RAWALPINDI MEDICAL UNIVERSITY

DEPARTMENT OF MEDICAL EDUCATION (DME)

4th Year MBBS 2023-2024

Study Guide

CNS, Psychiatry & MSK Module-VI

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University Moto, Vision, Values & Goals

RMU Motto

Mission Statement

To impart evidence-based research-oriented health professional education in order to provide best possible patient care and inculcate the values of mutual respect, ethical practice of healthcare and social accountability.

Vision and Values

Highly recognized and accredited centre of excellence in Medical Education, using evidence-based training techniques for development of highly competent health professionals, who are lifelong experiential learner and are socially accountable.

Goals of the Undergraduate Integrated Modular Curriculum

The Undergraduate Integrated Learning Program is geared to provide you with quality medical education in an environment designed to:

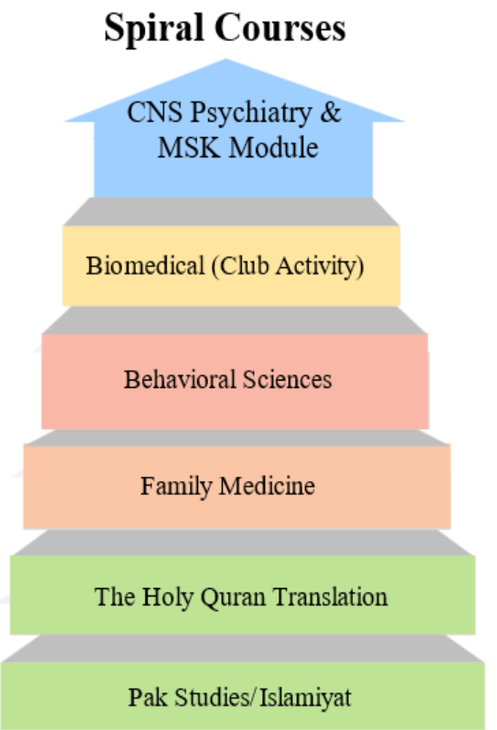
- Provide thorough grounding in the basic theoretical concepts underpinning the practice of medicine.
- Develop and polish the skills required for providing medical services at all levels of the health care delivery system.
- Help you attain and maintain the highest possible levels of ethical and professional conduct in your future life.
- Kindle a spirit of inquiry and acquisition of knowledge to help you attain personal and professional growth & excellence.

Fourth Year MBBS 2024

Study Guide

CNS, Psychiatry & MSK Module-VI

Integration of Disciplines in CNS, Psychiatry & MSK Module-VI



Discipline Wise Details of Modular Contents

SUBJECTS	OUTCOMES
	At the end of the module the student will have the understanding of :
• Community Medicine	• Mental health • Ergonomics • Social sciences • Mental health & behavioral sciences
• Pharmacology	• Anesthetics • Analgesics • Antipsychotics • Hypnotics • Skeletal muscle relaxants • Drugs for joint diseases • Drugs of abuse
• Pathology	• Etiology pathogenesis, morphological changes, laboratory diagnosis of various diseases affecting the brain • Etiology pathogenesis, morphological changes, laboratory diagnosis of various diseases affecting the peripheral nervous system • Etiology pathogenesis, morphological changes, laboratory diagnosis of various diseases affecting the joints • Etiology pathogenesis, morphological changes, laboratory diagnosis of various diseases affecting the bones • Etiology pathogenesis, morphological changes, laboratory diagnosis of various diseases affecting the skeletal muscles • Etiology pathogenesis, morphological changes, laboratory diagnosis of various diseases affecting the skin
• Medicine	• Acute CNS infection (pyogenic Meningitis/encephalitis) • Tuberculous meningitis • Stroke • Movement disorders • Osteoarthritis • Overview of Rheumatological disorders

SUBJECTS	OUTCOMES
• Psychiatry	• Anxiety and Stress • Depressive disorder • Psychosis • Bipolar Affective Disorder (BAD)
• Neurosurgery	• Surgical Intervention of Head Injury • Surgical Intervention of Brain Tumours • Surgical Interventions of Cerebrovascular malformation • Surgical Intervention of CNS Infections
• Orthopedics	• Classification, clinical presentation, differential diagnosis and management options of Bone infection and fractures • Classification, clinical presentation, differential diagnosis and management options of Bone tumors
• Pediatrics	• Classification, clinical presentation, differential diagnosis and management options of Cerebral Palsy • Classification, clinical presentation, differential diagnosis and management options of Meningitis • Classification, clinical presentation, differential diagnosis and management options of GBS • Classification, clinical presentation, differential diagnosis and management options of Epilepsy
• Dermatology	• Core concepts of cutaneous dermatosis
• The Holy Quran Translation	•
• Bioethics & Professionalism	•
• Family Medicine	• Core concepts of family medicine in mental health long term debilitating diseases
• Research	•

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CNS Psychiatry & MSK Module Team

Module Name	:	CNS Psychiatry & MSK Module
Duration of module	:	07 Weeks
Coordinator	:	Dr.Mudassira Zahid
Co-coordinator	:	Dr Iqbal Haider
Review by	:	Module Committee

Module Committee		
1.	Vice Chancellor RMU	Prof. Dr. Muhammad Umar
2.	Director DME	Prof. Dr. Rai Muhammad Asghar
3.	Convener Curriculum	Prof. Dr. Naeem Akhter
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7.	Chairperson Pathology	Prof. Dr. Mobina Dhodhy
8.	Chairperson Community Medicine	Dr Khola Noreen
9.	Focal Person Pharmacology	Dr Haseeba
10.	Focal Person Pathology	Dr Ayesha
11.	Focal Person Community Medicine	Dr. Afifa Kulsoom
12.	Focal Person Medicine	Dr. Saima Ambreen
13.	Focal Person Behavioral Sciences	Dr. Saadia Yasir
14.	Focal Person Dermatology	Dr. Shawana Sharif
15.	Focal Person Quran Translation Lectures	Mufti abdul Wahid
16.	Chairperson Family Medicine	Dr Sadia
17.	Focal Person Bioethics Department	Prof. Dr. Akram Randhawa
18.	Focal Person Surgery	Dr Huma Sabir

Module Task Force Team		
1.	Coordinator	Dr. Mudassira Zahid (Associate Professor of Pathology)
2.	DME Focal Person	Dr. Maryum Batool
3.	Co-coordinator	Dr. Sayed Iqbal Haider

DME Implementation Team		
1.	Director DME	Prof. Dr. Rai Muhammad Asghar
2.	Module planner & Implementation coordinator	Dr. Omaima Asif
3.	Editor	Dr Omaima Asif

Module Outcomes

Introduction: CNS module provides integration of core concepts that underlie the foundation of basic sciences and their use in clinical medicine. This will eventually lead to developing critical thinking for integration and application of basic knowledge for clinical application.

Rationale: System based learning structure is adopted. The CNS module is designed to impart basic knowledge. This knowledge will serve as a base on which the student will construct further knowledge about the etiology, pathogenesis, prevention of diseases and the principles of their therapeutics and management.

Module outcomes:

Knowledge

Each student will be able to acquire knowledge about the basic concepts of diseases in the community, use technology based medical education and to appreciate concepts & importance of

- **Research**
- **Biomedical ethics & Communication Skills**
- **Family medicine**
- **Artificial Intelligence**

Skills

Interpret and analyze various practical & practices of clinical sciences.

Attitude

Demonstrate a professional attitude. Team building spirit and good communication skills.

This module will run in 7 weeks. The content covered will be made visible through introductory titles of the teaching sessions. Instructional strategies are given in the timetable and learning objectives are briefed in study guides. Study guides will also be available on university websites.

Terms & Abbreviations

Contents

- Domains of Learning
- Teaching and Learning Methodologies/Strategies Large Group Interactive Session (LGIS)
  - Small Group Discussion (SGD) Self-Directed Learning (SDL)
  - Clinical / Skill Lab

Tables & Figures

- Table1. Domains of learning according to Blooms Taxonomy
- Figure 1. Prof Umar's Model of Integrated Lecture
- Table 2. Standardization of teaching content in Small Group Discussions
- Table 3. Steps of taking Small Group Discussions

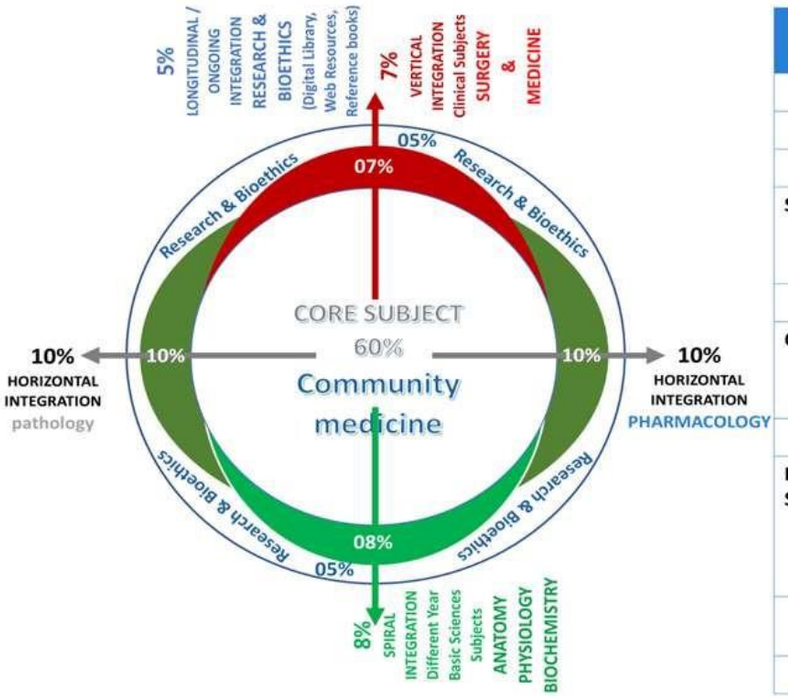
Domains of learning according to Blooms Taxonomy

1.	C	**Cognitive Domain:** knowledge and mental skills.
	• C1	Remembering
	• C2	Understanding
	• C3	Applying
	• C4	Analyzing
	• C5	Evaluating
	• C6	Creating
2.	P	**Psychomotor Domain:** motor skills.
	• P1	Imitation
	• P2	Manipulation
	• P3	Precision
	• P4	Articulation
	• P5	Naturalization
3.	A	**Affective Domain:** feelings, values, dispositions, attitudes, etc
	• A1	Receive
	• A2	Respond
	• A3	Value
	• A4	Organize
	• A5	Internalize

Teaching and Learning Methodologies / Strategies

LARGE GROUP INTERACTIVE SESSION (LGIS)

The large group interactive session is structured format of Prof Umar Model of Integrated lecture. It will be followed for delivery of all LGIS. Lecturer will introduce a topic or common clinical condition and explains the underlying phenomena through questions, pictures, videos of patients, interviews and exercises, etc. Students are actively involved in the learning process.



4th Year community medicine LGIS (≈30 slides)	
Core Subject – 60% (≈ 18-20 slides)	
Community medicine (≈ 18-20 slides)	
Horizontal Integration – 20% (≈ 5-6 slides)	
Same Year Subjects	• Pharmacology (10%) (≈ 2-3 slides) • Pathology (10%) (≈ 2-3 slides)
Vertical Integration – 07% (≈ 2-3 slides)	
Clinical Subjects	• Medicine (3-5%) (≈ 1-2 slides) • Surgery (3-5%) (≈ 1-2 slides)
Spiral Integration – 08% (≈ 2-3 slides)	
Different Year Basic Sciences Subjects	• Anatomy (1-3%) (≈ 1-2 slides) • Physiology (1-3%) (≈ 1-2 slides) • Biochemistry (1-3%) (≈ 1-2 slides)
Longitudinal / Ongoing Integration – 05% (≈ 1-2 slides)	
Research & Bioethics (≈ 1-2 slides)	

SMALL GROUP DISCUSSION (SGD)

This format helps students to clarify concepts acquire skills and attitudes. Sessions are structured with the help of specific exercises such as patient case, interviews or discussion topics or power point presentations. Students exchange opinions and apply knowledge gained from lectures, SGDs and self- study. The facilitator role is to ask probing questions, summarize and helps to clarify the concepts.

Standardization of teaching content in SGD`s

S. No	Contents	Approximate share in %
1	Title Of SGD	
2	Learning Objectives from Study Guides	
3	Horizontal Integration	5%+5% = 10%
4	Core Concepts of the Topic	70%
5	Vertical Integration	10%
6	Related Advance Research points	3%
7	Biomedical Ethical points	2%
8	Spiral integration	5%

Steps of taking Small Group Discussions

Step 1	**Sharing of Learning objectives by using students Study guides**	**First 5 minutes**
Step 2	Asking students pre-planned questions from previous teaching session develop co-relation (these questions will be standardized)	5minutes
Step 3	Students divided into groups of three and allocation of learning objectives	5minutes
Step 4	ACTIVITY: Students will discuss the learning objectives among themselves	15 minutes
Step 5	Each group of students will present its learning objectives	20 min
Step 6	Discussion of learning content in the main group	30min
Step 7	Clarification of concept by the facilitator by asking structured questions from learning content	15 min
Step 8	Questions on core concepts	
Step 9	Questions on horizontal integration	
Step 10	Questions on vertical integration	
Step 11	Questions on related research article	
Step 12	Questions on related ethics content	
Step 13	Students Assessment on online MS teams (5 MCQs)	5 min
Step 14	Summarization of main points by the facilitator	5 min
Step 15	Students feedback on the SGD and entry into log book	5 min
Step 16	Ending remarks	

SELF-DIRECTED LEARNING (SDL)

- Self- directed learning is a process where students take primary charge of planning, continuing and evaluating their learning experiences.
- Time Home assignment
- Learning objectives will be defined
- Learning resources will be given to students = Text book (page no), web site
- Assessment: Will be online on LMS every Tuesday during the reproduction module.

