

# **Rawalpindi Medical University**

Integrated Modular Curriculum – 3<sup>rd</sup> year MBBS



(REVISED)- October 2023



Dedicated

То

**Our Beloved Holy Prophet (PBUH)** 

## **Mission Statement of RMU**

- To impart evidence based research oriented medical education
- To provide best possible patient care
- To inculcate the values of mutual respect and ethical practice of medicine

#### Vision and Values:

• Highly recognized and accredited center of excellence in Medical Education, using evidence-based training techniques for development of highly competent health professionals.



#### Word by Vice Chancellor

There is no subject which will require more careful consideration in the settlement of the educational details of the University of which RMU is to be the centre than that of the choice and arrangement of the curriculum to be required for the degree in medicine. An exceptional opportunity presents itself, you have, within certain limits, a tabula rasa, and it behoves the authorities of the future university to mark it in the manner best calculated to promote the advance of medical science and the efficiency of medical teaching. If, from an experience acquired as a teacher and examiner in various universities during a period of more than a quarter of a century, I can help in the promotion of these objects, by pointing out virtues which may be emulated here, and failings which may be avoided there. I shall at least feel I have done something to assist in the modelling of what will, we all hope, become one of the great centers of learning of Pakistan.

But whilst endeavoring to sketch out what subjects should form part of the medical curriculum of a university, and to appraise their relative order and value, I do not propose to place before you an ideal which is unattainable under the circumstances of place and time, in which you find yourselves, although it would be easier to construct an ideal curriculum than to plan one out within the limits of present-day practicability. I suppose that the integrated modular curricula now being established in our university will more nearly approach the ideal.

The diverse faculty and student body make our programs earn top national and international reputation. I can say with complete confidence that what makes our university exceptional are the faculty & staff who are dedicated to help our aspiring students to become the compassionate, highly skilled health-care providers of tomorrow.

The breadth and depth of our robust academic experience, which is rooted in the basic and clinical sciences, is tied to hands-on learning, in our wards; through diverse clinical experiences; and through dynamic academic research with our distinguished scholars, skilled master clinicians and physician faculty. Here, you will learn the "science" of your discipline and the evidence that substantiates the service-delivery approaches for your patients. We strive to develop caring clinicians and healthcare leaders who possess the knowledge and skills to deliver the most efficacious clinical and administrative services — the "art" of their profession.



Founder Vice Chancellor RMU

Professor Dr. Muhammad Umar

#### Word by Additional & Assistant Director DME

Integration seeks to break down the barriers between the subject areas in order to provide students with better learning opportunities that facilitate the development of knowledge that is relevant and meaningful to clinical practice, deep and retrievable, and amenable to alteration, updating, and development as a part of an ongoing process of lifelong learning.

Curriculum integration is an approach to teaching and learning that is based on both philosophy and practicality. It can generally be defined as a curriculum approach that purposefully draws together knowledge, skills, attitudes and values from within or across subject areas to develop a more powerful understanding of key ideas. Curriculum integration occurs when components of the curriculum are connected and related in meaningful ways by both the students and teachers.

Integrating a curriculum is a complex process. Our faculty untiringly contributed towards making of this curriculum. We can proudly say that we are the Pioneers of this integrated modular curriculum in Public Sector in Punjab. This integrated curriculum of ours holds much promise for raising students, who will be able to apply their knowledge to their work and to their personal development.

Our faculty tries to develop in students, medical residents and fellows an awareness, through integration of subjects, their responsibility to contribute to an environment of loving care, sensitivity and respect for human dignity as they comfort people whose lives have been disrupted by illness or injury.

As a student of our university, you'll learn from distinguished, interdisciplinary faculty who provide a unique blend of experiential, clinical and academic preparation. We focus on the quality of care and the uniqueness of each patient, and the complexity of the healthcare environment. You'll gain an appreciation from your peers in other health professions as well, as you learn about the role of teaming in healthcare delivery. We foster critical thinking skills and strive to teach you how to provide a well-thought out and researched analysis of assessment and treatment methods. Through this dynamic interplay, you'll learn how caring and compassionate leaders can use their skills to make their communities — and the world — a better place.



