





## Study Guide

Third Year MBBS 2023

Foundation Module -II

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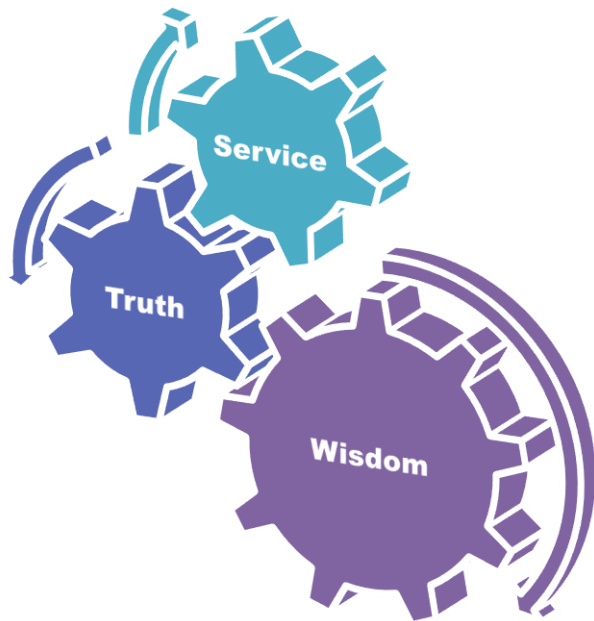
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## Module Team

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 Duration of module : 04 Weeks  
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 Review by : Module Committee

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RMU Motto



## University Moto, Vision, Values & Goals

### 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.

## Module II- Foundation Module

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

Rationale: The foundation module is designed to impart basic knowledge about Pharmacology, Pathology, Forensic Medicine, Community Medicine, Research, Medicine & Surgery. This knowledge will serve as base on which the student will construct further knowledge about the etiology, pathogenesis and prevention of diseases; the principles of their therapeutics and management.

### Module Outcomes

Each student will be able to:

#### Knowledge

Acquire knowledge about the basic terminologies used in Pharmacology, Pathology & Forensic Medicine as well as the concepts of diseases in the community

- Appreciate concepts & importance of
- Research
- Biomedical Ethics
- Family Medicine
- Use technology based medical education including Artificial Intelligence.

#### Skills

- Interpret and analyze various practical of Pre-clinical Sciences

#### Attitude

- Demonstrate a professional attitude, team building spirit and good communication skills

This module will run in 4 weeks duration. The content will be covered through introduction of topics. Instructional strategies are given in the time table and learning objectives are given in the study guides. Study guides will be uploaded on the university website. Good luck!

## Section I – Terms & Abbreviations

### Contents

- Domains of Learning
- Teaching and Learning Methodologies/Strategies
  - Large Group Interactive Session (LGIS)
  - Small Group Discussion (SGD)
  - Self-Directed Learning (SDL)
  - Case Based Learning (CBL)

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Domains of learning according to BloomsTaxonomy
- Figure 1.  
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- Table2.  
Standardization of teaching content inSmall Group  
Discussions
- Table 3.  
Steps of taking Small Group Discussions



Table1.

Domains of learning according to Blooms Taxonomy

Sr. #	Abbreviation	Domains of learning
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.

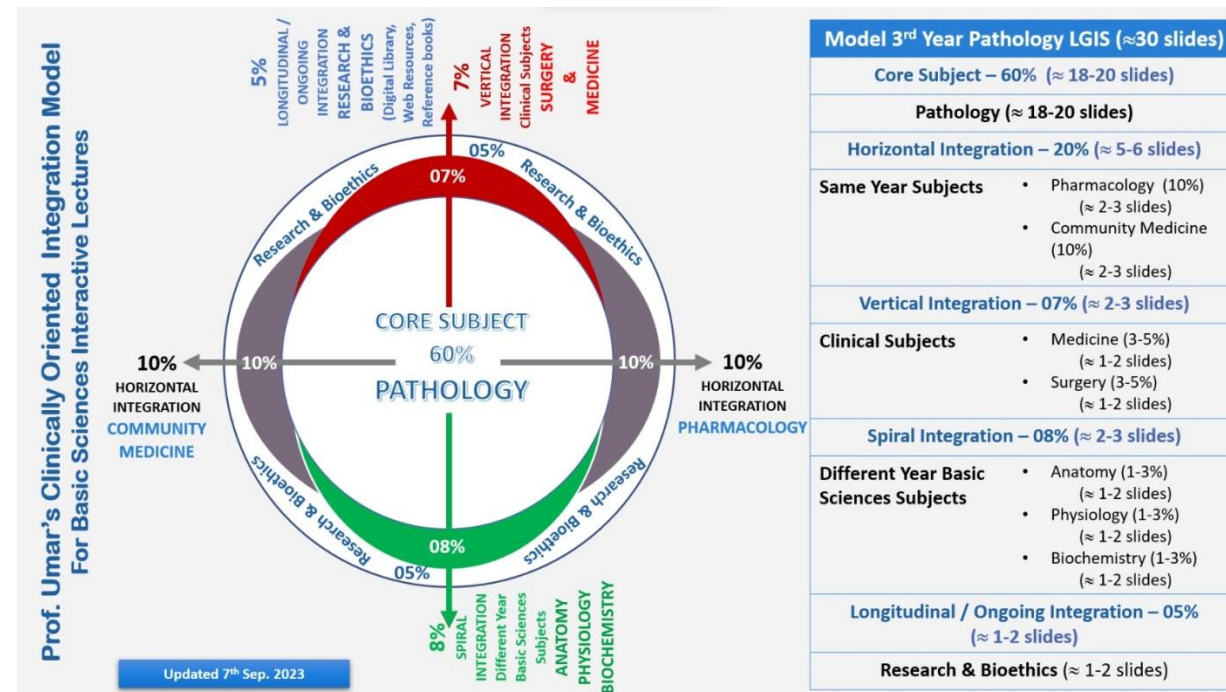


Figure 1. Prof Umar's Model of Integrated Lecture

## 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.

Table 3. Steps of conducting Small Group Discussions

Table 2.

### Standardization of teaching content in Small Group Discussions

S.No	Topics	Approximate %
1	Title Of SGD	
2	Learning Objectives from Study Guides	
3	Horizontal Integration	5%+5%=10%
4	Core Concepts of the topic	60%
5	Vertical Integration	20%
6	Related Advance Research points	3%
7	Related Ethical points	2%

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 to 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

### 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 (Mid module/ end of Module)

### Case Based Learning (CBL)

- It's a learner centered model which engages students in discussion of specific scenarios that resemble typically are 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.

## Section II-

### Learning Objectives, Teaching Strategies & Assessments

#### Contents

- Horizontally Integrated Clinical Sciences (Pharmacology, Pathology & Forensic Medicine)
- Large Group Interactive Session:
  - Pharmacology (LGIS)
  - Pathology (LGIS)
  - Forensic Medicine (LGIS)
- Small Group Discussions
  - Pharmacology (SGD)
  - Pathology (SGD)
  - Forensic Medicine (SGD)
- Self-Directed Topic, Learning Objectives & References
  - Pharmacology(SDL)
  - Pathology (SDL)
  - Forensic Medicine (SDL)
  - Practical
- Vertical horizontal integration
  - Medicine & Allied
  - Surgery & Allied

## Learning objectives Week 1

Code No	Topic	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching strategies	Assessment tools
L-1	Role of radiology Assessment in personal identity	Forensic medicine	<ul style="list-style-type: none"> <li>Define ossification centers</li> </ul>	C2	LGIS	MCQ SEQs VIVA
			<ul style="list-style-type: none"> <li>Enlist ossification centers in bones and their appearance with relation to age.</li> </ul>	C1		
			<ul style="list-style-type: none"> <li>Assessment of age of an individual using radiology</li> </ul>	C3		
			<ul style="list-style-type: none"> <li>Assessment of sex of skeletal remains</li> </ul>	C3		
			<ul style="list-style-type: none"> <li>Forensic assessment of a skeletal injury</li> </ul>	C3		
L-2	Role of D.N.A finger printing in personal identity	Forensic medicine	<ul style="list-style-type: none"> <li>Describe the pattern of fingerprints</li> </ul>	C2	LGIS	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Define Dactylography, Poroscopy, Footprint, and DNA finger printing</li> </ul>	C1		
			<ul style="list-style-type: none"> <li>Define the forensic importance and application of DNA finger printing</li> </ul>	C1		
L-3	Introduction to ANS	Pharmacology	<ul style="list-style-type: none"> <li>Describe the general organization of autonomic nervous system</li> </ul>	C2	LGIS	MCQ SEQs VIVA
			<ul style="list-style-type: none"> <li>Describe the basic characteristic of sympathetic and parasympathetic systems</li> </ul>	C2		
L-4	Symptomology- 1 (common symptoms)	Medicine	<ul style="list-style-type: none"> <li>Recognize common symptoms including dyspnea, chest pain, cough, palpitations, vomiting, fever, edema, dysuria and fatigue.</li> </ul>	C1	LGIS	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Distinguish between acute, chronic and persistent symptoms.</li> </ul>	C4		
			<ul style="list-style-type: none"> <li>Knows important steps involved in history taking of common symptoms.</li> </ul>	C1		
			<ul style="list-style-type: none"> <li>Recognize abnormal lab findings in common symptoms</li> </ul>	C1		
L-5	Introduction to toxicology	Forensic Medicine	<ul style="list-style-type: none"> <li>Define legal definition of a poison</li> </ul>	C1	LGIS	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Describe route of administration of poisons</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Discuss the factors which modify the actions of poison</li> </ul>	C2		
L-6	Pathophysiology of Thrombo- embolism	Pathology	<ul style="list-style-type: none"> <li>Define Thrombus &amp;Virchow's triad</li> </ul>	C1	LGIS	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Describe Causes of hypercoagulability</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Explain fate of thrombus, morphology of venous thrombosis</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Differentiate between arterial and venous thrombosis</li> </ul>	C3		
			<ul style="list-style-type: none"> <li>Correlate pathogenesis of Disseminated-intravascular coagulation clinical presentation</li> </ul>	C3		
			<ul style="list-style-type: none"> <li>Classify embolism on the basis of etiology</li> </ul>	C1		
S-1	Edema	Pathology	<ul style="list-style-type: none"> <li>Classify edema on the basis of etiology and pathogenesis</li> </ul>	C3	SGD	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Differentiate b/w edema in various clinical settings</li> </ul>	C3		