CASE BASED LEARNING (CBL)

- It’s a learner centered model which engages students in discussion of specific scenarios that resemble typically are realworld examples.
- Case scenario will be given to the students
- Will engage students in discussion of specific scenarios that resemble or typically are real-world examples.

SELF-DIRECTED LEARNING (SDL)	CASE BASED LEARNING (CBL)
▪ Self- directed learning is a process where students take primary charge of planning, continuing, and evaluating their learning experiences. ▪ Time Home assignment ▪ Learning objectives will be defined ▪ Learning resources will be given to students = Textbook (page no), web site ▪ Assessment: i Will be online on LMS (Mid module/ end of Module) ii.OSPE station	▪ It’s a learner centered model which engages students in discussion of specific scenarios that typically resemble real world examples. ▪ Case scenario will be given to the students ▪ Will engage students in discussion of specific scenarios that resemble or typically are real-world examples. ▪ Learning objectives will be given to the students and will be based on i. To provide students with a relevant opportunity to see theory in practice ii. Require students to analyze data in order to reach a conclusion. iii. Develop analytic, communicative, and collaborative skills along with content knowledge.

PRACTICAL SESSION/ SKILL LAB (SKL)	
Demonstration/ power point presentation 4-5 slide	10-15 minutes
Practical work	25-30 minutes
Write/ draw and get it checked by teacher	20-25 minutes
05 mcqs at the end of the practical	10 minutes
At the end of module practical copy will be signed by head of department	
At the end of block the practical copy will be signed by Head of Department Dean Medical education department QEC	

CONTENTS OF THE MODULE

1. **Horizontally Integrated Basic Sciences (Physiology, Pharmacology, Pathology, Community Medicine)**
2. **Large Group Interactive Session (LGIS):**
   - i. Pathology
   - ii. Community Medicine
   - iii. Pharmacology
   - iv. Medicine
   - v. Surgery
   - vi. Dermatology
   - vii. Psychiatry

3. **Small Group Discussions (SGD)**
   - i. Pathology
   - ii. Community Medicine
   - iii . Pharmacology
4. **Self-Directed Topic, Learning Objectives & References (SDL)**
   - i. Pathology
   - ii. Community Medicine
   - iii. Pharmacology
5. **PAL- Community medicine**

6. **SKILL LAB**
   - i. Pathology
   - ii. Pharmacology

7. **CBL**
   - i. Pathology
   - ii. Pharmacology
8. **Wards, operation theatres**
   - i. Surgery
   - ii. Medicine
   - iii. Gynae& obs

SECTION – II

Learning Objectives, Teaching Strategies & Assessments

Learning Objectives, Teaching Strategies & Assessments

Learning objectives are given to the students and will be based on:

- Purpose to provide students with a relevant opportunity to see theory in practice
- • Require students to analyze data in order to reach a conclusion.
- Develop analytic, communicative and collaborative skills along with content

HORIZONTALLY INTEGRATED BASIC SCIENCES

S NO	SUBJECTS	TEACHING HOURS WITHOUT PRACTICAL/PAL
1	Pathology (LGIS+SGD+CBL)	14
2	Community medicine (LGIS+SGD)	07
3	Pharmacology (LGIS+SGD+CBL)	37

Content of Pathology

Learning Objectives of Pathology (LGIS)

TOPIC	SUBTOPICS	LEARNING OBJECTIVES AFTER THE SESSION STUDENTS WILL BE ABLE TO:	LEARNING DOMAIN	ASSESSMENT
Infectious diseases of CNS	Pathophysiology of bacterial meningitis Pathophysiology of viral meningitis Pathophysiology of tuberculous meningitis Lab diagnosis of meningitis	The students should be able to Classify the etiological organisms on the basis of type of meningitis and age group affected Describe the pathogenesis and morphological characteristics of bacterial viral and tuberculous meningitis Describe the lab diagnosis of meningitis	C2 C3 C3	MCQs, SEQs, OSPE Viva
Diseases of myelin and neurodegenerative diseases	Demyelinating diseases Neurodegenerative diseases Alzheimer disease, Parkinson's disease	The students should be able to 1)compare and differentiate between Demyelinating Neurodegenerative Alzheimer Parkinson's disease 2) describe pathophysiology and morphology of each disease.	C3 C2	MCQs, SEQs, OSPE Viva
Tumors of CNS	Gliomas Neuronal and Glioneuronal Tumors Primary CNS Lymphoma Meningiomas Metastatic Tumors	Students should be able to classify tumors of brain correlate the morphological features of brain tumors with clinical presentation correlate the WHO grade of astrocytomas with morphological features enlist the investigations for diagnosing brain tumors	C2 C3 C2 C2	MCQs, SEQs, OSPE Viva
Tumors of Skin	Benign Epithelial Tumors Premalignant skin lesions Malignant Epidermal Tumors Tumors of dermis	Describe the morphology of Benign Epithelial Tumors of skin enlist the etiological factors for skin tumors describe the pathogenesis of skin tumors describe the morphology of malignant epidermal and dermal tumors	C2 C1 C3 C3	MCQs, SEQs, OSPE Viva

TOPIC	**SUBTOPICS**	LEARNING OBJECTIVES AFTER THE SESSION STUDENTS WILL BE ABLE TO:	LEARNING DOMAIN	**ASSESSMENT**
Dermatosis & Infections of Skin	Acute Inflammatory Dermatoses Chronic Inflammatory Dermatoses Blistering (Bullous) Diseases Infection	Classify dermatosis Describe the pathogenesis and morphology of acute inflammatory dermatoses Describe the pathogenesis and morphology of chronic inflammatory dermatoses Describe the pathogenesis and morphology of Blistering (Bullous) Diseases Describe the skin lesions due to viral and bacterial skin infections	C1 C2 C3 C3 C2	MCQs, SEQs, OSPE Viva
Diseases of skeletal muscles and myopathies	Skeletal Muscle Atrophy Neurogenic and Myopathic Changes in Skeletal Muscle Inflammatory Myopathies Toxic Myopathies	Describe the mechanisms of Skeletal Muscle Atrophy And Neurogenic and Myopathic Changes in Skeletal Muscle Describe the pathophysiology of Inflammatory Myopathies Describe the pathophysiology of Toxic Myopathies	C3 C2 C2	MCQs, SEQs, OSPE Viva
Metabolic diseases of bone	Osteopenia and Osteoporosis Osteomalacia and Rickets Hyperparathyroidism Renal Osteodystrophy Paget Disease	Describe the pathogenesis and morphological features of Osteopenia and Osteoporosis Describe the pathogenesis and morphological features of Hyperparathyroidism Renal Osteodystrophy Describe the pathogenesis and morphological features of Paget Disease	C2 C3 C3	MCQs, SEQs, OSPE Viva
Bone Tumors And Tumor-Like Lesions	Bone-Forming Tumors Cartilage-Forming Tumors Tumors of Unknown histogenesis	Classify bone tumors Enlist bone tumors arising from metaphysis , diaphysis and epiphysis Describe the morphology of bone forming tumors Describe the morphology of cartilage forming tumors Describe the morphology of Ewing's sarcoma and giant cell tumor of bone	C1 C1 C3 C3 C3	MCQs, SEQs, OSPE Viva

TOPIC	**SUBTOPICS**	LEARNING OBJECTIVES AFTER THE SESSION STUDENTS WILL BE ABLE TO:	LEARNING DOMAIN	**ASSESSMENT**
Neuropathies, neuromuscular junction disorders	Inflammatory Neuropathies Infectious Neuropathies Metabolic Neuropathies Toxic Neuropathies Diseases of the Neuromuscular Junction	Differentiate between the presentation of different types of neuropathies Describe the pathophysiology and mechanisms of injury in different types of neuropathies Describe the pathophysiology of Diseases of the Neuromuscular Junction	C3 C2 C3 C3	MCQs, SEQs, OSPE Viva
Inflammatory And Degenerative Diseases Of The Joint	Osteoarthritis Rheumatoid Arthritis Juvenile Idiopathic Arthritis Seronegative Spondyloarthropathies Crystal-Induced Arthritis	Describe the pathogenesis of different types of arthritis Differentiate between osteoarthritis and rheumatoid arthritis describe the morphological changes occurring in various types of arthritis Correlate the x ray findings with morphological findings. Describe the lab diagnosis for arthritis	C2 C3 C3 C2 C3	MCQs, SEQs, OSPE Viva

PATHOLOGY SMALL GROUP DISCUSSION (SGD)

DEMONSTRATION	CONTENTS OUTLINES (MAJOR TOPICS & SUB- TOPICS)	LEARNING OBJECTIVES	LEARNING DOMAIN	ASSESSMENT TOOL
Patterns of injury in nervous system physical traumatic head injury	Skull Fractures Concussion Parenchymal Injuries Epidural Hematoma Subdural Hematoma Intracranial Hemorrhage	Students should be able to Differentiate the pathophysiological patterns of different types of traumatic brain injuries Differentiate between various hematomas in the brain and their pathogenesis Describe the pathophysiology of concussion Describe the effects of diffuse axonal injury and parenchymal injury	C2 C3 C2 C2	MCQs, SEQs, OSPE Viva

PATHOLOGY CASE BASE LEARNING (CBL)

DEMONSTRATION	CONTENTS OUTLINES (MAJOR TOPICS & SUB- TOPICS)	LEARNING OBJECTIVES	LEARNING DOMAIN	ASSESSMENT TOOL
Bone Infections And Fractures	Healing of Fractures Osteonecrosis Osteomyelitis	Students should be able to Describe the patterns and mechanisms involved in fracture healing and its complications Describe the mechanisms and morphology of osteonecrosis Elist etiology of osteomyelitis Differentiate between pathophysiology and morphology of Pyogenic Osteomyelitis Mycobacterial Osteomyelitis and Skeletal Syphilis	 C2 C2 C3 C3 C2	MCQs, SEQs, OSPE Viva
Arthritis	OSTEOARTHRITIS RHEUMATOID ARTHRITIS	Correlate the clinical presentation with the pathophysiology of various joint diseases Counsel a patient with arthritis regarding life style modification and prevention	C3 C3	MCQs, SEQs, OSPE Viva
Soft tissue tumors and tumor-like lesions	Tumors of Adipose Tissue Fibrous Tumors Rhabdomyosarcoma Smooth Muscle Tumors Tumors of Uncertain Origin	Describe the morphological patterns in soft tissue tumors Describe the grading of soft tissue tumors Differentiate between the morphology of various soft tissue tumors	C2 C2 C2	MCQs, SEQs, OSPE Viva

PATHOLOGY SELF-DIRECTED LEARNING (SDL)

SR. NO.	TOPIC	LEARNING OUTCOMES At the end of session students will be able to:	REFERENCE
01	Genetic Metabolic Diseases of CNS	• The student should be able to: • Describes the types of Genetic Metabolic Diseases and their effects of brain and spinal cord	Robin Cotran Pathologic basis of disease 10th Edition Chapter The Central Nervous System page 1289-1290
02	Toxic and Acquired Metabolic Diseases of CNS	• Describe the pathogenesis and morphological changes occurring due to toxic and acquired metabolic diseases in CNS	Robin Cotran Pathologic basis of disease 10th Edition Chapter The Central Nervous System page 1290-1293
03	Inherited Diseases of Skeletal Muscle	• Describe the pathogenesis and genetic defects of various muscle dystrophies and myopathies	Robin Cotran Pathologic basis of disease 10th Edition Chapter Peripheral Nerves and Skeletal Muscles page 1231-1234
04	Peripheral Nerve Sheath Tumors	• Describe the morphology and pathogenesis of various peripheral nerve sheath tumors.	Robin Cotran Pathologic basis of disease 10th Edition Chapter Peripheral Nerves and Skeletal Muscles page 1236-1239
05	Infections of skin	• Describe the pathogenesis and morphological features of various bacterial and viral skin infections	Robin Cotran Pathologic basis of disease 10th Edition Chapter The skin pages; 1166-1169
06	Infectious Arthritis	• Describe the etiology pathogenesis and morphology of infectious arthritis	Robin Cotran Pathologic basis of disease 10th Edition Chapter Bones, Joints, and Soft Tissue Tumors pages; 1203-1204

PATHOLOGY SKILL LAB (SKILL)

TOPIC	LEARNING OBJECTIVES	LEARNING DOMAIN	TEACHING STRATEGIES	ASSESSMENT TOOLS
Brain tumors and CNS infections	Identify the morphology of various brain tumors Demonstrate the collection and transport of CSF for routine analysis Interpret report of CSF analysis	C2 C2 C2 P3	**PRACTICAL**	**OSPE**
Skin tumors	Identify the morphology of various skin tumors	C1 C2 P3	**PRACTICAL**	**OSPE**
Tumors of bones	Identify the morphology of bone tumors Demonstrate the collection and transport of synovial fluid for routine analysis Interpret report of synovial fluid analysis	C2 C2 C2 P3	**PRACTICAL**	**OSPE**
Soft tissue tumors	Identify the morphology of various soft tissue tumors	C2 C2 P2	**PRACTICAL**	**OSPE**

Teaching Staff / Human Resource of Department of Pathology

SR.NO.	DESIGNATION	TOTAL NUMBER OF TEACHING STAFF
1	Professor	01
2	Associate professor	01
3	Assistant professor	02
4	Demonstrators	09

Detail of Contact hours (faculty) **& contact hours** (students)

Sr. no.	Hours Calculation for Various Type of Teaching Strategies	Total Hours (Faculty)	Total Hours (Students)	Faculty level
1	LGIS (10). 1hrs each session (half class sessions)	2 x 10= 20hrs.	10	Professor, associate, and assistant professors
2	SGD (1) approx. 1hrs each session. 1/4th class	1 x 4= 4 hrs.	01	Assistant professors
3	CBL(3) approx. 1hrs per session. (4 small group sessions. 1 session per day)	4 x 3 = 12 hrs.	03	Demos (subject specialists) supervised by professional faculties
4	Practical	3.5hr x 4= 14hr	07	Demos (subject specialists)
5	SDL (6)	1 x 6 = 6 hrs.	06	Demos (subject specialists)
		Total: 56hrs	27 hrs	

