including medical, laser, and surgical interventions. Explain preventive strategies and the importance of timely screening in at-risk infants.		
Eye2-006	Define refractive errors and describe their impact on vision. Differentiate the main types (myopia, hyperopia, astigmatism, and presbyopia).	Ophthalmology	Refractive errors

	Explain the optical and anatomical basis of each refractive error. Identify key clinical features and diagnostic methods used to detect refractive errors. Outline the main management options, including spectacles, contact lenses, and refractive surgery.		
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EYE-II

C-FRC / CLINICAL ROTATION

Code	Skills/Task
	EYE-II
CFRC 4- eye2- 001	• Eye examination skills and procedures • Perform confrontation test to assess the visual field. • Perform digital tonometry. • Perform pupillary light reflexes (direct and consensual, swinging light reflex). • Operation theatre exposure • Apply eye bandage, eye pad, and protective shield correctly • Perform eye washing in chemical injuries. • Observe steps of cataract and other surgeries • Demonstrate correct patient positioning and draping in ophthalmic surgery. • Demonstrate the correct technique for scrubbing, gowning, and gloving. • Ophthalmic Emergencies • Perform rapid eye examination in emergency cases like acute congestive glaucoma. • Exposure to Ophthalmic lasers procedures Observe YAG Laser, Argon Laser • Observe/Perform retinoscopy to elicit and interpret the reflex for determining refractive error.

PERLs – 4

Block-11

PROFESSIONALISM		
TOPIC	LEARNING OBJECTIVES	TEACHING MODE/TASK
Mental Health of Doctors	Identify everyday stressors faced by healthcare professionals Discuss the Importance for maintaining mental well-being as a healthcare professional Explore strategies to manage stress, prevent burnout, and promote resilience in the demanding healthcare field.	Interactive lecture
Compassion and Empathy in Health Profession	Discuss the importance of compassion and empathy in patient care and how these qualities enhance the patient-provider relationship and improve health outcomes. Describe strategies for building empathy and compassion, e.g. active listening, perspective-taking, mindfulness training, and reflective practice.	interactive lecture/small group discussion
ETHICS		
TOPIC	LEARNING OBJECTIVES	TEACHING MODE/TASK
Autonomy in dialysis, Renal transplant ethics	. Analyze a case study for the ethical principles of autonomy as they relate to patient decision-making in dialysis and renal transplantation, including the challenges and implications of these principles in clinical practice	Case based discussion
informed Consent and Patient Autonomy	Describe ethical principles of informed consent and patient autonomy in ENT care, focusing on ensuring patients are fully informed and empowered to make decisions about their treatment.	Case based discussion
	Analyze a case about preprocedural informed consent.	
RESEARCH		
TOPIC	LEARNING OBJECTIVES	TEACHING MODE/TASK
Research manuscript writing	Write a complete scientific article (Introduction, Methods, Results, Discussion).	Group work (dedicated time slot in timetable to complete the task in current block)
LEADERSHIP		
TOPIC	LEARNING OBJECTIVES	TEACHING MODE/TASK
Digital Transformation in Healthcare	Explore the impact of digital transformation in healthcare, including the roles of telemedicine, digital health tools, AI, and the importance of data privacy in modern healthcare delivery.	Student presentations

Public Trust and Leadership in Society	Explore the role of healthcare professionals as leaders in society, focusing on how building public trust is essential for effective leadership and the responsibilities of healthcare professionals in maintaining this trust.	
	Explore the role of healthcare professionals as leaders in society, focusing on how building public trust is essential for effective leadership and the responsibilities of healthcare professionals in maintaining this trust.	Student presentations
	Analyze a case where public trust in healthcare leadership was challenged, identifying key leadership strategies that could rebuild trust and strengthen the healthcare professional's role in society, identifying key leadership strategies that could rebuild trust and strengthen the healthcare professional's role in society.	Case based discussion/ student presentations

ASSESSMENT METHODOLOGY

FORMATIVE ASSESSMENT:

COMBINED CLASS TESTS SCHEDULE

1. Number of tests: Three
2. Day = Friday
3. Time = 11 am to 1 pm
4. Dates =
Test 1 = 4th Week = 28th August 2026
Test 2 = 8th Week = 25th September 2026
Test 3 = 12th Week = 23rd October 2026
5. Type of questions = MCQs
6. Total Marks of each test = 100
7. Pass Marks = 50
8. Number of MCQs in each test:

Topics	Department responsible	Total MCQs
Neurosciences	Medicine	27
Behavioral Sciences / Psychiatry	Psychiatry	19
Renal II	Urology	18
Eye-II	Eye	18
ENT-II	ENT	18
TOTAL		100

SUMMATIVE BLOCK EXAMINATION

1. MCQ's
2. OSPE
3. Viva Voce
4. Assignments

BLOCK 11 TOS

Block-XI						
Modules	Theory		Practical			
	MCQs (1 mark each)	Marks	OSCE (8 marks each)	OSVE (10 marks each)	Short Case (20 marks each)	Marks
Neuroscience-II	38	38	3	1	-	34
Psychiatry & Behavioural Sciences	20+07	27	2	-	-	16
Renal-II	25	25	1	1	-	18
Eye-II	25	25	2	-	1	36
ENT-II	25	25	2	-	1	36
Total	140 MCQs	140 Marks	10 stations x 8= 80 Marks	2 stations x 10= 20 Marks	2 short cases x 20=40 Marks	140 Marks
Grand Total=280 Marks						

BLOCK 11 EXAMINATION BREAKDOWN

Modules	Theory		Practical			Total Marks
Neurosciences –II Psychiatry & Behavioral Sciences – II Eye & ENT -II	MCQs (140)	140 Marks	OSCE	10 stations x 2 marks= 80	140 Marks	280 Marks
			OSVE	02 Stations x 10 marks= 20		
			Short Case Eye – I	1 short case x 20 marks= 20		
			Short Case ENT – I	1 short case x 20 marks= 20		
Internal Assessment (10%) Theory		35 Marks	Internal Assessment (10%) Practical		35 Marks	70 Marks
Total = 350 Marks						

4th Year MBBS BLOCK 11 TIMETABLE 2026



LAHORE MEDICAL & DENTAL COLLEGE

Lahore Medical & Dental College
Canal Bank North, Tulsipura, Lahore
 Phone No. 0346-4418891-98
 No. LMDC/ /2026, Dated:

4th YEAR M.B.B.S TIMETABLE SESSION 2022-2023 w.e.f. 03-08-2026 to 30-10-2026

BLOCK – 11 (MODULE 27, 28 & 29, 30) 13 WEEKS

DAYS & TIME	08:00 a.m. to 08:45 a.m.	08:45 a.m. to 09:30 a.m.	09:30 a.m. to 10:15 a.m.	10:15 a.m. to 10:45 a.m.	10:45 a.m. to 12:45 p.m.	12:45 p.m. to 01:00 p.m.	01:00 p.m. to 02:15 p.m.	02:15 p.m. to 03:00 p.m.	
MONDAY	Behavioral Sciences Lecture theatre No. 2	EYE Lecture Theatre No. 2	ENT Lecture Theatre No. 2	Travel to GTTH & Break	Ward / SDL	Travel to LMDC	Patho CFRC 1 CFRC 2 ² Pharm / CFRC 3	A+B C+D E+F G+H	³ PERL/Urology Lecture Theatre No. 2
TUESDAY	Medicine Lecture Theatre No. 2	¹ Surgery/ Anesthesiology/Urology Lecture Theatre No. 2	Pathology Lecture Theatre No. 2		Ward / SDL		Patho CFRC 1 A+B C-FRC 2 ² Pharm / CFRC 3	A+B C+D E+F	Behavioral Sciences Lecture Theatre No. 2
WEDNESDAY	ENT Lecture Theatre No.2	Pharmacology Lecture Theatre No. 2	Behavioral Sciences Lecture Theatre No. 2		Ward / SDL		Patho CFRC 1 CFRC 2 ² Pharm/CFRC 3	E+F G+H A+B C+D	Pathology Lecture Theatre No. 2
THURSDAY	EYE Lecture Theatre No. 2	Medicine Lecture Theatre No. 2	Pathology Lecture Theatre No. 2		Ward / SDL		Patho CFRC CFRC ² Pharm/CFRC	C+D E+F G+H A+B	Pharmacology Lecture Theatre No. 2
FRIDAY	EYE Lecture Theatre No. 2	ENT Lecture Theatre No. 2	Pathology Lecture Theatre No. 2	10:15 a.m. to 11:00 a.m.	11:00 a.m. to 01:00 p.m.				
				Behavioral Sciences Lecture Theatre No. 2	Pharmacology / ⁴ Combine Tests / EYE/ ENT / Forensic Medicine / Mentoring Lecture Theatre No. 2				