Date: 2nd March, 2023 by DME, New Teaching Block

			•			
L-7	Sympathomimetics I (classification)	Pharmacology	<ul style="list-style-type: none"> <li>Classify Sympathomimetics</li> <li>Identify receptors selectivity of sympathomimetic drugs</li> </ul>	C1	LGIS	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Discuss structure activity relationship of sympathomimetics</li> </ul>	C1		
			<ul style="list-style-type: none"> <li>Differentiate between catecholamines and non catecholamines</li> </ul>	C2		
			<ul style="list-style-type: none"> <li></li> </ul>	C3		
L-8	Investigations and Diagnosis in surgery	Surgery	<ul style="list-style-type: none"> <li>Understand the basic principles of radiation protection and know the law in relation to the use of ionizing radiation</li> <li>Understand the principles of different imaging techniques and their advantages and disadvantages in different clinical scenarios</li> <li>Discuss the role of imaging in directing treatment in various surgical scenarios</li> </ul>	C2	LGIS	MCQs SEQs
			<ul style="list-style-type: none"> <li></li> </ul>	C3		
			<ul style="list-style-type: none"> <li></li> </ul>	C2		
L-9	Sympathomimetics-II (directly acting drugs)	Pharmacology	<ul style="list-style-type: none"> <li>Describe the pharmacological affects, produced by sympathomimetics</li> <li>Enlist uses and adverse effect of sympathomimetics</li> </ul>	C2	LGIS	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li></li> </ul>	C1		
L-10	Sympathomimetics-III (indirectly acting drugs)	Pharmacology	<ul style="list-style-type: none"> <li>Compare different sympathomimetics in relation with epinephrine</li> </ul>	C1	LGIS	MCQs SEQs VIVA
L-11	Symptomology- II (specific symptoms and lab investigations)	Medicine	<ul style="list-style-type: none"> <li>Recognize important signs during clinical Assessment.</li> <li>Recognize abnormal lab findings in common symptoms</li> </ul>	C1	LGIS	MCQs SEQs
			<ul style="list-style-type: none"> <li></li> </ul>	C1		
S-2	Morphological changes in Infarction	Pathology	<ul style="list-style-type: none"> <li>Define Infarct.</li> <li>Explain types of infarct.</li> <li>Explain causes, of infarct.</li> <li>Describe morphology of infarct.</li> </ul>	C1	SGD	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li></li> </ul>	C2		
			<ul style="list-style-type: none"> <li></li> </ul>	C2		
			<ul style="list-style-type: none"> <li></li> </ul>	C2		
C-1	Anaphylactic shock	Pharmacology	<ul style="list-style-type: none"> <li>Manage the given case</li> <li>Describe the effect of epinephrine on vascular and pulmonary systems and the receptors involved</li> <li>Enlist other uses and adverse effects of epinephrine</li> <li>Explain the epinephrine reversal phenomenon</li> <li></li> </ul>	C3	CBL	PBQS
			<ul style="list-style-type: none"> <li></li> </ul>	C2		
			<ul style="list-style-type: none"> <li></li> </ul>	C1		
			<ul style="list-style-type: none"> <li></li> </ul>	C2		
			<ul style="list-style-type: none"> <li></li> </ul>			

**2<sup>nd</sup> Week**

Code no	Topic	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching strategies	Assessment tools
S-3	Types of hemorrhage	Pathology	• Define Hemorrhage.	C1	SGD	MCQs SEQs VIVA
			• Describe Normal coagulation cascade.	C2		
			• Enlist Types of hemorrhages with examples.	C1		
			• Describe Concept of Petechiae, ecchymosis, bruises	C2		
C-2	Etio-pathogenesis of Shock	Pathology	• Define shock	C1	CBL	PBQS
			• Classify shock on the basis of etio-pathogenesis	C3		
			• Correlate the stages of shock with underlying pathogenic mechanisms	C3		
			• Identify the type of shock in clinical setting and the stage	C2		
			• Describe the Biochemical and immune-abnormalities in shock	C3		
			• Relate the need of diagnosis in emergency situations	C2		
L-12	$\alpha$ – Blockers	Pharmacology	• Classify alpha adrenergic blockers	C1	LGIS	MCQs SEQs VIVA
			• Describe the mechanism of action, pharmacological effects, uses and adverse effects of $\alpha$ – blockers.	C2		
			• Discuss “epinephrine reversal”	C2		
L-13	Beta blockers-I (classification)	Pharmacology	• Classify beta adrenergic blockers	C1	LGIS	MCQs SEQs VIVA
			• Describe the mechanism of action of beta adrenergic blockers	C2		
L-14	Beta blockers-II (mechanism of action)	Pharmacology	• Describe the pharmacological effects of beta adrenergic blockers	C2	LGIS	MCQs SEQs VIVA
L-15	Classification of poisons	Forensic Medicine	• Describe the symptomatic classification of poisons with examples of each group.	C2	LGIS	MCQs SEQs VIVA
L-16	Imaniyet-1V	The Holy Quran			LGIS	MCQs
S-4	Introduction to genetics	Pathology	• Define Genetics	C1	SGD	MCQs SEQs VIVA
			• Describe history and branches of genetics	C2		
			• Explain relationship between genes and human diseases	C2		
			• Enlist different types of changes in DNA which lead to genetic disease	C2		
			• Demonstrate the importance of patient confidentiality.	A2		
L-17	Perioperative care	Surgery	• To understand preoperative preparation for surgery. • Concept of taking consent	C2	LGIS	MCQs SEQs



			<ul style="list-style-type: none"> <li>To understand basics of postoperative care in surgery</li> </ul>	C2		VIVA
L-18	Beta Blockers-III (clinical uses and adverse effects)	Pharmacology	<ul style="list-style-type: none"> <li>Describe the uses and adverse effects of beta blockers</li> </ul>	C1	CBL	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Discuss absolute and relative contraindications of beta blockers</li> </ul>	C2		
L-19	Mendelian Disorders	Pathology	<ul style="list-style-type: none"> <li>Explain Mandelin's laws of genetics.</li> </ul>	C2	LGIS	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Correlate inheritance with pathogenesis of various genetic disorders</li> </ul>	C3		
L-20	Introduction to child growth and development	Peds	<ul style="list-style-type: none"> <li>Describe the developmental milestones according to gross motor, fine motor, vision, hearing, speech and social behavior at different ages.</li> </ul>	C2	LGIS	MCQs SEQs
			<ul style="list-style-type: none"> <li>Assess developmental age.</li> </ul>	C3		
			<ul style="list-style-type: none"> <li>Recognize warning signs for developmental delay.</li> </ul>	C3		
L-21	Shock and Blood transfusion	Surgery	<ul style="list-style-type: none"> <li>To understand the pathophysiology of shock and ischaemia– reperfusion injury</li> </ul>	C2	LGIS	MCQs SEQs
			<ul style="list-style-type: none"> <li>Use of blood and blood products, the benefits and risks of blood transfusion</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>The different patterns of shock and the principles and priorities of resuscitation</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Appropriate monitoring and end points of resuscitation</li> </ul>	C2		
S-5	Types of gene disorders and Prenatal diagnosis	Pathology	<ul style="list-style-type: none"> <li>Classify normal Karyotype</li> </ul>	C1	SGD	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Explain chromosomal disorders of autosomes and sex chromosomes</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Explain Down' syndrome and turner's syndrome</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Explain single gene disorders with non-classical inheritance.</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Explain multifactorial genetic disorders</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Identify diseases caused by triplet repeat mutation</li> </ul>	C2		
C-4	Beta blockers	Pharmacology	<ul style="list-style-type: none"> <li>Discuss the clinical pharmacology of beta blockers</li> </ul>	C2	CBL	PBQS
			<ul style="list-style-type: none"> <li>Rationalize the use of specific beta blockers in specific clinical situations</li> </ul>	C3		
L-22	Classification of antidotes	Forensic Medicine	<ul style="list-style-type: none"> <li>Define antidotes</li> </ul>	C1	LGIS	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Classify antidotes</li> </ul>	C1		
			<ul style="list-style-type: none"> <li>Preparation of universal antidote</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Classification of antidotes and their uses in respective poisoning</li> </ul>	C2		
L-23	History taking fundamentals	Family medicine	<ul style="list-style-type: none"> <li>To define the components of history taking</li> </ul>	C2	LGIS	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>To understand chief complains and presenting problem of patient.</li> </ul>	C2		

P1	Pharmacological calculations III	Pharmacology	<ul style="list-style-type: none"> <li>Solve the pharmacological calculations using the basic formulae</li> </ul>	P1	practical	OSPE
P2	Chronic Venous Congestion, Thrombosis, Infarction	Pathology	<ul style="list-style-type: none"> <li>Illustrate morphology of Chronic Venous Congestion, Thrombosis and Infarction with help of diagram</li> </ul>	P3	practical	OSPE
			<ul style="list-style-type: none"> <li>Interpret report of coagulation profile</li> </ul>	P3		
			<ul style="list-style-type: none"> <li>Be considerate of cost effectiveness and risk-benefit analysis while ordering investigations in a patient</li> </ul>	A2		
P3	Role of radiology in personal identity	Forensic medicine	The list of ossification centers in bones and their appearance with relation to age.	P1	practical	OSPE
			<ul style="list-style-type: none"> <li>Assessment of age of an individual using radiology</li> </ul>	P1		
			<ul style="list-style-type: none"> <li>Assessment of sex of skeletal remains</li> </ul>	P2		
			<ul style="list-style-type: none"> <li>Forensic assessment of a skeletal injury</li> </ul>	P2		