CATEGORIZATION OF MODULAR CONTENT OF PATHOLOGY DEPARTMENT

CATEGORY A*	CATEGORY B**	CATEGORY C***		
LGIS	LGIS	SGDS	SDL	CBL
Infectious diseases of CNS Bacterial and viral meningitis	Diseases of myelin and neurodegenerative diseases Alzheimer disease, Parkinson's disease	Patterns of injury in nervous system physical traumatic head injury	Genetic Metabolic Diseases of CNS	Bone Infections And Fractures
Tumors of Skin	Patterns of injury in nervous system physical traumatic head injury		Toxic and Acquired Metabolic Diseases of CNS	Arthritis
Metabolic diseases of bone	Diseases of skeletal muscles and myopathies		Inherited Diseases of Skeletal Muscle	Soft Tissue Tumors And Tumor-Like Lesions
Inflammatory And Degenerative Diseases Of The Joint	Dermatosis & Infections of Skin		Peripheral Nerve Sheath Tumors	
Bone Tumors And Tumor-Like Lesions	Neuropathies, neuromuscular junction disorders		Infections of skin	
Tumors of CNS Gliomas neural tumors meningioma			Infectious Arthritis	

Category A*: Fundamental & Complex Concepts taken by Professors, Associate Professors and Assistant Professors
Category B**: Intermediate concepts. Exercises. By Professorial faculty and Senior Demonstrators/ subject specialists.
Category C***: Relatively lower complex concepts, exercises/ applications. By Assistant professors, Demonstrators)

Content of Community Medicine

LEARNING OBJECTIVES OF LARGE GROUP INTERACTIVE SESSIONS (LGIS)

TOPICS	CONTENTS OUTLINES (MAJOR TOPICS & SUB-TOPICS)	LEARNING OBJECTIVES AFTER THE SESSION STUDENTS WILL BE ABLE TO:	LEARNING DOMAIN	TEACHING STRATEGY	ASSESSMENT TOOL
Mental health	Components of Mental Health Etiological factors Preventive aspect of mental health	• Understand the components of mental health • Understand the etiological factors responsible for mental health • Comprehend the preventive aspect of mental health	C1, C2 C1, C2 C1, C2	LGIS	MCQs, SEQs
Ergonomics Occupational Health-I	Occupational Health Ergonomics Pneumoconiosis	• Define Occupational Health. • Enlist Occupational Hazards encountered in various occupations. • Elaborate the concept and significance of Ergonomics. • Define Pneumoconiosis. • Enumerate important diseases grouped under pneumoconiosis. • Describe the occupations and common features of silicosis. • Describe the occupations and common features of anthracosis. • Describe the occupations and common features of byssinosis.	C1, C2 C1, C2 C1, C2 C1, C2 C1, C2 C1, C2 C1, C2 C1, C2	LGIS	MCQs, SEQs
Dynamics of Social sciences	Social Sciences	• Define social sciences • Identify branches of social science • Define families and its types • Define Society and its types • Define culture and its components • Describe medical anthropology and its branches		LGIS	MCQs, SEQs
				LGIS	MCQs, SEQs

TOPICS	CONTENTS OUTLINES (MAJOR TOPICS & SUB-TOPICS)	LEARNING OBJECTIVES AFTER THE SESSION STUDENTS WILL BE ABLE TO:	LEARNING DOMAIN	TEACHING STRATEGY	ASSESSMENT TOOL
		• Appreciate anthropological methods • Research and anthropological techniques • Know human ecology			
Ergonomics Occupational Health-II	Lead Poisoning Sickness absenteeism Accidents in industry Health problems due to industrialization	• Explain the common features, occupations and diagnostic investigations of lead poisoning • Illustrate common causes and prevention of Sickness absenteeism. • Describe causes and impact on health of massive industrialization. • Enlist common hazards occurring in agricultural workers. • Describe functions of occupational health service.	C1, C2 C1, C2 C1, C2 C1, C2 C1, C2	LGIS	MCQs, SEQs
Concept of Behavioral sciences & mental health	Behavioral Science & Mental Health	• Describe behavior and its dynamics • Elaborate various human needs • Define attitude and its components • Recognize learning and its types • Differentiate between behavioral medicine & behavioral sciences • Illustrate habits • Discuss the types of personality and IQ		LGIS	MCQs, SEQs

COMMUNITY MEDICINE SMALL GROUP DISCUSSION SGD

DEMONSTRATION	CONTENTS OUTLINES (MAJOR TOPICS & SUB-TOPICS)	LEARNING OBJECTIVES	LEARNING DOMAIN	TEACHING STRATEGY	ASSESSMENT TOOL
	Behavioral Sciences & Life Style	• Understand behaviour • Identify types of emotions • identify and analyze the various ways in which emotions are expressed and communicated. • Evaluate roles of emotions in health and disease • Elaborate control of emotions • Define motivation and incentives.	C1, C2 C1, C2 C1, C2 C1, C2 C1, C2 C1, C2 C1, C2	SGD	MCQs, SEQs
	Drug abuse	• Define Drug Abuse • Discuss over the counter medication use and its side effects • Discuss Dependence producing drugs • Discuss Environmental and host factors responsible for drug abuse • Enlist Symptoms of drug abuse • Describe Prevention and rehabilitation strategies for drug addicts	C1, C2 C1, C2 C1, C2 C1, C2 C1, C2 C1, C2	SGD	MCQs, SEQs

SELF-DIRECTED LEARNING (SDL) COMMUNITY MEDICINE

Week 1

#	MAJOR TOPIC	CONTENTS OUTLINES / SUB-TOPICS	LEARNING OBJECTIVES. STUDENTS WILL BE ABLE TO …	LEARNING RESOURCE	ASSESSMENT TOOL -MCQS (TOS)	MODE OF ASSESSMENT
1	Dynamics of human behavior (Human psychology)	Intro to selected important relevant concepts of psychology relevant to community medicine	Students should be able to: • Describe dynamics of human behavior in terms of health behavior, illness behavior and treatment behavior • Comprehend learning as Behavior change. • Describe 3 types of learning	K Park Ed. 27th (673, 674, 676, 678)	5 MCQ	LMS-1

Week 2

2	Concepts of sociology relevant to community medicine	Intro to selected important relevant concepts of sociology relevant to epidemiology & medical research	Students should be able to: • Comprehend definitions of, Society, community, social structure & institution, social control mechanisms, • Comprehend customs, culture, social problems, social pathology, case study & field study.	1. K Park Ed. 27th (670-73)	5 MCQs	LMS-2

Week 3

1	Ethics of Medical Profession	Nuremberg Code Declaration of Geneva The Helsinki Declaration Oath of Medical and Dental Practitioners by PMDC International code of medical ethics	Students should be able to: Define and comprehend the rationale of medical ethics. Recognize the principle of medical ethics Knowledge of different codes of medical ethics Appreciate the principles of research ethics	Public health and community Medicine by Ilyas Shah Ansari, 8th edition,Chapter Biomedical ethics(318-328)	5 MCQs	LMS 3

Week 4

1	Measures of health protection of workers and prevention of occupational diseases	Measures of health protection of workers Medical measures Engineering measures Legislation	Students should be able to: Describe measures of health protection of workers Discuss various aspects of prevention of occupational diseases	K Park , Chapter Occupational Health(756-760)	5MCQs	LMS4

Human Resource of Department of Community Medicine

SR.NO.	DESIGNATION	TOTAL NUMBER OF TEACHING STAFF
1.	Professor	0
2.	Associate professor	2
3.	Assistant professor	2
4.	Demonstrators	4

Detail of Contact Hours community medicine (Faculty &Students)

SR. NO.	HOURS CALCULATION FOR VARIOUS TYPE OF TEACHING STRATEGIES	TOTAL HOURS (FACULTY)	TOTAL HOURS (STUDENTS)	FACULTY LEVEL
1.	LGIS (5). 1hrs each session (half class sessions)	5 x 2= 10 hrs.	5	Professor, Associate Professor, and Assistant Professors
2.	SGD (1) approx. 2hrs each session. 1/4th class	2x4x 2= 16 hrs.	4	Demos (subject specialists)
4.	SDL (4)	4 x 1=4	4	Demos (subject specialists)
		30 hours	13	

CATEGORIZATION OF MODULAR CONTENT OF COMMUNITY MEDICINE DEPARTMENT

CATEGORY A*	CATEGORY B**	CATEGORY C***	
LGIS	LGIS	SGDS	SDL
Occupational Health-I Ergonomics	Concept of Behavioral sciences & mental health	Drug Abuse / Behavioral Sciences & Life Style Drug Abuse / Behavioral Sciences & Life Style	Dynamics of human behavior (Human psychology).
Vector Born Diseases-I Epidemiology of Viral Hemorrhagic fever & Malaria, Vector Born Disease-II Bioethics			Concepts of sociology relevant to community medicine
Occupational Health-II	Dynamics of Social sciences		

Category A*: Fundamental & Complex Concepts taken by Professors, Associate Professors
Category B**: By Professorial faculty and Senior Demonstrators/ subject specialists
Category C***: By Assistant professors, Demonstrators

Community medicine Faculty Wise Lectures Allocation

Sr no	Faculty nominated	No of lectures
1.	(Assc Prof) Dr. Khola Noreen	01
2.	(Assc Prof) Dr. Sana Bilal	01
3.	(Asst Prof) Dr. Afifa kulsoom	01
4.	(Asst Prof) Dr Mehwish Riaz	01
5.	(APMO) Dr. Imrana Saeed	02
6.	(APMO) Dr Narjis Zaidi	01
7.	(Sr Demo) Dr. Asif Maqsood Butt	02
8.	Dr, Abdul Qudoos	01

Pharmacology content

LEARNING OBJECTIVES OF PHARMACOLOGY LGIS

TOPIC	LEARNING OBJECTIVES	LEARNING DOMAINS	TEACHING STRATEGY	ASSESSMENT TOOL
Central Neurotransmission	• Discuss the role of different neurotransmitters and their pharmacological importance	C2	LGIS	SEQ MCQ VIVA
Anti –Parkinsonism I	• Classify the drugs for the treatment of parkinsonism • Discuss important pharmacokinetic features	C1 C2	LGIS	SEQ MCQ VIVA
Anti –Parkinsonism II	• Discuss Pharmacodynamics of anti-Parkinsonism • Discuss adverse effects, drug interaction & Clinical uses	C2 C2	LGIS	SEQ MCQ VIVA
Sedative Hypnotics I	• Classify the drugs used as sedatives & Hypnotics • Discuss important pharmacokinetic features	C1 C2	LGIS	SEQ MCQ VIVA
Sedative Hypnotics II	• Discuss Pharmacodynamics of Sedatives& Hypnotics • Discuss adverse effects, drug interaction & Clinical uses	C2 C2	LGIS	SEQ MCQ VIVA
Skeletal Muscle Relaxants I	• Classify Skeletal Muscle Relaxants • Discuss important pharmacokinetic features	C1 C2	LGIS	SEQ MCQ VIVA
Skeletal Muscle Relaxants II	• Discuss Pharmacodynamics • Discuss adverse effects, drug interaction & Clinical uses	C1 C2	LGIS	SEQ MCQ VIVA
Local Anesthetics I	• Classify Local anesthetics • Discuss important pharmacokinetic features	C1 C2	LGIS	SEQ MCQ VIVA
Local Anesthetics II	• Discuss Pharmacodynamics • Discuss adverse effects, drug interaction & Clinical uses	C2 C2	LGIS	SEQ MCQ VIVA
General Anesthetics I Inhalational Anesthetics	• Classification of general anesthetic agents • Balanced anesthesia & MAC	C1 C2	LGIS	SEQ MCQ

TOPIC	LEARNING OBJECTIVES	LEARNING DOMAINS	TEACHING STRATEGY	ASSESSMENT TOOL
				VIVA
General Anesthetics II Inhalational Anesthetics	• Discuss important pharmacokinetic features • Discuss Nitrous oxide, Diffusional Hypoxia & Second gas effects	C2 C3	LGIS	SEQ MCQ VIVA
General Anesthetics III Intravenous Anesthetics	• Discuss Propofol & Ketamine • Important Pharmacokinetic & Pharmacodynamics • Discuss adverse effects & drug interactions	C2 C2 C2	LGIS	SEQ MCQ VIVA
General Anaesthetics IV Intravenous Anaesthetics	• Discuss anesthetic agents used in ICU with important Pharmacological features	C3	LGIS	SEQ MCQ VIVA
Anti-seizures I	• Classify the drugs for the seizures • Discuss important pharmacokinetic features	C1 C2	LGIS	SEQ MCQ VIVA
Anti-seizures II	• Discuss Pharmacodynamics of anti-seizures • Discuss adverse effects, drug interaction & Clinical uses	C2 C2	LGIS	SEQ MCQ VIVA
Drugs used in Migraine	• Classify anti migraine drugs • Explain MOA of each group • Describe the other therapeutic uses of each group • Describe the adverse effects of each group	C1 C2 C2 C2	LGIS	SEQ MCQ VIVA
Anti-depressants I	• Classify the drugs for the treatment of depression • Discuss important pharmacokinetic features	C1 C2	LGIS	SEQ MCQ VIVA
Anti-depressants II	• Discuss Pharmacodynamics of anti-depressive agents • Discuss adverse effects, drug interaction • Discuss rationale of use of anti-depressive agents in Other disorders	C2 C2 C2	LGIS	SEQ MCQ VIVA
Anti-psychotics I	• Classify the drugs for the treatment of psychosis • Differentiate between typical & atypical antipsychotics	C1 C3	LGIS	SEQ MCQ VIVA
Anti-psychotics II	• Discuss important pharmacokinetic features • Discuss Pharmacodynamics of anti-Parkinsonism • Discuss adverse effects, drug interaction & Clinical uses	C2 C2 C2	LGIS	SEQ MCQ VIVA