CC's:

- Principal, LMDC
- Vice Principal, LMDC
- Heads of All Departments, LMDC/GTTH
- HOD Medical Education, LMDC
- Chief Administrative Officer / Director F&A, LMDC
- Director HR, LMDC
- Director Skills Lab, LMDC
- Director IT, LMDC
- Medical Superintendent, GTTH
- Chairperson Timetable Committee, LMDC
- Assessment & Examination Cell, LMDC
- Transport Incharge, LMDC
- Audio Visual Department (HOD) / (Lecture Theatre Incharge), LMDC
- Warden / Assistant Warden Hostels (Boy/Girl)
- Security Supervisor, LMDC
- Class Representative (Boy/Girl)
- Mis Ali Tours, LMDC
- Notice Board

- 1st 7 weeks Surgery next 2 weeks Anesthesiology and last 4 weeks Urology.
- 1st 6 weeks CFRC & last 7 weeks Pharmacology.
- 1st 4 weeks PERL and last 9 weeks Urology.
- 1st, 5th, 6th & 9th week Pharma, 4th, 8th & 12th week Combine Tests, 2nd, 7th week Eye, 3rd, 10th week ENT, 11th week Forensic Medicine and 13th week Mentoring.
- SDL for 30 minutes practical time.
- SDL for 1 hour ward time.
- Expository writing to be managed by Pathology, Community Medicine, EYE & ENT.
- Every Friday SDL from 01:00 p.m. to 02:00 p.m. and Library time from 02:00 p.m. to 03:00 p.m.
- Schedule of Clinical Rotations (ward) & Batches will be issued separately.
- Clinical Foundation Rotation Clerkship (C-FRC) will be held in Ward / Skill Lab in practical time and issued separately.
- In ward time of CFRC, students should be relieved 15 min before time to travel back to LMDC.
- Students reporting time of CFRC in respective dept is 12:45 pm afterward.

MAJ. GEN. (R) PROF. DR. NAEEM NAQI
PRINCIPAL

CFRC-4

Detailed Timetable

WEEKS	DATES	CFRC – 1	DEPARTMENT	VENUE
1 – 12	Mon – Thu 3-8-26 to 22.10.26	CFRC 4- Nose-001 History taking Obtain a focused history from patients presenting with nasal complaints Clinical examination/management skills • Perform external examination of nose and paranasal sinuses by inspection and palpation. • Assess nasal patency and olfaction. • Perform anterior and posterior rhinoscopy and identify normal and abnormal findings. • Identify nasal septum deviations, turbinate hypertrophy, polyps, and foreign bodies. • Observe and assist in nasal packing for epistaxis. • Observe and assist in foreign body removal from nose. • Identify nasal fractures and their immediate and definite management. • Identify red flag symptoms requiring urgent referral (proptosis and sudden vision changes, high fever with sinusitis, massive epistaxis)." • Observe and assist in surgery of nasal polypectomy, septoplasty, and FESS Counselling • Explain common nasal procedures to patients in simple language. • Take informed consent. • Counsel patients on preventive measures. Medicolegal Aspects of ENT trauma • Perform medicolegal examination and documentation of ear, nose, and throat injuries, correlating clinical findings with possible mechanisms and medicolegal implications.	ENT	Ward
13	26.10.26 to 29-10.26	CFRC 4-Re2-006 Urinary catheterization Observe/Assist in urinary catheterization. Identify indications, contraindications, and precautions (for adult and pediatric patients).	Urology	Skills Lab

WEEKS	DATES	CFRC – 2	DEPARTMENT	VENUE
1 – 12	Mon – Thu 3-8-26 to 22.10.26	CFRC 4- Nose-001 Eye examination skills and procedures • Perform confrontation test to assess the visual field. • Perform digital tonometry. • Perform pupillary light reflexes (direct and consensual, swinging light reflex). Operation theatre exposure • Apply eye bandage, eye pad, and protective shield correctly • Perform eye washing in chemical injuries. • Observe steps of cataract and other surgeries • Demonstrate correct patient positioning and draping in ophthalmic surgery. • Demonstrate the correct technique for scrubbing, gowning, and gloving. Ophthalmic Emergencies • Perform rapid eye examination in emergency cases like acute congestive glaucoma. Exposure to Ophthalmic lasers procedures Observe YAG Laser, Argon Laser Observe/Perform retinoscopy to elicit and interpret the reflex for determining refractive error.	EYE	Ward
13	26.10.26 to 29-10.26	CFRC 4-Re2-006 Urine Sample collection, storage and Transport Narrate proper technique for urine sample collection, including midstream, clean catch, catheterized urine sample and pediatric urine bag collection and correct labelling and transport sample	Pathology	Skills Lab