**3<sup>rd</sup> Week**

Cod e no	Topic	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching strategies	Assessment tools
L-24	Parasympathomimetics-I (directly acting)	Pharmacology	<ul style="list-style-type: none"> <li>Identify location of cholinergic receptors and molecular mechanism of their activation</li> </ul>	C1	LGIS	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Classify cholinomimetic</li> </ul>	C1		
			<ul style="list-style-type: none"> <li>Describe the pharmacological effects produced by the activation of these receptors</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Describe uses and adverse effects of cholinomimetic.</li> </ul>	C2		
L-25	Parasympathomimetics-II (indirectly acting)	Pharmacology	<ul style="list-style-type: none"> <li>Classify anticholinesterases</li> </ul>	C1	LGIS	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Describe the mechanism of action and adverse effects of anticholinesterases</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Enlist their clinical uses</li> </ul>	C1		
			<ul style="list-style-type: none"> <li>Outline the role of anticholinesterase in the diagnosis and treatment of myasthenia gravis</li> </ul>	C2		
L-26	Anti cholinergics-I (classification and mechanism of action)	Pharmacology	<ul style="list-style-type: none"> <li>Classify anticholinergic drugs (chemical &amp; therapeutic).</li> </ul>	C2	LGIS	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Discuss in detail pharmacokinetics, mechanism of action, pharmacological action, therapeutic uses &amp; adverse effects of anticholinergics.</li> </ul>	C2		
L-27	Anti cholinergics-II	Pharmacology	<ul style="list-style-type: none"> <li>Compare &amp; contrast hyoscine &amp; atropine.</li> </ul>	C3	LGIS	MCQs SEQs VIVA
S-6	Single-Gene Disorders	Pathology	<ul style="list-style-type: none"> <li>Enlist various single gene disorders</li> </ul>	C1	SGD	PBQs
			<ul style="list-style-type: none"> <li>Describe the mechanisms involved in single gene disorders</li> </ul>	C2		
L-28	Inferential Statistics 4 (Chi square test)	Research	<ul style="list-style-type: none"> <li>Explain principles of sampling distribution of proportion and standard error proportion</li> </ul>	C2	LGIS	MCQ SEQ
			<ul style="list-style-type: none"> <li>Calculate SEP for a given sample proportion</li> </ul>	C3		
			<ul style="list-style-type: none"> <li>Calculate standard error of difference between two proportions</li> </ul>	C3		
			<ul style="list-style-type: none"> <li>Do hypothesis testing by applying chi-square test</li> </ul>	C3		
			<ul style="list-style-type: none"> <li>Interpret results of chi-square test</li> </ul>	C4		
			<ul style="list-style-type: none"> <li>Elaborate fisher's exact test</li> </ul>	C3		
L-29	Patient Safety and quality improvement	Surgery	<ul style="list-style-type: none"> <li>The importance of understanding human behavior if patient care is to improve.</li> </ul>	C2	LGIS	MCQs SEQs

			<ul style="list-style-type: none"> <li>The importance of patient safety and the scale of the problem.</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Medical error and its definitions including adverse events and near misses.</li> </ul>	C3		
			<ul style="list-style-type: none"> <li>Patient safety strategies and solutions.</li> </ul>	C3		
C-4	Diagnosis of Klinefelter Syndrome	Pathology	<ul style="list-style-type: none"> <li>Explain causes and evaluation of chromosomal abnormalities</li> </ul>	C2	CBL	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Explain causes of facial features and complication of this syndrome</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Correlate the clinical features with genetic basis</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Identify different Chromosomal abnormalities on the basis of history taking and physical Assessment</li> </ul>	C3		
			<ul style="list-style-type: none"> <li>Apply his/her knowledge to differentiate different common chromosomal abnormalities</li> </ul>	C3		
L-30	Signs and symptoms of common poisoning and its Management	Forensic Medicine	<ul style="list-style-type: none"> <li>Identify case of poisoning.</li> </ul>	C1	LGIS	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Diagnostic criteria for a case of poisoning</li> </ul>	C4		
			<ul style="list-style-type: none"> <li>Classify antidotes and their uses in respective poisoning</li> </ul>	C1		
			<ul style="list-style-type: none"> <li>Describe the role of elimination of unabsorbed poison</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Describe the role of elimination of absorbed poison with special emphasis on forced diuresis and exchange transfusion</li> </ul>	C2		
L-31	Nomenclature & Characteristics of neoplasms	Pathology	<ul style="list-style-type: none"> <li>Define and classify neoplasia</li> </ul>	C1	LGIS	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Describe nomenclature of neoplasms</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Differentiate between benign and malignant tumors</li> </ul>	C3		
C-5	Organophosphate poisoning	Pharmacology	<ul style="list-style-type: none"> <li>Recognize the clinical features of Organophosphate Poisoning</li> </ul>	C2	CBL	PBQS
			<ul style="list-style-type: none"> <li>Evaluate the role of oximes in organophosphate poisoning</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Design the management plan for organophosphate poisoning</li> </ul>	C3		
L-32	Surgical infection	Surgery	<ul style="list-style-type: none"> <li>The characteristics of the common surgical pathogens and their sensitivities</li> </ul>	C1	LGIS	MCQs SEQs
			<ul style="list-style-type: none"> <li>The classification of sources of infection and their severity.</li> </ul>	C1		
			<ul style="list-style-type: none"> <li>The clinical presentation of surgical infections.</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>The indications for and choice of prophylactic antibiotic.</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>To learn the management of abscesses</li> </ul>	C2		
L-33	Legal duties of a doctor and stator law relating to drugs	Forensic Medicine	<ul style="list-style-type: none"> <li>Role of medical practitioner in a case of suspected poisoning</li> </ul>	C2	LGIS	MCQs SEQs VIVA
C-6	Mushroom and dhatura	Pharmacology	<ul style="list-style-type: none"> <li>Recognize the clinical features of both poisonings</li> </ul>	C2	CBL	PBQS

	poisoning		<ul style="list-style-type: none"> <li>Evaluate the role of anticholinergics in both poisonings</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Design the management plan for both poisonings</li> </ul>	C3		
S-7	Epidemiology of neoplasia	Pathology	<ul style="list-style-type: none"> <li>Explain cancer incidence along with environmental and geographic distribution C2</li> </ul>	C2	SGD	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Explain Genetic predisposition to cancer and Non hereditary predisposing conditions</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Design the management plan for both poisonings</li> </ul>	C2		
S-8	Molecular basis of cancer	Pathology	<ul style="list-style-type: none"> <li>Describe essential alterations for malignant transformation</li> </ul>	C2	SGD	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Define oncogenes, protooncogenes and oncoproteins</li> </ul>	C1		
			<ul style="list-style-type: none"> <li>Explain role of RAS oncogenes, BRAF ,MYC oncogenes ,Cyclin and cyclin dependent kinase in carcinogenesis</li> </ul>	C2		
L-34	Inferential Statistics 5 (Correlation)	Research	<ul style="list-style-type: none"> <li>Explain principles of correlation analysis for comparing two continuous variables in same subjects in given data set</li> </ul>	C1	LGIS	MCQs SEQs
			<ul style="list-style-type: none"> <li>Explain with examples concept of correlation and association in research data</li> </ul>	C1		
			<ul style="list-style-type: none"> <li>Compute co efficient of correlation and interpret results</li> </ul>	C2		
P-4	Effect of mydriatics on frog's eye	Pharmacology	<ul style="list-style-type: none"> <li>Recall the mydriatic groups</li> </ul>	P1	Practical	OSPE
			<ul style="list-style-type: none"> <li>Interpret the results of the drug instilled in rabbit's eye</li> </ul>	P3		
P-5	Diagnosis of benign Neoplasia	Pathology	<ul style="list-style-type: none"> <li>Diagnose a case of benign tumor on the basis of different laboratory tests</li> </ul>	P3	Practical	OSPE
			<ul style="list-style-type: none"> <li>Describe morphology of benign tumors (gross &amp; microscopy)</li> </ul>	P2		
			<ul style="list-style-type: none"> <li>Demonstrate adequate interpersonal skills and collaborative team work</li> </ul>	A2		
P-6	Role of D.N.A finger printing in personal identity	Forensic medicine	<ul style="list-style-type: none"> <li>Describe the pattern of fingerprints</li> </ul>	P1	Practical	OSPE
			<ul style="list-style-type: none"> <li>Define Dactylography</li> </ul>	P1		
			<ul style="list-style-type: none"> <li>Define Poroscopy</li> </ul>	P1		
			<ul style="list-style-type: none"> <li>Define Footprint,</li> </ul>	P1		
			<ul style="list-style-type: none"> <li>Define DNA finger printing</li> </ul>	P1		
			<ul style="list-style-type: none"> <li>Define the forensic importance and application of DNA finger printing</li> </ul>	P1		