TOPIC	LEARNING OBJECTIVES	LEARNING DOMAINS	TEACHING STRATEGY	ASSESSMENT TOOL
Mood stabilizers	• Enumerate Mood Stabilizers • Describe the mechanism of action of Lithium • Describe the Uses of Lithium • Describe the adverse effects of Lithium	C1 C2 C2 C2	LGIS	SEQ MCQ VIVA
Anti-Rheumatics	• Enlist DMARDs • Describe the mechanism of action & rationale of use of important DMARDs	C1 C2	LGIS	SEQ MCQ VIVA
Drugs used in Gout	• Classify Drugs used in the treatment of Gout • Describe the role of Corticosteroids in the treatment • Describe the role of NSAIDs in the treatment of Gout	C2 C2 C2	LGIS	SEQ MCQ VIVA
Opioid analgesics I	• Enumerate Opioid analgesics • Discuss Pain theory	C1 C2	LGIS	SEQ MCQ VIVA
Opioid analgesics II	• Discuss Pharmacokinetics & Pharmacodynamics • Discuss adverse effects, drug interaction	C2 C2	LGIS	SEQ MCQ VIVA
Opioid analgesics III	• Discuss clinical uses • Discuss Opioid antagonists	C2 C2	LGIS	SEQ MCQ VIVA
NSAIDs I	• Classify NSAIDs • Describe the mechanism of action of NSAIDs • Describe the actions of Aspirin • Discuss the Shared Toxicities of NSAIDs • Discuss the adverse effects of Aspirin	C1 C2 C2 C2 C2	LGIS	SEQ MCQ VIVA
NSAIDs II	• Differentiate between Non-Selective COX Inhibitors and Selective COX-2 Inhibitors	C3	LGIS	SEQ MCQ VIVA
Alcohol	• Describe the metabolism of Alcohol • Describe Adverse Effects of Alcohol	C2 C2	LGIS	SEQ MCQ

TOPIC	LEARNING OBJECTIVES	LEARNING DOMAINS	TEACHING STRATEGY	ASSESSMENT TOOL
	• Describe pharmacological treatment of acute alcohol intoxication, alcohol withdrawal syndrome and alcoholism	C2		VIVA
Drug of abuse	• Discuss different drugs of abuse with important pharmacological features	C2	LGIS	SEQ MCQ VIVA

PHARMACOLOGY CBL

TOPIC	LEARNING OBJECTIVES	LEARNING DOMAIN	TEACHING STRATEGIES	ASSESSMENT TOOLS
Case Scenario Parkinsonism	• Apply relevant knowledge to the clinical case	C3	CBL	SEQ MCQ PBQ
Case scenario of sedatives & Hypnotics	• Apply relevant knowledge to the clinical case	C3	CBL	SEQ MCQ PBQ
Case scenario on Grand mal Epilepsy	• Apply relevant knowledge to the clinical case	C3	CBL	SEQ MCQ PBQ
Case scenario on Depression	• Apply relevant knowledge to the clinical case	C3	CBL	SEQ MCQ PBQ
Case scenario on Schizophrenia	• Apply relevant knowledge to the clinical case	C3	CBL	SEQ MCQ PBQ
Case scenario on Nicotine & Opioid poisoning	• Clinical Pharmacology of drugs used in nicotine and opioid poisoning	C3	CBL	PBQ
Case Scenario Parkinsonism	• Apply relevant knowledge to the clinical case	C3	CBL	SEQ MCQ PBQ

SELF-DIRECTED LEARNING (SDL) PHARMACOLOGY

SR. NO.	TOPIC	LEARNING OBJECTIVES	REFERENCE
1.	Role of neurotransmitter in physiology and pathology of CNS	• Discuss the role of inhibitory and excitatory neurotransmitters in mental health and disease	• Teleanu RI, Niculescu AG, Roza E, Vladâcenco O, Grumezescu AM, Teleanu DM. Neurotransmitters-Key Factors in Neurological and Neurodegenerative Disorders of the Central Nervous System. Int J Mol Sci. 2022 May 25;23(11):5954. doi: 10.3390/ijms23115954. PMID: 35682631; PMCID: PMC9180936.
2.	Pharmacological treatment of nicotine addiction	• Discuss the features of nicotine addiction • Describe different pharmacological strategies employed in nicotine addiction	• Giulietti, F., Filipponi, A., Rosettani, G. et al. Pharmacological Approach to Smoking Cessation: An Updated Review for Daily Clinical Practice. High Blood Press Cardiovasc Prev 27, 349–362 (2020). https://doi.org/10.1007/s40292-020-00396-9 • Pajai D D, Paul P, Reche A (February 16, 2023) Pharmacotherapy in Tobacco Cessation: A Narrative Review. Cureus 15(2): e35086. doi:10.7759/cureus.35086
3.	Multimodal analgesia	• Identify different agents used for analgesia • Discuss the mechanism of action of different types of analgesics • Discuss pain ladder management	• Paladini A, Varrassi G. Multimodal pharmacological analgesia in pain management. InPain Management-Practices, Novel Therapies and Bioactives 2020 Sep 3. London, UK: IntechOpen. • Ehrlich AT, Kieffer BL, Darcq E. Current strategies toward safer mu opioid receptor drugs for pain management. Expert opinion on therapeutic targets. 2019 Apr 3;23(4):315-26.
4.	Fetal outcomes of AED use during pregnancy	• Identify different effects of antiepileptic drug on fetus taken during pregnancy • Recognize anti-epileptic drugs considered relatively safe in pregnancy	• Nie Q, Su B, Wei J. Neurological teratogenic effects of antiepileptic drugs during pregnancy. Experimental and therapeutic medicine. 2016 Oct 1;12(4):2400-4. • Bjørk MH, Zoega H, Leinonen MK, Cohen JM, Dreier JW, Furu K, Gilhus NE, Gissler M, Hálfdánarson Ó, Igland J, Sun Y. Association of prenatal exposure to antiseizure medication with risk of autism and intellectual disability. JAMA neurology. 2022 Jul 1;79(7):672-81.

SR. NO.	TOPIC	LEARNING OBJECTIVES	REFERENCE
5.	Cognitive enhancers	• Define cognitive enhancers • Describe the mechanism of action of cognitive enhancers • Identify the clinical utility of different cognitive enhancers	• Malík M, Tlustoš P. Nootropics as cognitive enhancers: types, dosage and side effects of smart drugs. Nutrients. 2022 Aug 17;14(16):3367. • https://www.bma.org.uk/media/1068/bma_ cognitive_enhancing_drugs_and_the_workplace_oct_2019.pdf • Husain M, Mehta MA. Cognitive enhancement by drugs in health and disease. Trends in cognitive sciences. 2011 Jan 1;15(1):28-36.

Teaching Staff / Human Resource of Department of Pharmacology

Sr.no.	Designation	Total number of teaching staff
1	Professor	00
2	Associate professor	
3	Assistant professor	
4	Demonstrators	

Detail of Contact hours (faculty) **& contact hours** (students)

Sr. no.	Hours Calculation for Various Type of Teaching Strategies	Total Hours (Faculty)	Total Hours (Students)	Faculty level
1	LGIS (). 1hrs each session (half class sessions)	2 x 30= 60hrs.	30	Professor, associate, and assistant professors
3	CBL. 1hrs per session. (4 small group sessions.)	4 x7 = 24hrs.	7	Demos (subject specialists) supervised by professional faculties
4	Practical	3.5hr x1 = 3.5hr	1.5	
5	SDL ()	1 x5 =5 hrs.	5	Demos (subject specialists)
		Total: 89hrs	43.5 hrs	

Categorization of Modular Content of Pharmacology Department

Category A*	Category B**	Category C***		
LGIS	LGIS	SGDS	SDL	CBL

Category A*: Fundamental & Complex Concepts taken by Professors, Associate Professors and Assistant Professors
Category B**: Intermediate concepts. Exercises. By Professorial faculty and Senior Demonstrators/ subject specialists.
Category C***: Relatively lower complex concepts, exercises/ applications. By Assistant professors, Demonstrators)

Learning objectives Vertically integrated subjects

NEUROSURGERY

TOPIC	LEARNING OBJECTIVES	LEARNING DOMAIN	TEACHING STRATEGY	ASSESSMENT TOOL
Surgical Intervention of Head Injury	● Describe Pathophysiology involved in Head Injury ● Classify different types of Head Injuries ● Summarize the management plan for Head Injury Patients	C1,C2	LGIS	MCQS
Surgical Intervention of Brain Tumours	● Describe signs & symptoms of brain tumors ● Classify the types of brain tumors ● Enlist the common diagnostic modalities of brain tumors ● Summarize the management options including surgery	C2,C3	LGIS	MCQS
Surgical Interventions of Cerebrovascular malformation	● Recall anaotmy of Cerebrovasuclar malformation ● Classify different types of CV malformations ● Compare different investigation modalities ● Select appropriate surgical treatment plan ● Counsel patient/attendent for post-op care and followup	C1,2,3 A	LGIS	MCQS
Surgical Intervention of CNS Infections	● Enlist different types of CNS infections ● Identify different signs symptoms of CNS infections ● Compare different investigation modalities ● Select appropriate surgical treatment plan ● Counsel patient/attendent for post-op care and followup	C2.C3 A	LGIS	MCQS

ORTHOPEDICS

TOPIC	LEARNING OBJECTIVES	LEARNING DOMAIN	TEACHING STRATEGY	ASSESSMENT TOOL
Bone infection and fractures		C2 C3	LGIS	MCQS
Bone tumors	• Introduction • WHO classification • Radiographic assessment • Clinical presentation • Clinical examination • Benign bone tumors – Age distribution • Bone scan, CT, MRI • Surgical staging • Osteoid osteoma • Osteoblastoma • Osteochondroma • Enchondroma • Chondroblastoma • Unicameral bone cyst • Aneurysmal bone cyst • Giant cell tumor • Malignant tumors of Bone • Osteosarcoma • Ewing Sarcoma • Chondrosarcoma	C2 C3	LGIS	MCQS

TOPIC	• LEARNING OBJECTIVES	LEARNING DOMAIN	TEACHING STRATEGY	ASSESSMENT TOOL
Acute CNS infection (pyogenic Meningitis/encephalitis)	• Identify the pathological features of acute CNS infections • Differentiate between viral and bacterial CNS infections on the basis of • Clinical presentation and investigations • Interpret CSF examination report to formulate a diagnosis of CNS infections • Formulate a management plan for patients presenting with CNS infections	Cognitive	LGIS	MCQs
Tuberculous meningitis	• Identify clinical presentation and clinical signs of patients presenting with tuberculous meningitis. • Interpret CSF examination findings and neuroimaging to formulate a diagnosis of tuberculous meningitis.	Cognitive	LGIS	MCQs
Stroke	• Identify clinical presentation physical examination findings in a patient with stroke. • Describe risk factors and etiology of stroke • Differentiate between different types of stroke • Formulate a management plan for patients presenting with stroke. • Effectively counsel a patient presenting with stroke	Cognitive	LGIS	MCQs
Movement disorders	• Identify different clinical presentation of patients presenting with movement disorders • Identify medications used in management of movement disorders • Discuss the clinical variants of Parkinson's disease. • Identify the impact of movement disorders on quality of life if patient.	Cognitive	LGIS	MCQs

TOPIC	• LEARNING OBJECTIVES	LEARNING DOMAIN	TEACHING STRATEGY	ASSESSMENT TOOL
Osteoarthritis	• Correlate joint physiology with pathophysiology of osteoarthritis. • Formulate a differential diagnosis for patients with joint pains. • Identify clinical presentation of patients presenting with osteoarthritis • Formulate a management plan for patients presenting with osteoarthritis.	Cognitive	LGIS	MCQs
Overview of Rheumatological disorders	• Identify common presenting problems of various rheumatological disorders. • Differentiate between common rheumatological disorders based on their clinical presentations. • Formulate an investigation plan for diagnosis of patients presenting with rheumatologic disorders. • Formulate a management plan for patients with rheumatologic disorders.	Cognitive	LGIS	MCQs

PSYCHIATRY

TOPIC	LEARNING OBJECTIVES			MOT/MIT	FACILITATOR
	COGNITION	SKILLS	ATTITUDE		
Anxiety and Stress	To be able to define anxiety and stress keeping in view ICD 11 criteria To be able to discuss differential diagnosis and Prognosis of anxiety and stress To be able to outline a management plan of anxiety and stress keeping in view etiological, psychopathological and epidemiological factors.	---------	A3	LGIS/Power point presentation	Dr Qurrat Ul Ain Dr Sadia Yasir
Depressive disorder	Students should be able to define depression keeping in view ICD 11 criteria for depressive illness To be able to discuss differential diagnosis and Prognosis of depressive patients To be able to outline a management plan of a depressed patient keeping in view etiological, psychopathological and epidemiological factors. To be able to identify the risk of self-harm / suicide in a depressed patients	----------	A3	LGIS/Power point presentation	Dr Muhammad Azeem Rao Dr Mehboob Ali Shah
Psychosis	Be able to define Psychosis and describe how to recognize and diagnose psychotic condition. **(C1)** To summarize epidemiology, diagnostic criteria, clinical features, course and complications of psychotic illness. **(C2)** Recognize the common substances associated with psychosis. **(C2)** Describe the pharmacological and psychosocial treatments of psychotic illnesses. **(C3)**	----------	A3	LGIS/Power point presentation	Dr Qurrat Ul Ain Dr Sadia Yasir
Bipolar Affective Disorder (BAD)	Be able to define BAD according to ICD-11 diagnostic criteria. **(C1)** Identify various presentations and natural history, onset, course and prognostic features of BAD. **(C2)** Recognize the sign and symptoms of BAD and discuss its differential diagnosis with appropriate treatment plan. **(C3)**	----------	A3	LGIS/Power point presentation	Dr Muhammad Azeem Rao Dr Mehboob Ali Shah