WEEKS	DATES	CFRC – 3	DEPARTMENT	VENUE
1 & 2	Mon – Thu 3-8-26 to 13-8-26	CFRC 4-NS2-001 History taking "Take and document history from patients presenting with stroke, headache/migraine, Parkinson's disease, or meningitis/encephalitis."	Medicine	Ward
3	17-8-26 to 20-8-26	CFRC 4-Re2-004 "Renal imaging Interpret ultrasound report for hydronephrosis, stones, polycystic kidneys. Interpret CT findings for obstruction, calculi, renal masses."	Radiology	Skills Lab
4 – 6	24-8-26 to 10-9-26	CFRC 4- PsyB hS-001 Take a detailed psychiatric history from patients with common psychiatric disorders. (Depressive disorder, bipolar affective disorder, schizophrenia, generalized anxiety disorder, panic disorder, obsessive-compulsive disorder (OCD), alcoholism, ADHD, "autism, personality disorders, acute suicidal ideation/attempt, acute aggression or violent behavior) Apply the non-pharmacological interventions in clinical settings (information care, breaking bad news, crisis intervention, disaster management, conflict resolution," progressive muscle relaxation & breathing exercises, and informed consent). Provide differential diagnosis based on history, MSE, and relevant investigations. Formulate a preliminary diagnosis and outline management plan. CFRC 4- PsyB hS-002 "Mental state examination Perform mental state examination (MSE), assessing appearance, behavior, speech, mood, thought, perception, cognition, insight, and judgment. Interpret findings of MSE in common psychiatric conditions." CFRC 4- PsyB hS-006 Patient Autonomy and Confidentiality Demonstrate respect for patient autonomy and confidentiality in psychiatric practice. Apply ethical principles in managing patients with impaired capacity or in involuntary treatment settings.	Psychiatry	Ward

MEDICINE /NEUROLOGY WARD ROTATION

CFRC 4-NS2-002

GCS Level

Assess and record the patient's level of consciousness using the Glasgow Coma Scale.

CFRC 4-NS2-003

Cranial Nerves

Examine the function of all 12 cranial nerves.

CFRC 4-NS2-004

Motor examination

Perform a complete motor examination, including assessment of muscle strength, tone, bulk, reflexes, and coordination.

CFRC 4-NS2-005

Sensory examination

Perform sensory examination including touch, pain, temperature, vibration, and proprioception.

CFRC 4-NS2-006

Cerebellar function tests

Examine cerebellar function through coordination tests, balance, and fine motor tasks (e.g., finger-to-nose, heel-to-shin, Romberg test).

CFRC 4-NS2-007

Gait Patterns

Observe and assess different gait patterns (normal, hemiplegic, Parkinsonian, ataxic) and posture abnormalities, and document findings.

CFRC 4-NS2-008

Deep tendon reflexes

Assess deep tendon reflexes, superficial reflexes, and pathological reflexes.

CFRC 4-NS2-009

Meningeal signs

Examine a patient of meningitis for meningeal signs, including neck stiffness, Kernig's sign, and Brudzinski's sign.

CFRC 4-NS2-010

Higher cortical functions

Assess higher cortical functions including language, memory, attention, calculation, praxis, and neglect.

CFRC 4-NS2-011

Lumbar puncture

Observe and narrate the steps of lumbar puncture procedure, including patient positioning, landmark identification, needle insertion, and CSF collection with proper handling and labeling with indications, contraindications, potential complications, and precautions for lumbar puncture. (See Annexure I)

PSYCHIATRY WARD ROTATION

CFRC 4- PsyB hS-003

"Suicide risk assessment Conduct suicide risk assessment.

Propose immediate management steps."

CFRC 4- PsyB hS-004

"Aggression/violence risk assessment

Identify and assess risk of aggression or violence in psychiatric patients.