## 4<sup>th</sup> Week

Code no	Topic	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching strategies	Assessment tools
S-9	Tumor suppressor genes in cancer	Pathology	<ul style="list-style-type: none"> <li>Explain carcinogenesis by Tumor suppressor genes ,RB gene ,P53 gene</li> </ul>	C2	SGD	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Explain role of ApC /b-catenin pathway in carcinogenesis</li> </ul>	C2		
S-10	Microbial & radiation carcinogenesis	Pathology	<ul style="list-style-type: none"> <li>Enlist examples of microbial and radiation carcinogenesis</li> </ul>	C2	SGD	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Correlate the etio-pathogenesis of microbial carcinogenesis with the genetic alterations in tumor genomics</li> </ul>	C3		
			<ul style="list-style-type: none"> <li>Correlate the mechanism of radiation oncogenesis with predisposing environment for carcinogenesis</li> </ul>	C3		
			<ul style="list-style-type: none"> <li>Describe the genetic pathways involved in the radiation oncogenesis</li> </ul>	C2		
L-35	Diagnostic approach of malignant tumors	Pathology	<ul style="list-style-type: none"> <li>Diagnose a case of malignant tumor on the basis of different laboratory tests</li> </ul>	C2	LGIS	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Describe morphology of malignant tumors (gross &amp; microscopy)</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Demonstrate adequate interpersonal skills and collaborative team work</li> </ul>	A2		
L-36	Autopsy findings in poisoning and Collection, preservation and dispatch of body	Forensic Medicine	<ul style="list-style-type: none"> <li>Identify case of poisoning during autopsy</li> </ul>	C1	LGIS	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Collection of remains of poisoning in viscera of a case of poisoning and their referral of Forensic Pathological assessment</li> </ul>	C4		
S-11	Carcinogenic agents and Tumor immunity	Pathology	<ul style="list-style-type: none"> <li>Classify carcinogenesis on the basis of various mechanism involved</li> </ul>	C2	SGD	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Describe the steps involved in carcinogenesis</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Explain chemical, radiational and microbial carcinogenesis</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Explain Immune surveillance</li> </ul>	C2		
L-37	Malnutrition: Assessment and management	Peads	<ul style="list-style-type: none"> <li>Define Malnutrition</li> </ul>	C1	LGIS	MCQs SEQs
			<ul style="list-style-type: none"> <li>Enlist common etiological factors</li> </ul>	C1		
			<ul style="list-style-type: none"> <li>Evaluate malnourished child from history and physical Assessment C3</li> </ul>	C3		
			<ul style="list-style-type: none"> <li>Plot Growth parameters on the percentile charts C5</li> </ul>	C5		

			<ul style="list-style-type: none"> <li>Know WHO management protocol for severe malnutrition C2</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Enlist the steps of nutritional rehabilitation C1</li> </ul>	C1		
S-12	Pathophysiology of Environmental Diseases	Pathology	<ul style="list-style-type: none"> <li>Environmental Effects on Global Disease Burden,</li> </ul>	C1	SGD	MCQs SEQs VIVA
			<ul style="list-style-type: none"> <li>Explain Health effects of Climate changes</li> </ul>	C1		
			<ul style="list-style-type: none"> <li>Describe Toxicity of chemical and physical agents</li> </ul>	C2		
L-38	Ibadat-11	Quran	<ul style="list-style-type: none"> <li></li> </ul>		LGIS	MCQs
C-7	Lead poisoning	Pathology	<ul style="list-style-type: none"> <li>Discuss causes of lead poisoning</li> </ul>	C2	CBL	PBQs
			<ul style="list-style-type: none"> <li>Describe the pathogenic effects of lead poisoning</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Discuss clinical and morphological features of lead poisoning anemia</li> </ul>	C2		
L-39	Communication Skills in patient care	Family Medicine	<ul style="list-style-type: none"> <li>Define communication skills</li> </ul>	C1	LGIS	MCQs SEQs
			<ul style="list-style-type: none"> <li>Understand the significance of good communications for doctors</li> </ul>	C2		
			<ul style="list-style-type: none"> <li>Apply communication skills in patient care.</li> </ul>	A1		
L-39	Inferential Statistics 5 (Correlation)	Research	<ul style="list-style-type: none"> <li>Explain principles of correlation analysis for comparing two continuous variables in same subjects in given data set</li> </ul>	C1	LGIS	MCQs SEQs
			<ul style="list-style-type: none"> <li>Explain with examples concept of correlation and association in research data</li> </ul>	C2		
P-7	Effect of drugs of Rabbit's Eye	Pharmacology	<ul style="list-style-type: none"> <li>Recall the miotic drug groups</li> </ul>	P1	Practical	OSPE
			<ul style="list-style-type: none"> <li>Interpret the results of the drug instilled in rabbit's eye</li> </ul>	P3		
P-8	Signs and symptoms of common poisoning and its Management	Forensic Medicine	<ul style="list-style-type: none"> <li>Identification of a case of poisoning.</li> </ul>	P1	Practical	OSPE
			<ul style="list-style-type: none"> <li>Diagnostic criteria for a case of poisoning</li> </ul>	P2		
			<ul style="list-style-type: none"> <li>Describe the role of elimination of unabsorbed poison</li> </ul>	P1		
			<ul style="list-style-type: none"> <li>Describe the role of elimination of absorbed poison with special emphasis on forced diuresis and exchange transfusion</li> </ul>	P1		
P-9	Diagnosis of malignant Neoplasia	Pathology	<ul style="list-style-type: none"> <li>Identify the microscopic features and gross appearance of Chronic and Granulomatous Inflammation</li> </ul>	P1	Practical	OSPE
			<ul style="list-style-type: none"> <li>Value the role of basic investigations in clinical management</li> </ul>	A3		

### Family Medicine

History taking fundamentals	Family medicine	<ul style="list-style-type: none"> <li>To define the components of history taking</li> </ul>	C2	MCQs
		<ul style="list-style-type: none"> <li>To understand chief complains and presenting problem of patient.</li> </ul>	C2	MCQs
Communication Skills in patient care	Family Medicine	<ul style="list-style-type: none"> <li>Define communication skills</li> </ul>	C1	
		<ul style="list-style-type: none"> <li>Understand the significance of good communications for doctors</li> </ul>	C2	
		<ul style="list-style-type: none"> <li>Apply communication skills in patient care.</li> </ul>	A1	

**SDL Curriculum  
(Self Directed Learning)**



Week-1		
Pharmacology		
Topic	Learning Objectives	References
<ul style="list-style-type: none"> <li>Receptors and neurotransmitters involved in ANS</li> </ul>	<ul style="list-style-type: none"> <li>Revise the knowledge of receptors and neurotransmitters regarding their functional roles</li> </ul>	<ol style="list-style-type: none"> <li>Basic and Clinical Pharmacology by Bertram Z. Katzung 15th Edition, Chapter 6, Page 2-6, 15-24</li> <li>Goodman and Gillmans The Pharmacological basics of Therapeutics, 13th Edition, Chapter , Pg 43</li> </ol>
Pathology		
<ul style="list-style-type: none"> <li>Embolism and types of embolism</li> </ul>	<ul style="list-style-type: none"> <li>Define and classify embolism</li> <li>Explain clinical Importance and treatment of different types of embolism.</li> <li>Describe morphology of different types of emboli.</li> <li>Diagnose a case of embolism on the basis of different laboratory tests.</li> </ul>	Robbins & Cotran Pathologic Basis OF Disease, 10 <sup>th</sup> Edition, Chapter 1, Pg 112--114
Forensic Medicine		
<ul style="list-style-type: none"> <li>.Role of radiology in personal identity</li> </ul>	<ul style="list-style-type: none"> <li>Define ossification centers</li> <li>The list of ossification centers in bones and their appearance with relation to age.</li> <li>Assessment of age of an individual using radiology</li> <li>Assessment of sex of skeletal remains</li> <li>Forensic assessment of a skeletal injury</li> </ul>	Parikh's text book of medical jurisprudence forensic medicine and toxicology, Edition 9

Week-2		
Pharmacology		
Topic	Learning Objectives	References
<ul style="list-style-type: none"> <li>Pheochromocytoma</li> </ul>	<ul style="list-style-type: none"> <li>Discuss the signs and symptoms of pheochromocytoma</li> <li>Discuss the pharmacological management of pheochromocytoma</li> </ul>	Basic and Clinical Pharmacology by Bertram Z. Katzung 15th Edition, Chapter 10, Page 165-166
Pathology		
<ul style="list-style-type: none"> <li>Cytogenetic disorders</li> </ul>	<ul style="list-style-type: none"> <li>Explain General Features of Chromosomal Disorders</li> <li>Explain numeric and structural abnormalities</li> <li>Explain Cytogenetic Disorders Involving</li> </ul>	Robbins & Cotran Pathologic Basis of Disease, 10 <sup>th</sup> Edition, Chapter 1, Pg 262-269-
Forensic Medicine		
<ul style="list-style-type: none"> <li>Role of D.N.A finger printing in personal identity</li> </ul>	<ul style="list-style-type: none"> <li>Describe the pattern of fingerprints</li> <li>Define Dactylography</li> <li>Define Poroscopy</li> <li>Define Footprint,</li> <li>Define DNA finger printing</li> <li>Define the forensic importance and application of DNA finger printing</li> </ul>	Parikh's text book of medical jurisprudence forensic medicine and toxicology, Edition 9

Week-3		
Pharmacology		
Topic	Learning Objectives	References
<ul style="list-style-type: none"> <li>Ganglion blockers</li> </ul>	<ul style="list-style-type: none"> <li>Enumerate Ganglion blockers</li> <li>Explain mechanism of action</li> <li>Discuss different organ system effects</li> <li>Enumerate clinical applications and toxicity of the drugs</li> </ul>	Basic and Clinical Pharmacology by Bertram Z. Katzung 15th Edition, Chapter 8, Page 139-140
Pathology		
<ul style="list-style-type: none"> <li>Nutritional disorder Macronutrients/Micronutrient insufficiency</li> </ul>	<ul style="list-style-type: none"> <li>Explain Macronutrient/Micronutrient insufficiency</li> <li>Explain Dietary insufficiency, Protein energy Malnutrition, Anorexia Nervosa and Bulimia, Vitamin Deficiency,</li> <li>Obesity, Diets, Cancers and Atherosclerosis.</li> <li>Demonstrate understanding of team work in diagnosing a patient with multiple health issues</li> </ul>	Robbins & Cotran Pathologic Basis OF Disease 10th Edition Chapter 3 Pg 80—85
Forensic Medicine		
<ul style="list-style-type: none"> <li>Classification of antidotes</li> </ul>	<ul style="list-style-type: none"> <li>Define antidote.</li> <li>Classify antidotes</li> <li>Preparation of universal antidote</li> <li>Classification of antidotes and there uses in respective poisoning</li> </ul>	Parikh's text book of medical jurisprudence forensic medicine and toxicology Edition 9