LEARNING OUTCOMES DERMATOLOGY

Topic	Learning Objectives	Learning Domain	Teaching Strategy	Assessment tool
An approach to a patient with Lichen planus	At the end of lecture, the student should be able to 1-Describe the risk factors of Lichen planus 2-Describe the types according to morphology 3-Explain the modification of Lichen planus by site 4-Describe the clinical features of Lichen planus 5-Know the treatment options of Lichen planus	C2 C3	LGIS/PPT PRESENTATION	MCQS

PEDIATRICS (LGIS)

TOPIC	LEARNING OBJECTIVES	LEARNING DOMAIN	ASSESSMENT TOOL
Cerebral Palsy	• Define Cerebral palsy • Know etiology and classification • Describe different clinical presentation • Discuss the Differential diagnosis • Manage with multidisciplinary approach	C1 C2 C2 C2 C3	**MCQs**
Epilepsy	• Define epilepsy • Classification of epilepsy • Discuss differentials of epilepsy • Brief idea about epileptic syndromes • Discuss clinical features • Discuss plan of treatment Counseling aspects of management	C1 C2 C2 C2 C3	**MCQs**
Polio/GBS	• Define AFP • Make differential diagnosis of AFP • Discuss various types and clinical features of poliomyelitis • Plan pertinent investigations, interpret and take appropriate action • Immediately notify the case	C1 C2 C2 C2 C3	**MCQs**
Bacterial meningitis	• Define meningitis • Enlist common etiological factors according to age • Describe pathogenesis and clinical features • Plan pertinent investigations, interpret and take appropriate action • Make differential diagnosis • Monitor for complications • Enlist steps of management plan	C1 C2 C2 C2 C3 C3 C1	**MCQs**

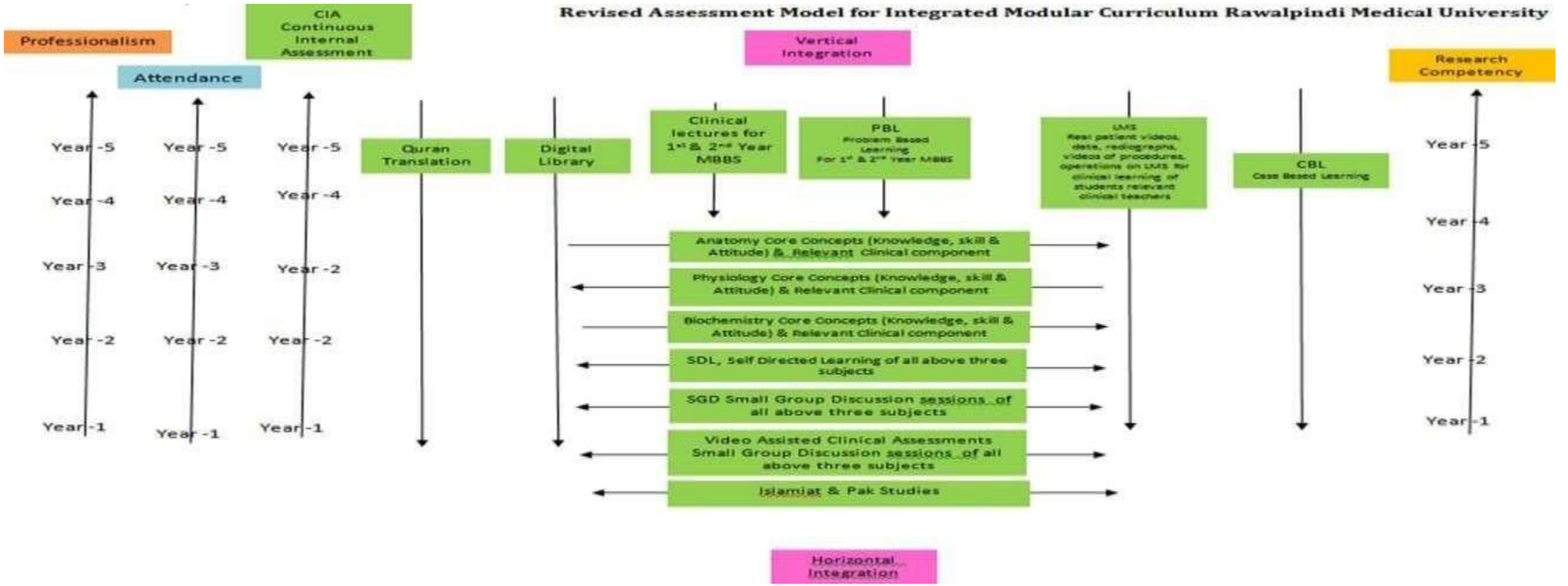
Learning Objectives of Family Medicine (LGIS)

S.NO	Broad topic	Major syllabus with sub-topics	Learning objectives	Learning domain	Assessment tools

Assessment Policies

CONTENTS:

1. Assessment Plan
2. Types of Assessment
3. Modular Examinations
4. Block examinations



Gauge for Continuous Internal Assessment (CIA)

Red Zone	High Alert	Yellow Zone	Green Zone	Excellent	Extra Ordinary
0 - 25%	26 - *50%	51 - 60%	61 – 70%	71 – 80%	81 - 100%

*50% and above is Passing Marks.

Gauge for attendance percentage

Red Zone	High Alert	Yellow Zone-1	Yellow Zone-2	Green Zone	Excellent
0 - 25%	26 - 50%	51 - 60%	61 – 74%	*75 – 80%	81 - 100%

*75% is eligibility criteria for appearing in professional examination.

Assessment Plan

Guidelines of Pakistan Medical and Dental Council for assessment. Assessment is conducted for SDL, SGD, mid modular, block/module levels.

Types of Assessment:

The assessment is formative and summative.

Formative Assessment: Formative assessment is taken from topics of SDL, SGD, LGIS (LMS).

Summative Assessment: Summative assessment is taken at the mid modular, modular/block

levels.

Modular Examinations:

Theory Paper:

There is an examination at the end of module. The content of the whole teaching of the module are tested in this examination.

It consists of paper with objective type questions, extended matching question, short answer questions and structured essay questions. The distribution of the questions is based on the Table of Specifications of the module.

Viva Voce:

Structured table viva voce is conducted including the practical content of

the module.

Block Examination

On completion of a block which consists of two modules, there is a block examination which consists of one theory paper, viva and video assisted & practical OSPE.

Theory Paper

There is one written paper for each subject. The paper consists of objective type questions, extended matching question, short answer questions and structured essay questions. The distribution of the questions is based on the Table of Specifications of the module.

Block OSPE: This covers the practical content of whole block.

ASSESSMENT TYPES

Types of Assessment:

1. Formative
2. summative

Formative Assessment

Formative assessment will be done at the end of module as reflective writing & multiple-choice questions through LMS. Assessment of clinical lectures will also be on LMS. Tool for this assessment will be one best choice question.

Summative Assessment:

Summative assessment will be taken weekly through LMS as well as at the end of module/ block and will be subject wise

ASSESSMENT FREQUENCY & TIME IN CNS & PSYCHIATRY MODULE

SR #	CNS & PSYCHIATRY MODULE TYPES OF ASSESSMENTS	TYPE OF ASSESSMENTS NATURE OF ASSESSMENT	TOTAL ASSESSMENT TIME ASSESSMENT TIME	SUMMATIVE ASSESSMENT TIME	FORMATIVE ASSESSMENT TIME	NO. OF ASSESSMENTS FORMATIVE	SUMMATIVE
1	Weekly LMS based assessments (pathology 20, Community Medicine 20, pharmacology20) (60 MCQs)60 marks	summative	60 Minutes per wk.=3hrs	15 hours	1hr 30 Minutes	02	05
3	End Module Examinations	Summative	Detailed below				
	Breakup of EOM Assessment						
	i. Community medicine (5SEQs,5 SAQs, 1 EMQ & 25 MCQs) 100 marks	Summative	3 Hrs.				
	ii. Pathology 5SEQs,7 SAQs, 1 EMQ and 25 MCQs) 100 marks	Summative	3 Hrs.				
	iii. Pharmacology 5SEQs,7 SAQs, 1 EMQ and 25 MCQs) 100 marks	Summative	3 Hrs.				
4	iv (video assisted OSPE) for each subject 10 stations(50 marks)	Summative	50 minutes				
	V. Ward test at the end of two weeks rotation in clinical subjects & End of clerkship C med		1 hr. 40 min				
5.	I. Reflective writing II. End Module LMS based MCQs (45 MCQs) 45 marks	formative	45+45=90 min				

TABLE OF SPECIFICATIONS (TOS)END OF WEEK ASSESSMENT (LMS)

S. No	Discipline	Type of Assessment	Number of MCQs	Cognitive domains			Marks
				C1	C2	C3	
	LMS 1						
1.	Community medicine	Summative	20	4	5	11	20
2.	Pathology	Summative	20	4	5	11	20
3.	Pharmacology	Summative	20	3	5	12	20
	LMS II						
4.	Medicine & Allied	Formative	10	2	3	5	10
5.	Surgery & Allied	Formative	20	4	5	11	10
6.	Bioethics, Research, AI, Family Medicine (Longitudinally running disciplines)	Formative	10	2	3	5	10
	Total		100	17	24	49	90

Types of Assessment ----------Community Medicine

S. NO	MODE OF ASSESSMENT	TYPE OF ASSESSMENT	SCHEDULE OF ASSESSMENT	VENUE	FREQUENCY
	End of wk. MCQ based Test	summative	Weekly	LMS	01 x no. of weeks
	Theory (MCQ+SEQ+ SAQs + EMQ)	Summative	End of module	On campus	01
	End of Block AV OSPE	Summative	End of module	On campus	01
	End of block practical OSPE	Summative	End of block	On campus	01
	End of block structured VIVA	Summative	End of block	On campus	01
	End of module MCQs test	formative	End of module	LMS	01
	End of clerkship Exam MCQs, OSCE	summative	end of clerkship batch	On campus	01 x 2 wks.

Type of Assessment ------ Pharmacology

S. NO	MODE OF ASSESSMENT	TYPE OF ASSESSMENT	SCHEDULE OF ASSESSMENT	VENUE	FREQUENCY
1.	End of wk. MCQ based Test	summative	Weekly	LMS	01 x no. of weeks
2.	Theory (MCQ+SEQ+ SAQs + EMQ)	Summative	End of module	On campus	01
3.	End of block AV & practical OSPE	Summative	End of block	On campus	01
4.	End of block structured VIVA	Summative	End of block	On campus	01
5.	End of module MCQs test	formative	End of module	LMS	01
6.	End of Skill lab Exam, MCQs	summative	End of module	On campus	01

Types of Assessment Pathology

S. No	Mode of Assessment	Type of Assessment	Schedule of Assessment	Venue	Remarks
1.	End of wk. MCQ based Test	summative	Weekly	LMS	01 x no. of weeks
2.	Theory (MCQ+SEQ+ SAQs + EMQ)	Summative	End of module	On campus	01
3.	End of block ,AV & practical OSPE	Summative	End of block	On campus	01
4.	End of block structured VIVA	Summative	End of block	On campus	01
5.	End of module One best option MCQs test	Formative	End of module	LMS	01
6.	End of Skill lab Exam, MCQs,	Summative		On campus	01

Table of Specification for End of Block Assessment (TOS)

Block Name& Order	Modules Names & Numbers	Subject	Theory			Scheme of Integration						Total marks Theory	Practical Assessment								Total Block marks	End of block LMS MCQs
			25 MCQs (1 mark each)	5+1 SAQ +EMQ (5 marks each)	5 SEQs (9marks each)	Core Subject. 70%		Hori- & Verti- Integ. 20%		*Spiral Integ. 10%			OSVE		OSPE (05 marks each)			Total marks Practical				
													Module I	Module 2	Observed	Unobserved	Video assisted					
Renal CNS & Psychiatry Block IV	Renal Module	Community medicine	25	25+5	45	19	46	4	12	2	7	100	10 stations -									
		Pharmacology	25	25+5	45	19	46	4	12	2	7	100	10 stations									
		Pathology	25	25+5	45	19	46	4	12	2	7	100	10 stations									
	CNS & Psychiatry Module	Community medicine	25	25+5	45	19	46	4	12	2	7	100	Viva marks	Book marks	Viva marks	Book marks	10 stations	10 stations	10 stations		400	30
													45	5	45	5	50	50	50	300		
		Pharmacology	25	25+5	45	19	46	4	12	2	7	100	45	5	45	5	50	50	50	300	400	30
		Pathology	25	25+5	45	19	46	4	12	2	7	100	45	5	45	5	50	50	50	300	400	30
		Gynae & Obs	25	25+1	45	19	46	4	12	2	7	100	100				50	50	50	250	350	30

Schedule of IUGRC session, 2024

Batch	Batch Incharge	Senior Faculty
A.	Dr Mehreen Noor	Dr Khola Noren
B.	Dr Ayesha Zujaja	Dr Imran Younis
C.	Dr Maria Jabeen	Dr Sana Bilal
D.	Dr Narjis Zaidi	Dr Rizwana Shahid
E.	Dr Imrana Saeed	--
F.	Dr Abdul Qudoos	Dr Mehwish Riaz
G.	Dr Bushra Farooq	Dr Afifa Kalsoom
H.	Dr Saba Maryam	Dr Arshad Sabir
I.	Dr Asif Maqsood	Dr Farah Parvaiz
J.	Dr Mehreen Noor	Dr Khola Noreen
K.	Dr Maria Jabeen	Dr Mehwish Riaz
L.	Dr Moniba Iqbal	Dr Rizwana Shahid
M.	Dr Bushra Farooq	Dr Sana Bilal
N.	Dr Zaira Azhar	Dr Arshad Sabir
O.	Dr Saba Maryam	Dr Afifa Kalsoom
P.	Dr Ayesha Zujaja	Dr Imran Younis

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TIMETABLE 4THYEAR MBBS-CNS & PSYCHIATRY MODULE 2024 (1STWEEK)