Propose immediate management steps."

CFRC 4- PsyB hS-005

Rapport building

"Establish rapport with patients and their families in a respectful, non-judgmental manner."

"Demonstrate empathetic listening and supportive communication in sensitive situations."

UROLOGY WARD ROTATION

CFRC 4-Re2-001

Take and record detailed history of patients with nephrotic syndrome, CKD, UTI, hematuria, urinary retention, BPH, or urolithiasis.

CFRC 4-Re2-002

"Examination of kidneys and urinary bladder

Inspect for abdominal distension, edema, and skin changes. Palpate kidneys and bladder for size, tenderness, and masses. Percuss kidneys and bladder for enlargement or fluid.

Auscultate renal arteries (bruits)."

CFRC 4-Re2-005

"Fluid balance

Measure and interpret fluid balance: urine input/output monitoring."

4th Year MBBS 2026| Detailed Schedule Block-11

Lectures (Surgery/ Anesthesia/ Urology)

WEEK	DAY	DATE	TIME	DEPARTMENT
1.	Tuesday	04-08-26.	8:45 a.m.-9:30 am.	Surgery
2.	Tuesday	11-08-26.	8:45 a.m.-9:30 am.	Surgery
3.	Tuesday	18-08-26.	8:45 a.m.-9:30 am.	Surgery
4.	Tuesday	25-08-26.	8:45 a.m.-9:30 am.	Surgery
5.	Tuesday	01-09-26.	8:45 a.m.-9:30 am.	Surgery
6.	Tuesday	08-09-26.	8:45 a.m.-9:30 am.	Surgery
7.	Tuesday	15-09-26.	8:45 a.m.-9:30 am.	Surgery
8.	Tuesday	22-09-26.	8:45 a.m.-9:30 am.	Anesthesia
9.	Tuesday	29-09-26.	8:45 a.m.-9:30 am.	Anesthesia
10.	Tuesday	06-10-26.	8:45 a.m.-9:30 am.	Urology
11.	Tuesday	13-10-26.	8:45 a.m.-9:30 am.	Urology
12.	Tuesday	20-10-26.	8:45 a.m.-9:30 am.	Urology
13.	Tuesday	27-10-26.	8:45 a.m.-9:30 am.	Urology

CFRC-1

WEEK	DAY	DATE	TIME	DEPARTMENT
1. to 12	Monday Tuesday Wednesday Thursday	03-08-26 To 22-10-26	1:00 p.m.-2:15 p.m.	ENT
13	Monday Tuesday Wednesday Thursday	23-10-26 To 29-10-26	1:00 p.m.-2:15 p.m.	Urology

CFRC-2

WEEK	DAY	DATE	TIME/Task	DEPARTMENT
1. to 12.	Monday Tuesday Wednesday Thursday	03-08-26 To 22-10-26	1:00 p.m.-2:15 p.m.	Ophthalmology
13	Monday Tuesday Wednesday Thursday	23-10-26 To 29-10-26	1:00 p.m.-2:15 p.m.	Pathology

² CFRC3 / Pharma Tutorial

WEEK	DAY	DATE	TIME/Task	DEPARTMENT
1. to 6.	Monday Tuesday Wednesday Thursday	03-08-26 To 10-09-26	1:00 p.m.-2:15 p.m. CFRC3	Medicine Radiology Psychiatry
7. to 13	Monday Tuesday Wednesday Thursday	14-0-26 To 29-10-26	1:00 p.m.-2:15 p.m. Tutorial	Pharmacology

³PERL / Urology

WEEK	DAY	DATE	TIME	DEPARTMENT
1.	Thursday	06-08-26.	09:30 a.m.-10:15 a.m.	PERL
2.	Thursday	13-08-26.	09:30 a.m.-10:15 a.m.	PERL
3.	Thursday	20-08-26.	09:30 a.m.-10:15 a.m.	PERL
4.	Thursday	27-08-26.	09:30 a.m.-10:15 a.m.	PERL
5.	Thursday	03-09-26.	09:30 a.m.-10:15 a.m.	Urology
6.	Thursday	10-09-26.	09:30 a.m.-10:15 a.m.	Urology
7.	Thursday	17-09-26.	09:30 a.m.-10:15 a.m.	Urology
8.	Thursday	24-09-26.	09:30 a.m.-10:15 a.m.	Urology
9.	Thursday	01-10-26.	09:30 a.m.-10:15 a.m.	Urology
10.	Thursday	08-10-26.	09:30 a.m.-10:15 a.m.	Urology
11.	Thursday	15-10-26.	09:30 a.m.-10:15 a.m.	Urology
12.	Thursday	22-10-26.	09:30 a.m.-10:15 a.m.	Urology
13.	Thursday	29-10-26.	09:30 a.m.-10:15 a.m.	Urology