Week-4		
Pharmacology		
Topic	Learning Objectives	References
Use of botulinum in aesthetics	<ul style="list-style-type: none"> <li>• Discuss mechanism of action of botulinum</li> </ul>	Basic and Clinical Pharmacology by Bertram Z. Katzung 15th Edition, Chapter 6, Page 99 pg 136,1232
	<ul style="list-style-type: none"> <li>• Enumerate uses and adverse effects of botulinum</li> </ul>	
Pathology		
<ul style="list-style-type: none"> <li>• Environmental pollution</li> </ul>	<ul style="list-style-type: none"> <li>• Outline salient features of environmental pollution in an article.</li> </ul>	<ul style="list-style-type: none"> <li>• Robbins &amp; COTRAN Pathologic Basis OF Disease, 10<sup>th</sup> Edition, Chapter 1, Pg 302--307</li> </ul>
	<ul style="list-style-type: none"> <li>• Demonstrate responsible behavior toward self-learning.</li> </ul>	
Forensic Medicine		
<ul style="list-style-type: none"> <li>• Signs and symptoms of common poisoning and its Management</li> </ul>	<ul style="list-style-type: none"> <li>• Identification of a case of poisoning.</li> </ul>	Parikhs" text book of forensic and toxicology, edition 9
	<ul style="list-style-type: none"> <li>• Diagnostic criteria for a case of poisoning</li> </ul>	
	<ul style="list-style-type: none"> <li>• Describe the role of elimination of unabsorbed poison</li> </ul>	
	<ul style="list-style-type: none"> <li>• Describe the role of elimination of absorbed poison with special emphasis on forced diuresis and exchange transfusion</li> </ul>	

Time Table 2023

Integrated Modular Curriculum

Foundation Module II

3<sup>rd</sup> Year MBBS

Duration Of Module: O4 Weeks

Coordinator:  
Dr. Attiya Munir

Co-Coordiators:  
Dr. Haseeba Talat/ Dr Omaima Asif

Reviewed by: Module committee

### Members of Module Committee

Prof. Dr. Muhammad Umar	Chairman	Vice Chancellor RMU
Prof. Dr. Ayesha Yousaf	Dean of Basic Sciences/Convener	Anatomy Department
Prof. Dr Idrees Anwar	Dean & Member Curriculum Committee	Surgery Department
Dr Asma Khan	Incharge 3 <sup>rd</sup> year Modular Curriculum	Pharmacology Department
Dr Omaima Asif	Overall Modular Coordinator	Pharmacology Department
Dr Zunera Hakim	Focal Person	Pharmacology Department
Dr Fariha	Focal Person	Pathology Department
Dr Gulzaib	Focal Person	Forensic Medicine Department
Dr Saima Ambreen	Focal Person	Medicine Department
Dr Huma Sabir	Focal Person	Surgery Department
Dr Asad Shabbir	Focal Person	Paeds Department
Dr Kholi Noreen	Focal Person	Research
Dr Sadia Khan	Focal Person	Family Medicine Department
Mufti Abdul Wahid	Focal Person	Quran Teachings

Approved by: Curriculum Committee  
Documented By  
Dr Omaima Asif

Prepared By  
Dr Attiya Munir  
AP Pharmacology Department

DATE / DAY															
Monday 06-03-2023	Foundation I Theory Exam (8:30am to 2:00 pm)														
Tuesday 07-03-2023	Batch: A Medicine Batch: B Surgery Batch: C Sub-Specialty (Refer to annexure2)				11am-12pm		12:00pm to 02:00pm								
					Forensic Medicine * L-1										
					Role of radiology in personal identity				Batch Wise Viva Foundation I						
					Even		Odd								
					Dr. Naila Batool		Dr. Raheel Baig								
					Forensic Medicine * L-2		12:00pm To 02:00pm								
					Role of DNA finger printing in personal identity										
					Even		Odd		Batch Wise Viva Foundation I						
					Dr. Raheel Baig		Dr. Naila Batool								
					Pharmacology * L-3		12:00pm To 02:00pm								
					Introduction of Autonomic nervous system										
					Even		Odd		Batch Wise Viva Foundation I						
	Dr. Asma Khan														
Wednesday 08-03-2023															
Thursday 09-03-2023															
Friday 10-03-2023	08:00am - 08:45am		08:45am – 09:30am		09:30am – 10:15am		10:15am - 11:00am		11:00am – 12:00pm						
	Medicine *L-4		Forensic Medicine *L-5		Pathology *L-6		Pathology ** S-1		Pharmacology * L-7						
	Symptomology I (Common symptoms)		Introduction to toxicology		Pathophysiology of Thrombosis		Edema		Sympathomimetics-I (Classification)						
	Even		Odd		Even		Odd		Even				Odd		
	Dr. Javeria		Dr. Tahira		Dr. Raheel Baig		DrGulzaib		Prof Mobina Dodhy		Prof Wafa Omer				
	Dr. Mudassira, Dr. Aisha		Dr. Huma, Dr.Unaiza		Dr. Zunera Hakim		Dr. SobiaJaved								
Saturday 11-03-2023	08:00am - 08:45am		08:45am – 09:30am		09:30am – 10:30am		10:30am-11:00pm		11:00 am – 12:00 pm		12:00 pm – 1:00 pm		1:00 pm – 2:00 pm		
	Surgery L* 8		Pharmacology *L-9		Pharmacology * L-10		BREAK		Medicine *L-11		Pathology ** S-2		Pharmacology ***C-1		
	Investigations and Diagnosis in surgery		Sympathomimetics-II (Directly acting drugs)		Sympathomimetics-III (Indirectly acting drugs)				Symptomology –II (Specific symptoms and lab investigations)		Morphological changes in Infarction		Anaphylactic Shock		
	Even		Odd		Even				Odd		Even		Odd		
	Dr. Muhammad Atif		Dr. Muhammad Iqbal		Dr. Zunera Hakim				Dr. Sobia Javed		Dr. Javeria		Dr. Tahira		Dr. Mudassira ,Dr.Rabia
Dr. Zunera Hakim		Dr. Sobia Javed		Dr. Zunera Hakim		Dr. Sobia Javed			Dr. Huma, Dr.Nida Fatima		Dr.Zaheer, Dr zoefeshan		Dr.Omai ma Dr. Arsheen		

DATE / DAY	8:00 AM - 11:00 AM		11:00am – 12:00am		12:00 AM – 02:00 PM									
Monday 13-03-2023	Clinical Clerkship		Pathology **S-3		Batch	Discipline	Topic of Practical		Teacher	Venue				
	Batch : A Medicine Batch : B Surgery Batch : C Sub-Specialty (Refer to annexure2)		Types of Hemorrhage		A	Pharmacology P-1	Pharmacological calculations III		Dr.UzmaUmer	Pharmacology Lab				
			Even	Odd	B	Forensic Medicine P-2	Spectroscopic Assessment of blood		Dr. Raheel	Forensic Lab				
			Dr. Nida Fatima, DrHuma	Dr. Rabbia Khalid, DrMudassira	C	Pathology P-3	Chronic Venous Congestion, Thrombosis, Infarction		Dr. Abid Hassan	Pathology Lab, NTB				
Tuesday 14-03-2023			Pathology *** C-2		Batch	Discipline	Topic of Practical							
			Etio-pathogenesis of Shock		B	Pharmacology P-1	Pharmacological calculations III		Dr.UzmaUmer	Pharmacology Lab				
			Even	Odd	C	Forensic Medicine P-2	Spectroscopic Assessment ofBlood		Dr. Raheel	Forensic Lab				
	Dr. Fatima, Dr Iqbal	Dr. Saeed, DrAmna	A	Pathology P-3	Chronic Venous Congestion, Thrombosis, Infarction		Dr. Abid Hassan	Pathology Lab, NTB						
Wednesday 15-03-2023			Pharmacology * L-12		Batch	Discipline	Topic of Practical							
			Alpha blockers		C	Pharmacology P-1	Pharmacological calculations III		Dr.UzmaUmer	Pharmacology Lab				
			Even	Odd	A	Forensic Medicine-2	Spectroscopic Assessment ofBlood		Dr. Raheel	Forensic Lab				
	Dr. Zunera Hakim	Dr.Sobia Javed	B	Pathology-3	Chronic Venous Congestion, Thrombosis, Infarction		Dr. Abid Hassan	Pathology Lab, NTB						
Thursday 16-03-2023			Pharmacology * L-13		Pharmacology * L-14			Forensic Medicine * L-15						
			Beta Blockers-I (Classification)		12:00 AM – 1:00PM			1:00 PM – 02:00 PM						
			Beta Blockers-II (Mechanism of Action)					Classification of poisons						
	Even	Odd	Even	Odd	Even	Odd	Even	Odd						
Dr Asma Khan	Dr Sobia Javed	Dr Asma Khan	Dr Sobia Javed	Dr Raheel	Dr Gulzaib									
Friday 17-03-2023	08:00am - 08:45am		08:45am – 09:30am		09:30am – 10:15am		10:15am - 11:00am		11:00am – 12:00pm					
	Quran * L-16		Pathology ** S-4		Surgery * L-17		Pharmacology *L-18		Pathology *L-19					
	Imaniat IV		Introduction to genetics		Perioperative care		Beta Blockers-III (Clinical uses and adverse effects)		Mendelian Disorders					
	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd				
Mufti Wahid		Dr. Mudassira, Dr. Aisha	Dr. Huma, Dr.Unaiza	Dr. Ali Kamran	Dr. Amjad	DAsma Khan	Dr Sobia javed	Prof Wafa Omer	Dr.Mobina Dodhy					
Saturday 18-03-2023	08:00am - 08:45am		08:45am – 09:30am		09:30am – 10:30am		10:30-11:00am		11:00am – 12:00pm		12:00:am – 1:00pm		1:00pm – 2:00 pm	
	Peads * L-20		Surgery * L-21		Pathology ** S-5		BREAK		Pharmacology *** C-3		Forensic Medicine *L- 22		Family Medicine *L-23	
	Introduction to child growth and development		Shock and Blood transfusion		Types of gene disorders and Prenatal diagnosis				Beta Blockers		Classification of antidotes		History taking fundamentals	
	Even	Odd	Even	Odd	Even	Odd			Even	Odd	Even	Odd	Even	Odd
Dr. Jaweria Zain	Dr. Hafeez	Dr. Hafiza Kiran	Dr. Sehrish Bashir	Dr. Mudassira Dr. Aisha	Dr. Huma, Dr. Unaiza	Dr. Uzma Dr. Zaheer	Dr. Omaima Dr. Zoefeshan	Dr. Shahida	Dr Gulzaib	Dr Sadia				