<table>
<tr><td></td><td colspan="3">8:00-9:00</td><td colspan="2">9:00-10:00</td><td colspan="8">10:30-2:00</td></tr>
<tr><td>Mon</td><td colspan="5" rowspan="6">RENAL MODULE ASSESSMENT</td><td colspan="8">Clinical clerkship & Batch Rotations</td></tr>
<tr><td rowspan="5">Tues

Wed

Thurs</td><td colspan="8" rowspan="5">1. Whole class will split into 16 batches, each comprising 20-22 students.
2. Each batch will attend clinical clerkship training for 4thyear MBBS students in the relevant clinical units or department in RMU Allied Hospitals and Departments under a pre-notified schedule (attached as annexure-I) and will a follow specific module of clerkship / Public health Practices / community oriented training module accordingly.
3. Clinical Clerkship module of Oto-rhinology (ENT) followed is attached as annexure-II
4. Clinical Clerkship module of Ophthalmology (EYE) followed is attached as annexure-Annexure-III
5. Clinical Clerkship module of Medicine followed is attached as annexure-IV
6. Clinical Clerkship module of Surgery followed is attached as annexure-V
7. Clinical Clerkship module of Gynae-Obstetric followed is attached as annexure-VI
8. Clinical Clerkship module of Cardiology followed is attached as annexure-VII
9. Clinical Clerkship module of Neurosurgery followed is attached as annexure-VIII
10. Public health Practices / community, oriented training module of Community Medicine Annexure-IX. (
11. IUGRC (integrated undergraduate research Curriculum) attached as annexure-X
Under training needs more than 1 batches may be combined accordingly</td></tr>
<tr></tr>
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<tr><td>Fri</td><td colspan="3">8.00am to 09.45am</td><td colspan="2">09.45AM – 10.30AM</td><td colspan="2">10.30-11.15</td><td colspan="2">11.15-12.00</td><td colspan="6"></td></tr>
<tr><td rowspan="6">13th Oct</td><td colspan="2">C. Medicine/Pharmacology</td><td colspan="2">Medicine</td><td colspan="2">Pharmacology</td><td colspan="2">Peads</td><td colspan="6"></td></tr>
<tr><td>(SGIS)</td><td>Practical</td><td colspan="2">(LGIS)</td><td colspan="2">(LGIS)</td><td colspan="2">LGIS</td><td colspan="6"></td></tr>
<tr><td></td><td>Reflex time</td><td colspan="2">CNS Infections (Acute Meningitis)</td><td colspan="2">Introduction to CNS Neurotransmission</td><td colspan="2">Meningitis</td><td colspan="6"></td></tr>
<tr><td>Batch A-H</td><td>Batch I-P</td><td>Even</td><td>Odd</td><td>Even</td><td>Odd</td><td>Even</td><td>Odd</td><td colspan="6"></td></tr>
<tr><td>Faculty</td><td>Faculty</td><td>Faculty 1</td><td>Faculty 2</td><td>Dr.Uzma</td><td>Dr.Tahira</td><td>Faculty 1</td><td>Faculty 2</td><td colspan="6"></td></tr>
<tr><td>Com-Med Dept</td><td>Pharma Lab</td><td>LH 4</td><td>LH 5</td><td>LH 4</td><td>LH 5</td><td>LH 4</td><td>LH 5</td><td colspan="6"></td></tr>
<tr><td rowspan="7">Sat 14th Oct</td><td colspan="3">8.00am to 09.45am</td><td colspan="2">09.45- 10.30AM</td><td colspan="2">10.30-11.15</td><td colspan="2">11:15-11:45</td><td colspan="2">11.45 – 12.30</td><td colspan="2">12.30-1.15PM</td><td colspan="2">1.15-2.00PM</td></tr>
<tr><td colspan="2">C.Medicine/Pharmacology</td><td colspan="2">Medicine</td><td colspan="2">Pathology</td><td colspan="2" rowspan="6"></td><td colspan="2">C.Medicine</td><td colspan="2">Peads</td><td colspan="2">Pathology</td></tr>
<tr><td>(SGIS)</td><td>Practical</td><td colspan="2">LGIS</td><td colspan="2">LGIS</td><td colspan="2">LGIS</td><td colspan="2">LGIS</td><td colspan="2">LGIS</td><td colspan="2">LGIS</td></tr>
<tr><td></td><td>Reflex time</td><td colspan="2">CNS infections (Tuberculous Infections)</td><td colspan="2">Infectious diseases of CNS Bacterial and viral meningitis</td><td colspan="2">Prevention of CNS infections & Medical Ethics</td><td colspan="2">Polio/GBS</td><td colspan="2">Neuropathies</td></tr>
<tr><td>Batches I- P</td><td>Batches A-H</td><td>Even</td><td>Odd</td><td>Even</td><td>Odd</td><td>Even</td><td>Odd</td><td>Even</td><td>Odd</td><td>Even</td><td>Odd</td><td>Even</td><td>Odd</td></tr>
<tr><td>Faculty</td><td>Faculty</td><td>Faculty 1</td><td>Faculty 2</td><td>Faculty 1</td><td>Faculty 2</td><td>Faculty 1</td><td>Faculty 2</td><td>Faculty 1</td><td>Faculty 2</td><td>Faculty 1</td><td>Faculty 2</td><td>Faculty 1</td><td>Faculty 2</td></tr>
<tr><td>Com-Med Dept</td><td>Pharma Lab</td><td>LH 4</td><td>LH 5</td><td>LH 4</td><td>LH 5</td><td>LH 4</td><td>LH 5</td><td>LH 4</td><td>LH 5</td><td>LH 4</td><td>LH 5</td><td>LH 4</td><td>LH 5</td></tr>
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TIMETABLE 4THYEAR MBBS-CNS & PSYCHIATRY MODULE 2024 (2ND WEEK)

	8:00-9:00		9:00-10:00		10:30-2:00
Mon	Surgery		Pharmacology		Clinical clerkship & Batch Rotations
16th Oct	Surgical intervention of CNS infections		Sedative Hypnotic I		1. Whole class will split into 16 batches, each comprising 20-22 students. 2. Each batch will attend clinical clerkship training for 4thyear MBBS students in the relevant clinical units or department in RMU Allied Hospitals and Departments under a pre-notified schedule (attached as annexure-I) and will a follow specific module of clerkship / Public health Practices / community oriented training module accordingly. 3. Clinical Clerkship module of Oto-rhinology (ENT) followed is attached as annexure-II 4. Clinical Clerkship module of Ophthalmology (EYE) followed is attached as annexure-Annexure-III 5. Clinical Clerkship module of Medicine followed is attached as annexure-IV 6. Clinical Clerkship module of Surgery followed is attached as annexure-V 7. Clinical Clerkship module of Gynae-Obstetric followed is attached as annexure-VI 8. Clinical Clerkship module of Cardiology followed is attached as annexure-VII 9. Clinical Clerkship module of Neurosurgery followed is attached as annexure-VIII 10. Public health Practices / community, oriented training module of Community Medicine Annexure-IX. (11. IUGRC (integrated undergraduate research Curriculum) attached as annexure-X Under training needs more than 1 batches may be combined accordingly
	Faculty 1	Faculty 2	Dr.Asma	Dr.Attiya	
	Odds	Even	Odds	Even	
	LHl 1	LH 2	LH 1	LH2	
Tues	Psychiatry		Pharmacology		
17th Oct	Anxiety & Stress		Sedatives & Hypnotics II		
	Faculty 1	Faculty 2	Dr.Asma	Dr.Attiya	
	Odds	Even	Odds	Even	
	LH 1	LH 2	LH1	LH 2	
Wed	C.Medicine		Pharmacology		
18th Oct	Mental Health		Anti-Depression I		
	Faculty 1	Faculty 2	Dr.Zunera	Dr.Attiya	
	Odds	Even	Odds	Even	
	LH 1	LHl 2	LH 1,	LH 2,	
Thurs	Pharmacology		Pharmacology(CBL)		
19th Oct	Anti-Depression II		Sedatives & Hypnotics Depression		
	Dr.Zunera	Dr.Attiya	Dr.Arsheen ,Dr.Uzma	Dr.Rubina Dr.Zaheer	
	Odds	Even	Odds	Even	
	LH 1	LH 2	LH 1	LH2	

	8.00am to 09.45am		09.45AM – 10.30AM		10.30-11.15		11.15-12.00					
Fri												
20th Oct	C.Medicine/Pharmacology		Psychiatry				C.Medicine					
	(SGIS)	Practical	Depression		(LGIS)		LGIS					
		CNS Depressants					Social Sciences					
	Batch A-H	Batch I-P	Even	Odd	Even	Odd	Even	Odd				
	Faculty 1	Dr.Zoefishan, Dr.Tahira			Faculty 1	Faculty 2	Faculty 1	Faculty 2				
	Com-Med Dept	Pharma lab	LH 4	LH 5	LH 4	LH 5	LH 4	LH 5				
Sat 21st Oct	8.00am to 09.45am		09.45- 10.30AM		10.30-11.15		11:15-11:45		11.45 – 12.30		12.30-1.15PM		1.15-2.00PM	
	C.Medicine/Pharmacology		Pharmacology		Pharmacology				Obs/Gynae		C.Medicine		Psychaitry	
	(SGIS)	Practical	LGIS		LGIS				LGIS		LGIS		LGIS	
		CNS Depressants	Anti-Psychotic I		Anti-Psychotic II				Puerperal Psychosis		Behaviour Changes		Psychosis	
	Batches I-P	Batches A-H	Even	Odd	Even	Odd			Even	Odd	Even	Odd	Even	Odd
	Faculty 1	Dr.Zoefishan, Dr.Tahira	Dr.Asma	Dr.Tahira	Dr.Asma	Dr.Tahira			Faculty 1	Faculty 2	Faculty 1	Faculty 2	Faculty 1	Faculty 2
	Com-Med Dept	Pharma Lab	LH 4	LH 5	LH 4	LH 5			LH 4	LH 5	LH 4	LH 5	LH 4	LH 5

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TIMETABLE 4TH YEAR MBBS-CNS & PSYCHIATRY MODULE 2024 (3RD WEEK)

	8:00-9:00		9:00-10:00		10:30-2:00
Mon	Psychiatry		Pharmacology		Clinical clerkship & Batch Rotations
23rd Oct	Bipolar Disorder		Mood Stabilizer		1. Whole class will split into 16 batches, each comprising 20-22 students. 2. Each batch will attend clinical clerkship training for 4thyear MBBS students in the relevant clinical units or department in RMU Allied Hospitals and Departments under a pre-notified schedule (attached as annexure-I) and will a follow specific module of clerkship / Public health Practices / community oriented training module accordingly. 3. Clinical Clerkship module of Oto-rhinology (ENT) followed is attached as annexure-II 4. Clinical Clerkship module of Ophthalmology (EYE) followed is attached as annexure-Annexure-III 5. Clinical Clerkship module of Medicine followed is attached as annexure-IV 6. Clinical Clerkship module of Surgery followed is attached as annexure-V 7. Clinical Clerkship module of Gynae-Obstetric followed is attached as annexure-VI 8. Clinical Clerkship module of Cardiology followed is attached as annexure-VII 9. Clinical Clerkship module of Neurosurgery followed is attached as annexure-VIII 10. Public health Practices / community, oriented training module of Community Medicine Annexure-IX. (11. IUGRC (integrated undergraduate research Curriculum) attached as annexure-X Under training needs more than 1 batches may be combined accordingly
	Faculty 1	Faculty 2	Dr.Asma	Dr.Tahira	
	Odds	Even	Odds	Even	
	LHl 1	LH 2	LH 1	LH2	
Tues	C.Medicine		Pharmacology		
24th Oct	Sickness absenteeism & function of occupational health services		Alcohol & Drug of Abuse		
	Faculty 1	Faculty 2	Dr.Attiya	Dr.Zunera	
	Odds	Even	Odds	Even	
	LH 1	LH 2	LH1	LH 2	
Wed	Dermatology(LGIS)				
25th Oct	An approach to a patient with Psoriasis				
	Faculty 1	Faculty 2	Faculty 1	Faculty 2	
	Odds	Even	Odds	Even	
	LH 1	LHl 2	LH 1	LH 2	
Thurs	Surgery		Pathology		
26th Oct	Surgical Intervention of Head Injury		Patterns of injury in nervous system physical traumatic head injury Congenital Disorders		
	Faculty 1	Faculty 2	Faculty 1	Faculty 2	
	Odds	Even	Odds	Even	
	LH 1	LH 2	LH 1	LH2	

Fri	8.00am to 09.45am		09.45AM – 10.30AM		10.30-11.15		11.15-12.00	
27th Oct	Pathology/Pharmacology		Dermatology		C.Medicine		Peads	
	Practical	Practical	(LGIS)		(LGIS)		LGIS	
	Brain and nerve tumor morphology	CNS Stimulants	An approach to a patient with bacterial skin infections and scabies		Concept of ergonomics & pneumoconiosis		Cerebral Palsy	
	Batch A-H	Batch I-P	Even	Odd	Even	Odd	Even	Odd
	Faculty	Dr.Zoefishan, Dr.Tahira	Faculty 1	Faculty 2	Dr.Zunera	Dr.Attiya	Faculty 1	Faculty 2
	Patho Dept	Pharma lab	LH 4	LH 5	LH 4	LH 5	LH 4	LH 5

Sat 28th Oct	8.00am to 09.45am		09.45- 10.30AM		10.30-11.15		11:15-11:45	11.45 – 12.30		12.30-1.15PM		1.15-2.00PM	
	Pathology/Pharmacology		Medicine		Pathology			Surgery		Community Medicine		Dermatology	
	Practical	Practical	LGIS		LGIS			LGIS		LGIS		LGIS	
	Brain and nerve tumor morphology	CNS Stimulants	Stroke		Tumours of CNS Gliomas neural tumours meningioma			Surgical intervention of brain tumours		Emporiatrics		Clinical evaluation of a rash	
	Batches I-P	Batches A-H	Even	Odd	Even	Odd		Even	Odd	Even	Odd	Even	Odd
	Faculty	Dr.Zoefishan, Dr.Tahira	Faculty 1	Faculty 2	Faculty 1	Faculty 2		Faculty 1	Faculty 2	Faculty 1	Faculty 2	Faculty 1	Faculty 2
	Patho Dpt	Pharma lab	LH 4	LH 5	LH 4	LH 5		LH 4	LH 5	LH 4	LH 5	LH 4	LH 5