⁴ Pharma / Com Med / Combine Test / EYE / ENT / For Med / Mentoring

WEEK.	DAY	DATE	TIME.	ACTIVITY	DEPARTMENT
					
1.	Friday	07-08-26.	11:00 a.m.-1:00 pm	SDL	Pharma
2.	Friday	14-08-26.	11:00 a.m.-1:00 pm	SDL	Eye
3.	Friday	21-08-26.	11:00 a.m.-1:00 pm	SDL	ENT
4.	Friday	28-08-26.	11:00 a.m.-1:00 pm	Combined Test	All concerned Dept.
5.	Friday	04-09-26.	11:00 a.m.-1:00 pm.	SDL	Community Medicine
6.	Friday	11-09-26.	11:00 a.m.-1:00 pm	SDL	Pharma
7.	Friday	18-09-26.	11:00 a.m.-1:00 pm	SDL	Eye
8.	Friday	25-09-26.	11:00 a.m.-1:00 pm	Combined Test	All concerned Dept.
9.	Friday	02-10-26.	11:00 a.m.-1:00 pm	SDL	Pharma
10.	Friday	09-10-26.	11:00 a.m.-1:00 pm	SDL	ENT
11.	Friday	16-10-26.	11:00 a.m.-1:00 pm	Lecture	Forensic Medicine
12.	Friday	23-10-26.	11:00 a.m.-1:00 pm	Combined Test	All concerned Dept.
13.	Friday	30-10-26.	11:00 a.m.-1:00 pm	Mentoring	All concerned Dept. 

Eligibility Criteria for Appearing in UHS Annual Examination according to the following UHS Assessment Policy

Regulations

1. Professional examination shall be open to any student who: -
 - a) has been enrolled/registered and completed one academic year preceding the concerned professional examination in a constituent/affiliated college of the University.
 - b) has his/her name submitted to the Controller of Examinations, for the purpose of examination, by the Principal of the college in which he / she is enrolled & is eligible as per all prerequisites of the examination.
 - c) has his/her marks of internal assessment in all the Blocks/Clinical Clerkships sent to the Controller of Examinations through office of the Principal of the concerned college, at the end of each Block/Clinical Clerkships, as well as at the conclusion of the academic session along with the admission form for the professional examination.
 - d) has been certified by the principal of his/her college:
 - (i) of good character;
 - (ii) of having attended not less than cumulative 75%* of the full course of lectures delivered, practical and clinical rotations conducted in the particular academic session, while maintaining 75 % attendance in each Block/Clinical Clerkship,
 - (iii) of having appeared at the Block/Clinical Clerkship Examinations conducted by the college of enrolment with at least 50 % marks* in each Block/Clinical Clerkship examination, as well as in aggregate score of all Blocks/Clinical Clerkships examinations for the concerned year;
2. Written/Theory paper in all Professional Examinations in Modular Integrated MBBS or BDS Curricula shall consist of MCQs alone, with effect from Annual 2026 Examinations. (Ref: No. UHS/REG-25/2379, dated 17.11.2025)
3. The minimum number of marks required to pass the professional examination for each Block/Clinical Clerkship shall be fifty percent (50%) in Written and fifty percent (50%) in the 'Oral/Practical/Clinical' examinations and fifty percent (50%) in aggregate, independently and concomitantly, at one and the same time.
4. A candidate failing in one or more Blocks/Clinical Clerkships in the annual examination shall be provisionally allowed to join the next professional class till the commencement of supplementary examinations. The candidate, however, shall have to pass the failed Block/s or Clinical Clerkship in this supplementary examination failing which he / she shall be detained in the professional year. Under no circumstances, a candidate shall be promoted to the next professional class till he/she has previously passed all the Blocks/Clinical Clerkships in the preceding professional examination.
If a student appears in the Supplementary Examination for the first time as he/she did not appear in the annual examination for any reason and failed in any Block/Clinical Clerkship in the Supplementary Examination, he/she will be detained in the same class and will not be promoted to the next class.