DATE / DAY	8:00 AM - 11:00 AM				11:00am – 12:00pm				12:00 PM – 02:00 PM							
Monday 20-03-2023	Clinical Clerkship				Pharmacology *L-24				Batch	Discipline		Topic of Practical				
	Batch : A Medicine Batch : B Surgery Batch : C Sub-Specialty (Refer to annexure2)				Parasympathomimetics-I (Directly acting )				A	Pharmacology P-4		Effect of mydriatics on rabbit's eye		DrRubina	Pharmacology Lab	
					Even		Odd									
					Dr. Attiya		Dr. Zunera Hakim		B	Forensic Medicine P-5		General Toxicology & Management of human poisoning		Dr. Gulzaib		Forensic Lab
Tuesday 21-03-2023					Pharmacology *L-25				Batch	Discipline		Topic of Practical				
					Parasympathomimetics-II (Indirectly acting)				B	Pharmacology P-4		Effect of mydriatics on rabbit's eye		DrRubina	Pharmacology Lab	
	Even		Odd													
	Dr. Attiya		Dr. Zunera Hakim		C	Forensic Medicine P-5		General Toxicology & Management of human poisoning		Dr. Gulzaib		Forensic Lab				
Wednesday 22-03-2023					Pharmacology * L-26				Batch	Discipline		Topic of Practical				
					Anti cholinergics –I (Classification and mechanism of action)				C	Pharmacology P-4		Effect of mydriatics on rabbit's eye		DrRubina	Pharmacology Lab	
	Even		Odd													
	Dr. Attiya		Dr.Asma Khan		A	Forensic Medicine P-5		General Toxicology & Management of human poisoning		Dr. Gulzaib		Forensic Lab				
Thursday 23-03-2023					Pharmacology * L-27				Pathology ** S-6							
					Anticholinergics-II (Therapeutic uses and adverse effects)				12:00 PM – 1:00 PM							
									Single gene disorder							
	Even		Odd		Even		Odd		Even		Odd					
DrAsma Khan		DrAttiyaMunir		DrMudassira, DrRabia Khalid		DrHuma, Dr. Nida Fatima										
Friday 24-03-2023	08:00am - 08:45am		08:45am – 09:30am		09:30am – 10:15am		10:15am - 11:00am		11:00am – 12:00pm							
	Surgery * L-28		Pathology ***C-4		Forensic Medicine *L-29		Pathology *L-30		Pharmacology ***C-5							
	Fluid and Electrolyte balance		Diagnosis of Klienfilter syndrome		Signs and symptoms of common poisoning and its Management		Nomenclature & Characteristics of neoplasms		Organophosphate poisoning							
	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd						
Dr. Asifa Dayan	Dr. Umer Kaleem	Dr Fatima Rizvi, Dr. Iqbal	Dr Saeed, Dr. Amna	Dr. Gulzaib		Dr Shahida	Prof Wafa Omer	Dr .Mobina Dodhy	Dr. Uzma Dr. Haseeba	Dr.Omaira Dr. Zoefeshan						
Saturday 25-03-2023	08:00am - 08:50am		08:50am – 09:40am		09:40am – 10:30am		10:30am - 11:20am		11:20:am – 12:10pm		12:10pm – 1:00 pm					
	Surgery * L-31		Forensic Medicine * L-32		Pharmacology *** C-6		Pathology ** S-7		Pathology **S-8		Research *L-33					
	Introduction to trauma and Basic Management		Legal Duties of a doctor in case of poisoning		Mushroom and dhatura poisoning		Epidemiology of Neoplasia		Molecular Basis of Cancer		Inferential Statistics 4 (Chi Square test)					
	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd				
Dr. Huma Sabir Khan	Dr. Asad Amir	Dr. Filza	Dr. Naila Batool	Dr. Uzma Dr. Haseeba	Dr.Omaira Dr.Arsheen	Dr Tayyaba, Dr Fariha	Dr Asiya, Dr. Abid	Dr Tayyaba, Dr Fariha	Dr Asiya, Dr. Abid	Dr. Imrana	Dr. Abdul Qudoos					

DATE / DAY	8:00 AM - 10:45 AM				10:45am – 11:30 am				11:30 PM – 01:00 PM										
Monday 27--03-2023	Clinical Clerkship				Pathology **S-9				Batch      Discipline      Topic of Practical										
	Batch : A Medicine Batch : B Surgery Batch : C Sub-Specialty (Refer to annexure2)				Tumor suppressor genes in cancer				A		Pharmacology P-7		Effect of mitotics on rabbit's eye		Dr. Haseeba		Pharmacology Lab		
					Even		Odd		B		Forensic Medicine P-8		Practical journal preparation		Dr. Naila		Forensic Lab		
					DrTayyaba, DrFariha		DrAsiya, Dr. Abid												
					C		Pathology P-9		D		Diagnosis of malignant neoplasm		Dr. Amna Noor		Pathology Lab, NTB				
					Pathology ** S-10		Batch										Discipline		Topic of Practical
Microbial and radiation carcinogenesis					B		Pharmacology P-7		Effect of mitotics on rabbit's eye		Dr. Haseeba		Pharmacology Lab						
Even		Odd		C		Forensic Medicine P-8		Practical journal preparation		Dr. Naila		Forensic Lab							
DrTayyaba, DrFariha		DrAsiya, Dr. Abid																	
A		Pathology P-9		D		Diagnosis of malignant neoplasm		Dr. Amna Noor		Pathology Lab, NTB									
Pathology * L-34												Batch		Discipline		Topic of Practical			
Diagnostic approach of malignant tumors				C		Pharmacology P-7		Effect of mitotics on rabbit's eye		Dr Haseeba		Pharmacology Lab							
Even		Odd		A		Forensic Medicine P-8		Practical journal preparation		Dr. Naila		Forensic Lab							
Prof Wafa Omer		Dr.Mobina Dodhy																	
B		Pathology P-9		D		Diagnosis of malignant neoplasm		Dr.Amna Noor		Pathology Lab, NTB									
Forensic Medicine * L-35												Pathology ** S-11				Peads*L-36			
Autopsy findings in poisoning and Collection, preservation and dispatch of body				11:30 AM – 12:15 PM				12:15 PM – 01:00 PM											
Even				Odd				Malnutrition assessment and management											
Even		Odd		Even		Odd		Even		Odd									
Dr. Filza		Dr. NailaBatoool		Dr. Tayyaba, Dr. Aisha		Dr. Asiya, Dr. Saeed		Dr. Farah		Dr. Sadaf									
08:00am - 08:45am		08:45am – 09:30am		09:30am – 10:15am		10:15am - 11:00am		11:00am – 12:00pm											
Quran * L-37		Pathology **S-12		Family Medicine * L-38		Pathology ***C-7		Research *L-39											
Ibadiat I				Pathophysiology of Environmental Diseases				Communication Skills in patient care				Lead Poisoning				Inferential Statistics 4 (Correlation)			
Even		Odd		Even		Odd		Even		Odd		Even		Odd					
Mufti Wahid				Dr. Tayyaba, Dr. Nida		Dr. Asiya, Dr. Saeed		Dr. Sadia				Dr. Fatima, Dr. Iqbal		Dr. Saeed, Dr. Amna		Dr. Imrana		Dr. Abdul Qudoos	
Saturday 01-04-2023				Prep Leave															

Time Table 3rd Year MBBS –Foundation Module II-2023

Date / Day	08:00am to 02:00pm
Monday 03-04-2023	FOUNDATION II Theory Assessment
Tuesday 04-04-2023	OSPE + VIVA Block-I
Wednesday 05-04-2023	OSPE + VIVA Block-I
Thursday 06-04-2023	OSPE + VIVA Block-I

## Teaching Hours

Sr. No.	Disciplines	LGIS	SGD/CBL	SDL	Hours
1.	Pharmacology	12	04	04	20
2.	Pathology	04	15	04	23
3.	Forensic Medicine	08	0	04	12
4.	Research	02	0	0	02
5.	Surgery	05	0	0	05
6.	Medicine	02	0	0	02
7.	Pediatrics	02	0	0	02
8.	Quran	02	0	0	02
9.	Family Medicine	02	0	0	02
	Total hours	39	19	12	70

## Practical & Clerkship Hours

Disciplines	Practical hours	Disciplines	Clerkship hours
Pharmacology	2x3 = 06 hrs	Surgery	2.5 x 15 = 37.5hrs
Pathology	2x3 = 06 hrs	Medicine	2.5 x 15 = 37.5hrs
Forensic Medicine	2x3 = 06 hrs	Sub Specialty	2.5 x 15 = 37.5hrs

- LGIS (L) \*
- SGD (S) \*\*
- CBL (C) \*\*\*
- SDL (SL) \*\*\*\*

## Venues for Academic Sessions

3<sup>rd</sup> Year MBBS

- Large Group Interactive Sessions (LGIS)

Odd roll numbers: Lecture Hall 01

Even roll numbers: Lecture Hall 02

- Small Group Discussion (SGD) /Case Based Learning (CBL)