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TIMETABLE 4TH YEAR MBBS-CNS & PSYCHIATRY MODULE 2024 (4TH WEEK)

	8:00-9:00		9:00-10:00		10:30-2:00									
Mon	Surgery		Pharmacology		Clinical clerkship & Batch Rotations									
30th Oct	Thromboembolism		GA I		1. Whole class will split into 16 batches, each comprising 20-22 students. 2. Each batch will attend clinical clerkship training for 4thyear MBBS students in the relevant clinical units or department in RMU Allied Hospitals and Departments under a pre-notified schedule (attached as annexure-I) and will a follow specific module of clerkship / Public health Practices / community oriented training module accordingly. 3. Clinical Clerkship module of Oto-rhinology (ENT) followed is attached as annexure-II 4. Clinical Clerkship module of Ophthalmology (EYE) followed is attached as annexure-Annexure-III 5. Clinical Clerkship module of Medicine followed is attached as annexure-IV 6. Clinical Clerkship module of Surgery followed is attached as annexure-V 7. Clinical Clerkship module of Gynae-Obstetric followed is attached as annexure-VI 8. Clinical Clerkship module of Cardiology followed is attached as annexure-VII 9. Clinical Clerkship module of Neurosurgery followed is attached as annexure-VIII 10. Public health Practices / community, oriented training module of Community Medicine Annexure-IX. (11. IUGRC (integrated undergraduate research Curriculum) attached as annexure-X Under training needs more than 1 batches may be combined accordingly									
	Faculty 1	Faculty 2	Dr.Asma	Dr.Haseeba										
	Odds	Even	Odds	Even										
	LHl 1	LH 2	LH 1	LH2										
Tues	Pharmacology		Surgery											
31st Oct	GA II		Surgical interventions of cerebrovascular malformation											
	Dr.Asma	Dr.Haseeba	Faculty 1	Faculty 2										
	Odds	Even	Odds	Even										
	LH 1	LH 2	LH1	LH 2										
Wed	Anaesthesia		Pharmacology											
1st Nov	Basic anaesthesia & its types		GA III											
	Faculty 1	Faculty 2	Dr.Asma	Dr.Haseeba										
	Odds	Even	Odds	Even										
	LH 1	LHl 2	LH 1	LH 2										
Thurs	Pathology		Pharmacology											
2nd Nov	Diseases of myelin and neurodegenerative diseases alzheimers disease, Parkinson.s disease and others		Drugs used in Parkinsonism (classification)											
	Faculty 1	Faculty 2	Dr.Rubina	Dr.Uzma										
	Odds	Even	Odds	Even										
	LH 1	LH 2	LH 1	LH2										
Fri	8.00am to 09.45am		09.45AM – 10.30AM		10.30-11.15		11.15-12.00							
3rd Nov	Pathology/Pharmacology		Anaesthesia		Medicine		Pharmacology							
	Practical	Practical	(LGIS)		(LGIS)		LGIS							
	Soft Tissue Tumor Morphology	Parkinsonism & MG	Basic Drug Monitoring		Movement disorders (Parkinson's disease, Huntington's disease)		Drugs Used In Parkinsonism II							
	Batch A-H	Batch I-P	Even	Odd	Even	Odd	Even	Odd						
	Faculty	Dr.Tahira Dr.Zoefishan	Faculty 1	Faculty 2	Faculty 1	Faculty 2	Dr.Rubina	Dr.Uzma						
	Patho Lab	Pharma Lab	LH 4	LH 5	LH 4	LH 5	LH 4	LH 5						
Sat 4th Nov	8.00am to 09.45am		09.45- 10.30AM		10.30-11.15		11:15-11:45		11.45 – 12.30		12.30-1.15PM		1.15-2.00PM	
	Pathology/Pharmacology		Pharmacology		Pharmacology				Peads		Medicine		Pharmacology	
	Practical	Practical	LGIS		LGIS				LGIS		LGIS		CBL	
	Soft tissue tumour Morphology	Parkinsonism & MG	Epilepsy I		Epilepsy II				Epilepsy in Infants		Epilepsy		Epilepsy & Schizophrenia	
	Batches I-P	Batches A-H	Even	Odd	Even	Odd			Even	Odd	Even	Odd	Even	Odd
	Faculty	Dr.Tahira Dr.Zoefishan	Dr.Asma	Dr.Attiya	Dr.Asma	Dr.Attiya			Faculty 1	Faculty 2	Faculty 1	Faculty 2	Dr.Arsheen ,Dr.Uzma	Dr.Rubina Dr.Zaheer
	Patho lab	Pharma Lab	LH 4	LH 5	LH 4	LH 5			LH 4	LH 5	LH 4	LH 5	LH 4	LH 5

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TIMETABLE 4TH YEAR MBBS-CNS & PSYCHIATRY MODULE 2024 (5TH WEEK)

	8:00-9:00		9:00-10:00		10:30-2:00
Mon	Surgery		Pathology		Clinical clerkship & Batch Rotations
6th Nov	Bone Infections And Fractures		Metabolic diseases of bone		1. Whole class will split into 16 batches, each comprising 20-22 students. 2. Each batch will attend clinical clerkship training for 4thyear MBBS students in the relevant clinical units or department in RMU Allied Hospitals and Departments under a pre-notified schedule (attached as annexure-I) and will a follow specific module of clerkship / Public health Practices / community oriented training module accordingly. 3. Clinical Clerkship module of Oto-rhinology (ENT) followed is attached as annexure-II 4. Clinical Clerkship module of Ophthalmology (EYE) followed is attached as annexure-Annexure-III 5. Clinical Clerkship module of Medicine followed is attached as annexure-IV 6. Clinical Clerkship module of Surgery followed is attached as annexure-V 7. Clinical Clerkship module of Gynae-Obstetric followed is attached as annexure-VI 8. Clinical Clerkship module of Cardiology followed is attached as annexure-VII 9. Clinical Clerkship module of Neurosurgery followed is attached as annexure-VIII 10. Public health Practices / community, oriented training module of Community Medicine Annexure-IX. (11. IUGRC (integrated undergraduate research Curriculum) attached as annexure-X Under training needs more than 1 batches may be combined accordingly
	Faculty 1	Faculty 2	Faculty 1	Faculty 2	
	Odds	Even	Odds	Even	
	LHl 1	LH 2	LH 1	LH2	
Tues	Pharmacology		Pharmacology		
7th Nov	NSAIDS I (Classification)		NSAIDS II (MOA & Adverse effects)		
	Dr.Zunera	Dr.Attiya	Dr.Zunera	Dr.Attiya	
	Odds	Even	Odds	Even	
	LH 1	LH 2	LH1	LH 2	
Wed	Pathology		Dermatology		
8th Nov	Bone Infections And Fractures		An approach to a patient with cutaneous leishmaniosis or leprosy		
	Faculty 1	Faculty 2	Faculty 1	Faculty 2	
	Odds	Even	Odds	Even	
	LH 1	LHl 2	LH 1	LH 2	
Thurs	Medicine		Pharmacology		
9th Nov	Osteoarthritis		Drugs used in Migraine		
	Faculty 1	Faculty 2	Dr.Attiya	Dr.Zunera	
	Odds	Even	Odds	Even	
	LH 1	LH 2	LH 1	LH2	

	8.00am to 09.45am		09.45AM – 10.30AM		10.30-11.15		11.15-12.00		Developmental (Genetic) And Acquired Abnormalities In Bone Cells, Matrix, And Structure Osteomyelitis
Fri									
10th Nov	Pathology/Pharmacology		Surgery		Pathology		Dermatology		
	Practical	Practical	(LGIS)		LGIS		LGIS		
	Bone Tumor Morphology	RA,GA,OA	Surgical Intervention of bone tumours		Bone Tumours And Tumour-Like Lesions		An approach to a patient with eczematous disorders		
	Batch A-H	Batch I-P	Even	Odd	Even	Odd	Even	Odd	
	Faculty	Dr.Tahira Dr.Zoefishan	Faculty 1	Faculty 2	Dr.Arsheen ,Dr.Uzma	Dr.Rubina Dr.Zaheer	Dr.Asma	Dr.Haseeba	
	Patho lab	Pharma lab	LH 4	LH 5	LH 4	LH 5	LH 4	LH 5	

	8.00am to 09.45am		09.45- 10.30AM		10.30-11.15		11:15-11:45	11.45 – 12.30		12.30-1.15PM		1.15-2.00PM	
Sat 11th Nov	Pathology/Pharmacology		Medicine		Pathology			Pathology		Pharmacology		Pharmacology	
	Practical	Practical	LGIS		LGIS			LGIS		LGIS		LGIS	
	Bone Tumor Morphology	RA,GA,OA	Overview of Rhuematological diseases		Inflammatory And Degenerative Diseases Of The Joint			Infectious arthritis		Anti-Rheumatic		Anti-Gout Drugs	
	Batches I-P	Batches A-H	Even	Odd	Even	Odd		Even	Odd	Even	Odd	Even	Odd
	Faculty	Dr.Tahira Dr.Zoefishan	Faculty 1	Faculty 2	Faculty 1	Faculty 2				Dr.Attiya	Dr.Zunera	Dr.Zunera	Dr.Haseeba
	Patho lab	Pharma Lab	LH 4	LH 5	LH 4	LH 5		LH 4	LH 5	LH 4	LH 5	LH 4	LH 5

Rawalpindi medical University Rawalpindi

TIMETABLE 4TH YEAR MBBS-CNS & PSYCHIATRY MODULE 2024 (6TH WEEK)

	8:00-9:00		9:00-10:00		10:30-2:00							
Mon	Peads		Pathology		Clinical clerkship & Batch Rotations							
13th Nov	Muscular Dystrophy		Diseases of skeletal muscles Denervation atrophy muscular dystrophy congenital myopathies		1. Whole class will split into 16 batches, each comprising 20-22 students. 2. Each batch will attend clinical clerkship training for 4thyear MBBS students in the relevant clinical units or department in RMU Allied Hospitals and Departments under a pre-notified schedule (attached as annexure-I) and will a follow specific module of clerkship / Public health Practices / community oriented training module accordingly. 3. Clinical Clerkship module of Oto-rhinology (ENT) followed is attached as annexure-II 4. Clinical Clerkship module of Ophthalmology (EYE) followed is attached as annexure-Annexure-III 5. Clinical Clerkship module of Medicine followed is attached as annexure-IV 6. Clinical Clerkship module of Surgery followed is attached as annexure-V 7. Clinical Clerkship module of Gynae-Obstetric followed is attached as annexure-VI 8. Clinical Clerkship module of Cardiology followed is attached as annexure-VII 9. Clinical Clerkship module of Neurosurgery followed is attached as annexure-VIII 10. Public health Practices / community, oriented training module of Community Medicine Annexure-IX. (11. IUGRC (integrated undergraduate research Curriculum) attached as annexure-X Under training needs more than 1 batches may be combined accordingly							
	Faculty 1	Faculty 2	Faculty 1	Faculty 2								
	Odds	Even	Odds	Even								
	LHl 1	LH 2	LH 1	LH2								
Tues	Pathology		Pharmacology									
14th Nov	Classification, Pathogenesis & General Features Soft Tissue Tumours And Tumour-Like Lesions		Opioid Analgesics I									
	Faculty 1	Faculty 2	Dr.Zunera	Dr.Attiya								
	Odds	Even	Odds	Even								
	LH 1	LH 2	LH1	LH 2								
Wed	Dermatology		Pharmacology									
15th Nov	An approach to a patient with urticaria		Opioid Analgesic II									
	Faculty 1	Faculty 2	Dr.Zunera	Dr.Attiya								
	Odds	Even	Odds	Even								
	LH 1	LHl 2	LH 1	LH 2								
Thurs	Pathology		Pharmacolgy									
16th Nov	Tumours Of Adipose Tissue, Skeletal Muscle, Smooth Muscles And Vascular Tissue		Skeletal Muscle Relaxants (Classifications)									
	Faculty 1	Faculty 2	Dr.Asma	Dr.Zunera								
	Odds	Even	Odds	Even								
	LH 1	LH 2	LH 1	LH2								
Fri	8.00am to 09.45am		09.45AM – 10.30AM		10.30-11.15		11.15-12.00					
17th Nov	Pathology/Pharmacology		Pharmacology		Pathology		Pharmacology					
	Practical	Practical	(LGIS)		LGIS		CBL					
	Morphology of Skin Tumours	Reflex Time & Copy checking	Skeletal Muscle Relaxants (Mechanism of Action & adverse effects		Myopathies neuromuscular junction disorders tumours of skeletal muscle		Nicotine & Opioid poisoning					
	Batch A-H	Batch I-P	Even	Odd	Even	Odd	Even	Odd				
	Faculty	Dr.Zoefishan Dr.Tahira	Dr.Asma	Dr.Zunera	Faculty 1	Faculty 2	Dr.Uzma Dr.Arsheen	Dr.Rubina Dr.Zaheer				
	Patho Lab	Pharma dept	LH 4	LH 5	LH 4	LH 5		LH 5				
Sat 18th Nov	8.00am to 09.45am		09.45- 10.30AM		10.30-11.15		11:15-11:45		11.45 – 12.30		12.30-1.15PM		1.15-2.00PM	
	Pathology/Pharmacology				Pathology				Pharmacology		Pharmacology		Pathology	
	Practical	Practical	LGIS		LGIS				LGIS		LGIS		LGIS	
	Morphology of skin Tumours	Reflex time & Copy checking			Tumours of skin				Local Anaesthetics I		Local Anaesthetics II		Dermatosis Infections	
	Batches I-P	Batches A-H	Even	Odd	Even	Odd			Even	Odd	Even	Odd	Even	Odd

	Faculty	Dr.Zoefishan Dr.Tahira	Faculty 1	Faculty 2	Dr.Asma	Dr.Haseeba		Dr.Zunera	Dr.Attiya	Dr.Zunera	Dr.Attiya	Faculty 1	Faculty 2
	Patho lab	Pharma Lab	LH 4	LH 5	LH 4	LH 5		LH 4	LH 5	LH 4	LH 5	LH 4	LH 5

Rawalpindi medical University Rawalpindi

TIMETABLE 4TH YEAR MBBS-CNS & PSYCHIATRY MODULE 2024 (7TH WEEK)

	8:00-9:00	9:00-10:00	10:30-2:00
Mon			
20th Nov			END OF BLOCK EXAMINATION
Tues 21st Nov Wed			
22nd Nov			
Thurs 23rd Nov			
Fri 24th Nov			
Sat 25th Nov			

Community Oriented Clerkship Module (annex I)

Theme (AIM):

The primary purpose of this module is to educate students in those areas of the subject of CM&PH which are learnt better by onsite presence of the students at certain sites, processes, agencies which have public health relevance and in general community setting. Moreover some, areas of the subject which demands close interactive teachings in small group like HHS data analysis & report writing skills, contraceptive use skills, vaccination skills, etc are also covered during this rotation. All opportunities available within and outside the institution within affordable logistics, time, are focused for this purpose. A short time of this batch rotation is dedicated for health education communication practices as Health awareness work and other social work.