5. Only one annual and one supplementary of each Professional Examination shall be allowed in a particular academic session. However, in exceptional situations, i.e., national calamities, war or loss of solved answer books in case of accident, special examination may be arranged after having observed due process of law. This will require permission of relevant authorities, i.e., Syndicate and Board of Governors.
6. Any student who fails to clear the First or Second Professional MBBS / First Professional BDS Examination, in four consecutive attempts, each, inclusive of both availed as well as un-availed attempts, after becoming eligible for the examination, and has been expelled on that account shall not be eligible for continuation of studies and shall not be eligible for admission as a fresh candidate in either MBBS or BDS.
7. The application for admission of each candidate to the professional examination shall be submitted to the Controller of Examination, through the Principal of the College, on the prescribed format, as per notified schedule, accompanied by the prescribed fee.
8. The candidates shall pay their fee through the principal of their respective Colleges, who shall forward the Examination Forms along with the duly paid challan of the examination fee generated from the Online Examination Form.
9. The continuous internal assessment through the Block/Clinical Clerkship, conducted by the college of enrollment, shall carry 20% weightage in the total allocated marks for the concerned Block/Clinical Clerkship in the Professional Examination conducted by the university. The score will be equally distributed to the Written and “Oral/Practical/Clinical” Examinations.
10. The marks of internal assessment through Blocks/Clinical Clerkships examination and attendance record shall be submitted to Controller of Examinations, along with question papers and keys for the Block/Clinical Clerkship examination, within two weeks of completion of each Blocks/Clinical Clerkships examination.
Further, parent-teacher meetings shall be arranged by the colleges after every Block/Clinical Clerkship examination to share feedback on the progress of students with their parents. Minutes of parent teacher meetings, academic timetables/schedule of Blocks/Clinical Clerkships and academic year study guides shall be submitted to the Department of Medical Education UHS, as well.
11. It is emphasized that fresh internal assessment or a revision of assessment for supplementary examination shall not be permissible. However, a revised internal assessment for the detained students can be submitted. The internal assessment award in a particular year will not be decreased subsequently detrimental to the detainee candidate. A proper record of the continuous internal assessment shall be maintained by the concerned department/s in the colleges.
12. The colleges may arrange remedial classes and one re-sit for each Block/Clinical Clerkship examination after fulfillment of prescribed requirements given below. The remedial classes and re-sit examination can be conducted during summer vacation/weekends, before or during preparatory leave for the concerned professional examination, subject to the following conditions:

Block/Clinical Clerkship Attendance	Remedial Classes
<75%, ≥ 50% (50-74%)	i. Principal of the college may conduct remedial classes and submit result to the Examination Department, UHS, independently. ii. Principal of the college may conduct remedial classes for detained students, who have short attendance in the first Block/Clinical Clerkship of a professional year after detention. The college may submit record of the remedial classes to the Examination Department, UHS, independently.
<50%	i. Principal of the college may submit attendance record of such students to Department of Medical Education, UHS, seeking permission for conduct of remedial Classes. The conduct of remedial classes in such cases shall be arranged only after permission from the Competent Authority in the university. ii. The colleges shall also have to provide the university with the reasons submitted by the candidates for short attendance along with documentary evidence for the same duly verified by the principal. iii. The following shall be considered as valid reasons for short attendance of the students for consideration of permission for remedial classes: • Illness/accident/surgery of the student or sickness/death of an immediate relative/being afflicted by a natural/man-made calamity or disaster or detained students (missed the first Block/Clinical Clerkship of the year), students clearing their preceding professional examination in supplementary, or late admitted students who have been permitted for joining by UHS

13. The following policy shall be applicable for transition of students From Traditional Subject-Based Scheme to the Modular Integrated Curriculum Scheme:

- i. The students who fail in all subjects of the professional examination, either by taking the examination or due to non-appearance, and are detained in the respective professional year, shall follow the Modular Integrated Curriculum Scheme for their teaching and assessment.
- ii. The students who fail in one or more subjects but not all the subjects of a professional examination, either by taking the examination or due to non-appearance, and are detained in the respective professional year, shall attend classes with students following the Modular Integrated Curriculum Scheme, but they will be examined in the failed subject/s according to their parent scheme, i.e., the Traditional Subject-Based Curriculum Scheme.