Lecture Hall 01

Lecture Hall 02

Lecture Hall 06

Pharmacy Lab



In case of non-availability of these venues, CPC will be used for two batches

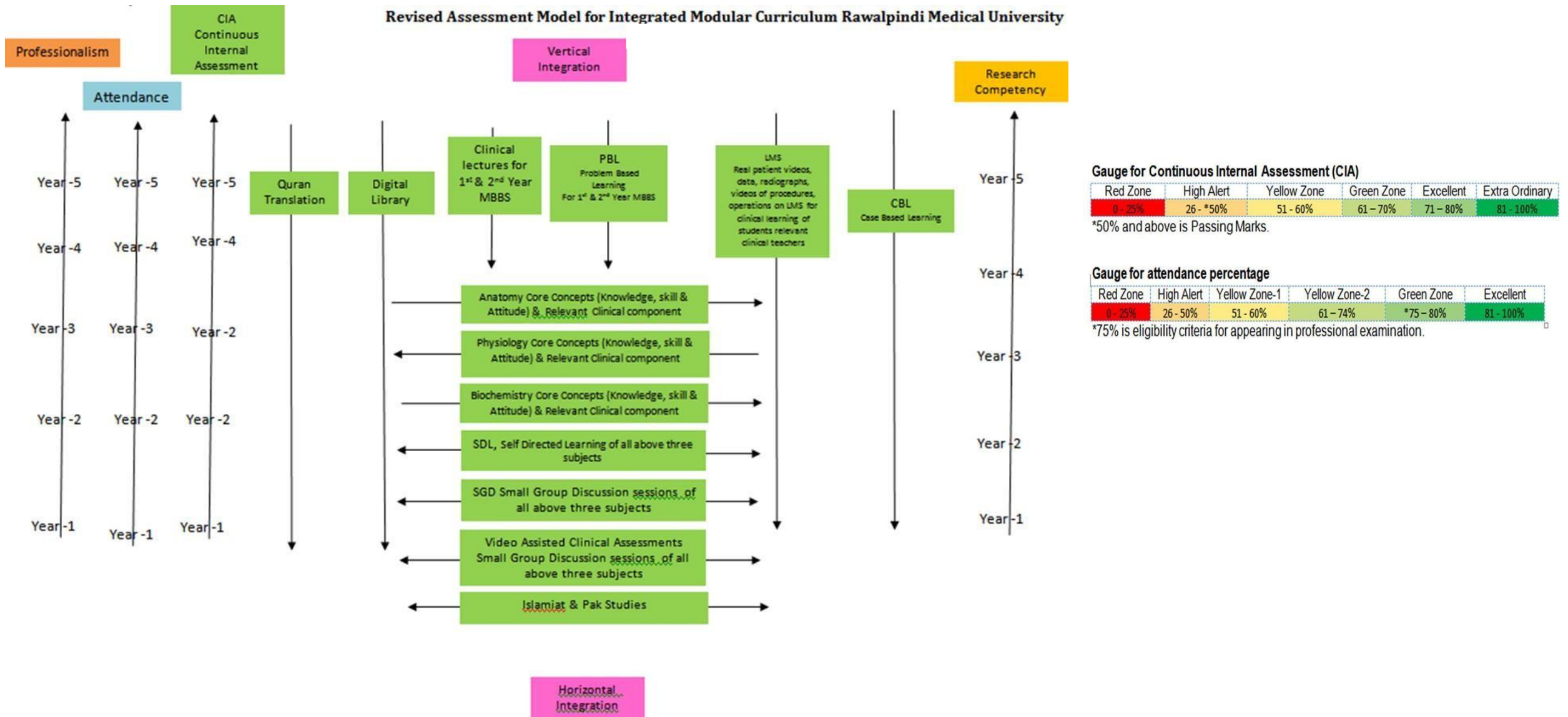
The batch distribution & venues for whole year are fixed with no change except for extra ordinary situations.

## Section III- Assessment Policies

### Contents

- Assessment plan
- Types of Assessment
- Modular Assessments
- Block Assessment
- Table 4: Assessment Frequency & Time in Foundation Module

## Section III: Assessment Policies



## Assessment plan

University has followed the guidelines of Pakistan Medical and Dental Council for assessment. Assessment is conducted at the mid modular, modular and block levels.

### Types of Assessment:

The assessment is formative and summative.

#### Formative Assessment

Formative assessment is taken at modular (2/3<sup>rd</sup> of the module is complete) level through MS Teams. Tool for this assessment is best choice questions and all subjects are given the share according to their hour percentage.

#### Summative Assessment:

Summative assessment is taken at the mid modular (LMS Based), modular and block levels.

### Modular Assessments

#### Theory Paper

There is a module Assessment at the end of first module of each block. The content of the whole teaching of the module are tested in this Assessment.

It consists of paper with objective type questions and structured essay questions. The distribution of the questions is based on the Table of Specifications of the module. (Annexure I attached)

#### Viva Voce:

Structured table viva voce is conducted including the practical content of the module.

### Block Assessment

On completion of a block which consists of two modules, there is a block Assessment which consists of one theory paper and a structured viva with OSPE.

#### Theory Paper

There is one written paper for each subject. The paper consists of objective type 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.



Table 4-Assessment Frequency & Time in Foundation Module II

Block	Sr #	Module – 2 Foundation Module Components	Type of Assessments	Total Assessments Time			No. of Assessments	
				Assessment Time	Summative Assessment Time	Formative Assessment Time		
Block-I	1	Mid Module Assessments LMS based(Pharmacology, Pathology, Forensic Medicine, Medicine, Surgery, Peads, Family Medicine, Research)	Summative	30 Minutes	7 hours	30 Minutes	1 Formative	5 Summative
	2	Topics of SDL Assessment on MS Team	Formative	10 Minutes (Every Friday)				
	3	End Module Assessments (SEQ & MCQs Based)	Summative	6 Hours				
	4	Pharmacology Structured and Clinically Oriented Viva	Summative	10 Minutes				
	5.	Forensic Medicine Structured and Clinically oriented Viva	Summative	10 Minutes				
	5	Pathology Structured & Clinically oriented Viva	Summative	10 Minutes				

## Learning Resources

Subject	Resources
Pathology/Microbiology	<p style="text-align: center;">TEXT BOOKS</p> <ol style="list-style-type: none"> <li>1. Robbins &amp; Cotran, Pathologic Basis of Disease, 10<sup>th</sup> edition.</li> <li>2. Rapid Review Pathology, 5<sup>th</sup> edition by Edward F. Goljan MD.</li> <li>3. <a href="http://library.med.utah.edu/WebPath/webpath.html">http://library.med.utah.edu/WebPath/webpath.html</a></li> </ol>
Pharmacology	<p style="text-align: center;">TEXT BOOKS</p> <ol style="list-style-type: none"> <li>1. Basic and Clinical Pharmacology by Bertram Z. Katzung 15th Edition</li> <li>2. Goodman and Gillmans The Pharmacological basics of Therapeutics, 13th Edition</li> </ol>
Forensic Medicine	<p style="text-align: center;">TEXT BOOKS</p> <ol style="list-style-type: none"> <li>1. Parikh Text Book of Medical Jurisprudence Forensic Medicine &amp; Toxicology Edition 9</li> </ol>
Medicine	<p style="text-align: center;">TEXT BOOKS</p> <p style="text-align: center;">Davidsons Textbook of Medicine</p>
Surgery	<p style="text-align: center;">TEXT BOOKS</p> <p style="text-align: center;">Balley &amp; Love textbook of surgery</p>
Research	<p style="text-align: center;">Digital library</p>

## SECTION IV

Table of Specification (TOS) For Foundation II Module Assessment

Sr. #	Discipline	No. of MCQs (%)	No. of MCQs according to cognitive domain			No. of SEQs (%)		No. of SEQs according to cognitive domain			Viva voce	OSPE Marks	Total Marks
			C1	C2	C3	No of items	Marks	C1	C2	C3			
1.	Pharmacology	15	2	9	4	7	35	2	4	1	30	20	100
2.	Forensic Medicine	15	4	9	3	5	25	2	2	1	10	0	50
3.	Pathology	25	2	5	3	7	35	2	4	1	40	10	100
4.	Family Medicine	5	1	2	1	0	0	0	0	0	0	0	5
6.	Research	5	0	3	2	0	0	0	0	0	0	0	5
7.	Medicine	5	1	3	1	0	0	0	0	0	0	0	5
8.	Surgery	5	1	3	1	0	0	0	0	0	0	0	5
9.	Peads	5	2	2	1	0	0	0	0	0	0	0	5
<b>Grand Total</b>											<b>275</b>		

## Annexure I

(Sample MCQ & SEQ papers with analysis)



RAWALPINDI MEDICAL UNIVERSITY  
**DEPARTMENT OF PATHOLOGY**  
RMU & Allied Hospitals

**SEND-UP EXAMINATION 2022**  
3<sup>rd</sup> Year MBBS

**MCQs PAPER**

**BLOCK-I**

ROLL NO. \_\_\_\_\_

Date: --- -- --  
Time: --:--

Total Marks: 55  
Time Allowed: 60min

1. A 29-year man comes to a resident surgeon for removal of plaster cast. The patient states that the plaster was applied due to fracture of his left femoral bone 8 weeks ago. After removal of the cast the resident notices that the diameter of the left calf has decreased in size as compared to the right one. What is the cause of this observation?

- A. Aplasia
- B. Atrophy
- C. Dystrophy
- D. Dysplasia
- E. Hypoplasia

**CORE C2 CELLULAR ADAPTATIONS**

2. A 22-year college student developed marked right lower abdominal pain over the past day. On physical examination there is rebound tenderness on palpation at the right iliac fossa. Laparoscopic surgery was performed, and the appendix was found to be swollen, erythematous, and partly covered by a yellowish exudate. Which one of the following best describes the process?

- A. Acute inflammation
- B. Granuloma formation
- C. Chronic inflammation
- D. Tissue necrosis
- E. Fibrosis and repair

**VERTICAL INTEGRATION SURGERY C2 INFLAMMATION**

3. A 34 years man presented with complains of productive cough, low grade fever and weight loss for last 6 months. After investigation he has been diagnosed as having pulmonary tuberculosis. What are the two main cell types involved in this inflammatory disease?

- A. Basophils and Macrophages
- B. Macrophages and Lymphocytes
- C. Eosinophils and neutrophils
- D. Neutrophils and lymphocytes
- E. Basophils and neutrophils

**CORE INFLAMMATION C2**

4. A 35-year woman takes acetylsalicylic acid (aspirin) for arthritis. The aspirin therapy alleviates her pain mainly through reduction in the synthesis of which of the following mediators?