LEARNING OUTCOMES (LOS):

At the end of this learning module students are expected to achieve following Public health Competencies as will be able to:

1. Undertake a population-based health survey (HHS)
2. Appreciate working of First level Care Facility (Public Sector)
3. Perform Community Immunization / EPI vaccinations.
4. Develop Hospital waste management plans.
5. Develop Community based health awareness message.
6. Communicate for Health awareness in community settings.
7. Commemorate International public health days.
8. Develop Hospital administration Plans.
9. Undertake Preventive healthcare inquiries and NCDs Risk Factors Surveillance
10. Counsel for the contraceptive devices to the community

MODULE OUTLINE:

- A batch comprising 20-22 students is posted in the department of CM & PH for a period of 2weeks **(Monday to Thursday-04 hrs. /day & for 32hrs in total**). This schedule is run over the whole academic year, till all students of 4th year MBBS class passes through this rotation.
- Batch formation and schedules of rotation for whole class as notified by the DME / Student's section will be followed accordingly.
- At commencement of the academic year overall batch learning module coordinator, nomination of batch in-charges, senior faculty in charges and calendar schedule of batch rotation for all batches over the whole academic year will be notified by the Department of CM & PH.

Domains of learning: learning will occur in all the three domains C, A & P

SOPS OF LEARNING & ASSESSMENTS:

- Active participation will be graded by the batch in charge (under a check list) during the activity / session and grades/marks will be entered in the practical manual as out of 05 (Max marks 05) by the batch in charge. O5 Max Marks are reserved for CHC (HMDTD and Health awareness work.
- Assessment will be done by OSPE / MCQs Exam / Viva voce at the end of each module and credit will be objectively recorded for the purpose of internal assessment. (Max mark 10)
- General assessment of the subject learning will be through MCQs, SEQs & OSPE on the relevant subjects in the relevant end of modules, block exams and Send up Exams.
- **Students are required to report / write the relevant work in Practical Journal, House Hold Survey Report Book and log all the clerkship activities in the Logbook on daily basis.**

Da y	**Activity -I 10.30 – 11.00**	**Activity – II 11.00- 11.30am**	**Activity III 11.30- 01.00pm**	**Act-V 01.00 – 2.00pm**	**Sites of teaching-learning**	**Assessment**	**Session outcome (level of learning)**
	Session topic	Session topic	Session topic	Session topic			
1st day	instructing / demonstrati on on Practical Manual based Assignment s	• Visit to CHC • SGIS on Health days commemor ation work, Display material, PPT.	• SGIS on HMDTD practicum. Topic finalization, CHC-Message draft outlines finalization.	• PPT based Demo on How to conduct & report HHS. • Guidelines on PHI work to be done during clinical rotations / ward duties	• Demonstration on n / lec Hall 3 • CHC - Dept. CM NTB RMU.	• 1-2 OSPE in end of clerkship exam (credit will part of IA) • Assessment of HHS - Report (Max marks:5 part practical /viva exam 4th Prof MBBS)	• Construct a health message. (C6) • Prepare Health days commemoration stuff, Display material, PPT, (P) • Undertake a health survey. (HHS) (C3)

2nd day	Follow up session on. - HM-DTD work - HHS work - health days commemoration work	SGIS/ Briefing / PPT based guidelines on field visit of the day (EPI services center HFH)	FV to the EPI center HFH	Health awareness work (HAW)	• Demo Room, • EPI Center HFH • OPD, hospital shelters sites for health awareness work (HAW)	• 1-2 OSPE in end of clerkship exam (credit will part of IA) • Grade of performance in EPI visit reporting. • Credit of HAW	• Explain cold chain component at EPI center • Vaccinate (EPI) vaccines to the clients. • Comprehend EPI system
3rd day	Follow up session on HM- DTD work & HHS	SGIS / Briefing / PPT based guidelines on FV to MCH & FP Services Center HFH	FV to the MCH services & FP center HFH	Health awareness work (HAW)	• FP Center HFH • OPD, hospital shelters sites for HAW	• 1-2 OSPE in end of clerkship exam (credit will part of IA) • Grade of performance in EPI visit reporting. • Credit of HAW	• Identify CP devices available at MHC FP center • Counsel clients for use of a contraception method • Place CP devices to client (P)
4th day	Follow up session on HM- DTD work & HHS	Briefing / guidelines on FV Hospital waste disposal system in hospitals	• FV to the hospital waste disposal system & relevant sites/ Incinerator	Health awareness work (HAW)	• FP Center HFH OPD, hospital shelters sites for HAW	• End of module OSPE • Grade of performance in visits to sites	• Explain hospital waste disposal system • Develop a hospital waste management plan • Explains various domains of hospital management (C2)

5th day, week 2)	SGIS / PPT based briefing on Hospital management & administration on	Visit to Hospital management & administration (HFH) office	Health awareness work (HAW	HHF	• End of module OSPE • Grade of performance in visits to sites	
6th day	SGIS / PPT based briefing on visit to First level of health care facility (FLCF) BHU/RHC	Field visit to RHC Khayaban Sir-Syed (RHC) or BHU	• Demo room / lec Hall 3 NTB / CPC-Hall. • RHC / BHU	Health awareness work (HAW at site visited	• End of module OSPE • Report credit in PJ	• Explain working of FLCF • Appreciate PHC elements at FLCF. (C2)
7th day	Health days commemoration (walk/ seminar/ presentation/ CHC-message dissemination work (10.30 – 12.00pm)		12.00 – 2.00pm • Completion & assessment of relevant Practical Journal work, • HHS-report book, • Logbook etc. • Feedback discussion on PHI		• Communication skills • Comprehend frequency Preventable RFs of NCDs in the real population (RF surveillance) • Undertake a preventive Healthcare inquiry	

Note:

1. Colander schedule of each batch will be noticed by the Department of community Medicine prior to the commencement of the batch rotation.
2. Students will have to record all activities of the clerkship in the relevant Logbook accordingly. Students will keep logbook updated and duly signed by faculties & departments.

Clinical Training Rotations 4th Year MBBS

(SESSION 2023-2024)

STARTING w.e.f. 19-02-2024 ENDING 20-11-2024.

Date	Medicine /Neurolo gy DHQ	OBS/GYN HFH I & II	OBS/GYN BBH & DHQ	C.ME D	E.N.T. H.F.H.	E.N. T. B.B. H	E.N. T. D.H. Q	Medicine DHQ	EYE H.F.H	EYE B.B. H.	EYE DHQ	PEA DS H.F. H	PEA DS B.B. H.	CARDI O	PAT H	NEUR OSUR GERY
19-02-24 To 03-03-24	A	B1, HFH-1 B2, HFH-2	C1, BBH C2, DHQ	D	E	F	G	H	I	J	K	L	M	N	O	P
04-03-24 to 17-03-24	B	C1, HFH-1 C2, HFH-2	D1, BBH D2, DHQ	E	F	G	H	I	J	K	L	N		O	P	A
18-03-24 To 31-03-24	C	D1, HFH-1 D2, HFH-2	E1, BBH E2, DHQ	F	G	H	I	J	K	L	M		O	P	A	B
01-04-24 To 21-04-24 S.V	D	E1, HFH-1 E2, HFH-2	F1, BBH F2, DHQ	G	H	I	J	K	L	M	N	P		A	B	C

22-04-24 To 12-05-24 (S.W)	**E**	**F1, HFH-1 F2, HFH-2**	**G1, BBH G2, DHQ**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**A**	**B**	**C**	**D**
13-05-24 To 26-05-24	**F**	**G1, HFH-1 G2, HFH-2**	**H1, BBH H2, DHQ**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**B**	A	**C**	**D**	**E**
27-05-24 To 09-05-24	**G**	**H1, HFH-1 H2, HFH-2**	**I1, BBH I2, DHQ**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**A**	**B**	**C**	**D**	**E**	**F**
10-06-24 To 23-06-24	**H**	**I1, HFH-1 I2, HFH-2**	**J1, BBH J2, DHQ**	**K**	**L**	**M**	**N**	**O**	**P**	**A**	**B**	**D**		**E**	**F**	**G**
24-06-24 To 08-08-24	**I**	**J1, HFH-1 J2, HFH-2**	**K1, BBH K2, DHQ**	**L**	**M**	**N**	**O**	**P**	**A**	**B**	**C**		**E**	**F**	**G**	**H**

05-08-24 To 18-08-24	**J**	**K1, HFH-1 K2, HFH-2**	**L1, BBH L2, DHQ**	**M**	**N**	**O**	**P**	**A**	**B**	**C**	**D**	**F**		**G**	**H**	**I**
19-08-24 To 01-09-24	**K**	**L1, HFH-1 L2, HFH-2**	**M1, BBH M2, DHQ**	**N**	**O**	**P**	**A**	**B**	**C**	**D**	**E**		**G**	**H**	**I**	**J**
02-09-24 To 15-09-24	**L**	**M1, HFH-1 M2, HFH-2**	**N1, BBH N2, DHQ**	**O**	**P**	**A**	**B**	**C**	**D**	**E**	**F**	**H**		**I**	**G**	**K**
16-09-24 To 29-09-24	**M**	**N1, HFH-1 N2, HFH-2**	**O1, BBH O2, DHQ**	**P**	**A**	**B**	**C**	**D**	**E**	**F**	**G**		**I**	**J**	**K**	**L**
30-09-24 To 13-10-24	**N**	**O1, HFH-1 O2, HFH-2**	**P1, BBH P2, DHQ**	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**J**		**K**	**L**	**M**

14-10-24 To 27-10-24	**O**	**P1, HFH-1 P2, HFH-2**	**A1, BBH A2, DHQ**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**		**K**	**L**	**M**	**N**
28-10-24 To 10-11-24	**P**	**A1, HFH-1 A2, HFH-2**	**B1, BBH B2, DHQ**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**L**		**M**	**N**	**O**
Date	**Medicine /Neurology DHQ**	**OBS/GYN HFH I & II**	**OBS/GYN BBH & DHQ**	**C.MED**	**E.N.T. H.F.H.**	**E.N.T. B.B.H.**	**E.N.T. D.H.Q**	**ENT / EYE HFH / HFH**	**EYE H.F.H**	**EYE B.B.H.**	**EYE DHQ**	**PEADS H.F.H**	**PEADS B.B.H.**	**CARDIO**	**PATH**	**NEUROSURGERY**

Vice Chancellor
Rawalpindi Medical University
Rawalpindi

No. T-9/_____/RMU, RWP. Dated_____2024.

Copy to all concerned Departments.
You are also informing to send revised lecture schedule.

Research

Cultivating the culture of Research has always been envisioned as one of the main pillars of Rawalpindi Medical University, as a means to develop healthcare professionals capable of contributing to the development of their country and the world. For the purpose thereof, right from the inception of Rawalpindi Medical University, efforts were concentrated to establish a comprehensive framework for research in Rawalpindi Medical University, as a matter of prime importance. With team efforts of specialists in the field of research, framework was made during the first year of the RMU, for the development and promotion of Research activities in RMU, called the Research Model of RMU, giving clear scheme and plan for establishment of required components for not only promoting, facilitating and monitoring the research activities but also to promote entrepreneurship through research for future development of RMU itself.

Biomedical Ethics

Ethical choices, both minor and major, confront us every day in the provision of health care for persons with diverse values living in a pluralistic and multicultural society.

Four commonly accepted principles of health care ethics, excerpted from Beauchamp and Childress (2008), include the:

1. Principle of respect for autonomy,
2. Principle of no maleficence, 3. Principle of beneficence, and 4. Principle of justice.

Family Medicine

Family Medicine is the primary care medical specialty concerned with provision of comprehensive health care to the individual and the family regardless of sex, age or type of problem. It is the specialty of breadth that integrates the biological, clinical and behavioral sciences. Family physicians can themselves provide care for the majority of conditions encountered in the ambulatory setting and integrate all necessary health care services.

Artificial Intelligence

Artificial intelligence in medicine is the use of machine learning models to search medical data and uncover insights to help improve health outcomes and patient experiences. Artificial intelligence (AI) is quickly becoming an integral part of modern healthcare. AI algorithms and other applications powered by AI are being used to support medical professionals in clinical settings and in ongoing research. Currently, the most common roles for AI in medical settings are clinical decision support and imaging analysis.