- A. Complement C1q
- B. Histamine
- C. Leukotriene E4
- D. Nitric oxide
- E. Prostaglandins

**HORIZONTAL INTEGRATION PHARMACOLOGY C1 INFLAMMATION**

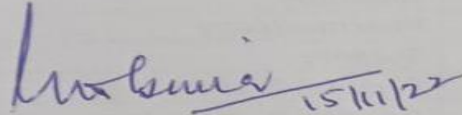
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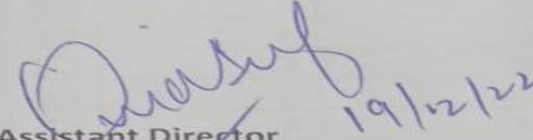
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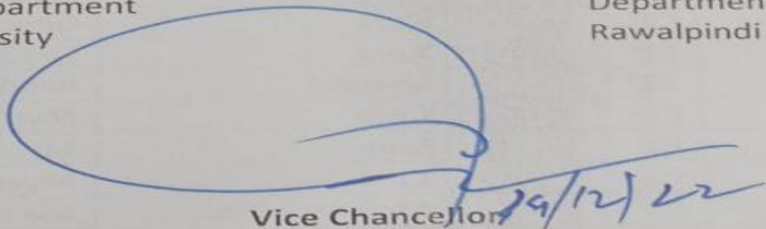
## Detailed Analysis of Sample of MCQs Paper

Level of Cognition	Question No	Total	Percentage
C1	4, 13, 19, 26, 27, 36, 47, 51, 54	09	16%
C2	1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 20, 22, 23, 25, 28, 29, 30, 32, 33, 34, 40, 41, 42, 43, 45, 46, 48, 49, 50, 52, 53, 55	38	69%
C3	21, 24, 31, 35, 37, 38, 39, 44	08	15%

Type of Integration	Question No	Total	Percentage
Core	1, 3, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 19, 26, 27, 28, 29, 30, 32, 33, 34, 36, 37, 39, 40, 41, 42, 43, 46, 47, 48, 49, 51, 53	34	62%
Horizontal	4, 17, 24, 38, 52	05	9%
Vertical	2, 18, 21, 25, 31, 44, 50	07	13%
Spiral	5, 8, 20, 23, 45, 54	06	11%
Research & medical ethics	22, 35, 55	03	5%

  
**Prof. Mobina Ahsan Dodhy**  
 Chairperson Pathology Department  
 Rawalpindi Medical University

  
**Assistant Director**  
 Department of Medical Education  
 Rawalpindi Medical University

  
**Vice Chancellor**  
 Rawalpindi Medical University  
 Rawalpindi

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**RAWALPINDI MEDICAL UNIVERSITY**  
**DEPARTMENT OF PATHOLOGY**  
 RMU & Allied Hospitals  
**Haematology Immunology & Research Module Assessment**  
 3<sup>rd</sup> Year MBBS  
**SEQs PAPER**

ROLL NO. \_\_\_\_\_

Total Marks: 35  
 Time: 12:00noon

Date: 07<sup>th</sup> November 2022  
 Time Allowed: 45min

**Q1.** A 3 years boy presents with failure to thrive, repeated infections, lethargy and pallor. Mother gives history of consanguineous marriage. His elder sister is on regular transfusion. Physical examination of the boy shows Pallor, frontal bossing and hepatosplenomegaly. His CBC reveals Hb3.4 g/dL, MCV 52 fL, MCH 18 pg with normal WBC and platelet count.

a) What is the most likely diagnosis?	01
b) What further tests you would like to perform to confirm diagnosis?	02
c) What advice you would give to the parents of this child?	02

**Q2.** A 65-years man presents to clinic with fatigue, night sweats, and lethargy of 6 months duration. He tells you that he has experienced 10 lb weight loss over that period. On physical examination, the spleen is palpable 6 cm below the costal margin, the rest of his examination is normal. Laboratory testing is remarkable for leukocytosis (85 X 10<sup>9</sup>/L) and an elevated lactate dehydrogenase level. A complete spectrum of myeloid cells is seen in the peripheral blood with biomedel peak of neutrophils and myelocytes. There is also increased number of basophils.

a) What is the most probable diagnosis?	01
b) Briefly discuss the underlying genetic mutation.	2.5
c) Enumerate the phases of this disease.	1.5

**Q3.** A 30 years female with history of easy bruising and increased menstrual flow was evaluated for a bleeding disorder. She was diagnosed with immune thrombocytopenic purpura (ITP).

a) Discuss Peripheral film and Bone marrow examination findings.	2.5
b) Enlist the causes of thrombocytopenia.	2.5

**Q4.** A 47 years woman presented in basic health unit of district Jehlum with complains of fatigue and repeated infections. Physical examination shows scattered bruises on body. Her laboratory investigations reveals Hb 7.3 g/dL, WBC 174 x 10<sup>9</sup>/L and platelet count is 24 x 10<sup>9</sup>/L. Pathologist reports 90% blast cells on peripheral film.

a) Briefly compare the morphology of lymphoblast and myeloblast?	02
b) Which cytochemical stain helps to differentiate between lymphoblast and myeloblast?	01
c) Give any two cytogenetic abnormalities seen in Acute myeloid leukemia.	02

**Q5.** A renal transplant recipient experiences gradual rise of creatinine in 10-month time period despite immunomodulatory drugs. He states that he was alright and all his lab results were normal for few months after the transplant but then his condition deteriorated slowly.

a) Which type of graft rejection is this?	01
b) Classify different types of grafts on the basis of type of donor.	02
c) Differentiate between direct and indirect graft antigen recognition	02

**Q6.** A physician is suspecting Hepatitis B in a patient in the ward. The laboratory performs a rapid kit test but the physician has asked them to perform ELISA for confirmation as it is based on specific antigen antibody reaction technique.

a) Enlist 4 the different types of antigen antibody reactions	02
b) Enumerate 3 types of ELISA with the underlying principle in each	03

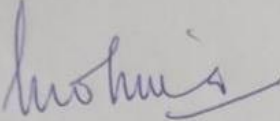
**Q7.** A 45 years female presented with painless diffuse enlargement of thyroid gland. Her thyroid function test shows decreased T3 and T4 levels and she is positive for circulating antithyroid antibodies.

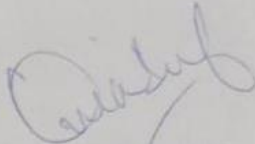
a) What is your most likely diagnosis?	01
b) Enlist 4 the different types of specific autoimmunediseases?	01
c) Enumerate 3 types of ELISA with the underlying principle in each	01

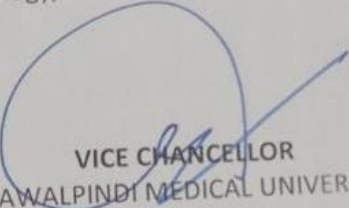
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 Total: 48

## Detailed Analysis of SEQs Paper

Levels of cognition	Question number	Total	Percentage
C1	5b,6a and 7c	3	16%
C2	2b, 2c, 3b, 4a, 4b, 5c, 6b and 7b	8	42%
C3	1a, 1b, 1c, 2a, 3a, 4c, 5a and 7a	8	42%

  
**PROF. MOBINA AHSAN DODHY**  
Chairperson, Department of Pathology, RMU

  
**ASSISTANT DIRECTOR**  
Department of Medical Education, RMU

  
**VICE CHANCELLOR**  
RAWALPINDI MEDICAL UNIVERSITY



## ANNEXURE II

### Time Table 3<sup>rd</sup> year MBBS (Session 2020-2021)

#### Clinical Teaching and Training Posting ----- From 08-02-2023 to 15-10-2023

Dates		MEDICINE					SURGERY + TRAUMA				
		HFH Unit-I	HFH Unit-II	BBH Unit-I	BBH Unit-II	DHQ	HFH Unit-I	HFH Unit-II	BBH Unit-I	BBH Unit-II	DHQ
<b>S.P.W</b> <b>S.P.V</b>	08-02-2023 To 30-04-2023	A1	A2	A3	A4	A5	B5	B4	B3	B2	B1
<b>S.V</b>	01-05-2023 To 06-08-2022	C1	C2	C3	C4	C5	A5	A4	A3	A2	A1
	07-08-2023 To 15-10-2023	B1	B2	B3	B4	B5	C5	C4	C3	C2	C1

#### MISCELLANEOUS

	8-2-23 To 19-2-23	20-2-23 To 5-3-23	6-3-23 To 19-3-23	<b>S.P.W</b> 20-3-23 To 9-4-23	<b>S.P.V</b> 10-4-23 To 30-4-23	1-5-23 To 14-5-23	15-5-23 To 28-5-23	29-5-23 To 11-6-23	12-6-23 To 25-6-23	<b>S.V</b> 26-6-23 To 6-8-23	7-8-23 To 20-8-23	21-8-23 To 3-9-23	4-9-23 To 17-9-23	18-9-23 To 1-10-23	2-10-23 To 15-10-23
<b>Pathology</b>	C1	C2	C3	C4	C5	B1	B2	B3	B4	B5	A1	A2	A3	A4	A5
<b>Psychiatry</b>	C5	C1	C2	C3	C4	B5	B1	B2	B3	B4	A5	A1	A2	A3	A4
<b>Radiology</b>	C4	C5	C1	C2	C3	B4	B5	B1	B2	B3	A4	A5	A1	A2	A3
<b>Skill Lab</b>	C3	C4	C5	C1	C2	B3	B4	B5	B1	B2	A3	A4	A5	A1	A2
<b>E.R</b>	C2	C3	C4	C5	C1	B2	B3	B4	B5	B1	A2	A3	A4	A5	A1

> Tentative Holidays

Sports Week (S.P.W)	12-03-2023	TO	19-03-2023
Spring Vacations (S.P.V)	24-04-2023	TO	30-04-2023
Summer Vacations (S.V)	03-07-2023	TO	30-07-2023

No T-9/ 544 RMU, RWP. Dated 04-02 /2023

- Copy to all Concerned Departments

  
 Vice-Chancellor  
 Rawalpindi Medical University  
 Rawalpindi