Dr Asma Khan Add. Director DME Implementation In charge 3<sup>rd</sup> Year MBBS





## Preamble

Curriculum of a subject is said to be the throbbing pulse of a nation. By looking at the curriculum of a subject, one can judge the state of intellectual development and the state of progress of a nation. The world has turned into a global village, new ideas and information are pouring in a constant stream. It is, therefore, imperative to update our curricula by introducing the recent developments in the relevant fields of knowledge.

Medical science is constantly advancing with the advancement of science and technology. Global changes are happening in medical education in accordance and conformity of these advancements and changes. With the application of these knowledge and skills of medical science, future doctors should satisfy their patients with the changing needs of the community. Much changes are happening in teaching methods and teaching sites or learning environment. It is now an established fact that best learning is achieved through utilizing the learning environment in factual situation. A doctor can better learn from his own patients. Slogan of today is now the unity of education and practice. The undergraduate curriculum for future doctor is expected to be so designed that it should focus more on real life situation and of learning i.e. more community oriented as well as more community based. To serve this purpose community campus partnership is very much appropriate and essential

"Knowledge Learnt in Isolation is Rapidly Forgotten"

Here comes the importance of integration. Integration is de-fined as organization of teaching matter to interrelate or unify subjects frequently taught in separate academic courses or departments.1

In another definition, the term integration in education means coordination in the teaching learning activities to ensure harmonious functioning of the educational processes.

Integration in modern medical curricula means abandoning the traditional discipline based discreet segmentation and isolation of teaching and learning activities within "concrete" silos. Integration seeks to break down the barriers that is relevant and meaningful to clinical practice, is deep and retrievable and which is amenable to alteration, updating and development as a part of an ongoing process of lifelong learning.

It is expected from the students to:

To impart evidence based research oriented medical education

To provide best possible patient care

To inculcate the values of mutual respect and ethical practice of medicine



- Early clinical experience
- Clinician-scientist partnerships
- On-going incorporation of science in later years

Horizontal: bring together the disciplines, topics, subjects



Medical education has traditionally been compartmentalized into basic and clinical sciences, with the latter being viewed as the skillful application of the former. Over time, the relevance of basic sciences has become defined by their role in supporting clinical problem solving rather than being, of themselves, a defining knowledge base of physicians.

### Why do we need integration?

Integration is needed to avoid the information overload that is associated with the traditional curriculum where learning was delivered as a series of discipline blocks over concerned with detail and with little recognition of the links between subject and topic areas that are required to make the knowledge created available for use and application in new situations. Integration deals more with principles and concepts which can be used to explore and understand novel problems and allow new solution to be achieved. Furthermore changes to the clinical environment, the expectation of patients, the accountability to stakeholders and the understanding of learning and its theoretical

basis demand new, effective approaches to the learning and the preparation of learners in order to be fit for purpose.

## What is curriculum

According to definition curriculum can be classified into five categories:

- 1. Curriculum as a product program, document, electronic media, or multimedia
- 2. Curriculum as a program of study usually courses offered, curriculum sequences of study in standards as benchmarks, gateways,
- 3. Curriculum as intended learnings goals, content, concepts, generalizations, outcomes
- 4. Curriculum as experiences of the learner activities, planned and unplanned.
- 5. Hidden curriculum what students learn that isn't planned unless you plan for this or is it possible?

#### Integrated Medical Curriculum

Shoemaker defines an integrated curriculum as "education that is organized in such a way that it cuts across subject matter lines, bringing together various aspects of the curriculum into meaningful association to focus upon broad areas of study." There is an ongoing discussion about whether medical curriculum should be discipline based or integrated.

Most curricula for medical education have been integrated horizontally and vertically—vertically between basic and clinical sciences. The Flexnerian curriculum has disappeared to permit integration between basic sciences and clinical sciences, which are taught throughout the curriculum. We have proposed a different form of integration where the horizontal axis represents the defined learning outcomes and the vertical axis represents the teaching of the sciences throughout the courses. We believe that a mere integration of basic and clinical sciences is not enough because it is necessary to emphasize the importance of humanism as well as health population sciences in medicine. It is necessary to integrate basic and clinical sciences, humanism, and health population in the vertical axis, not only in the early years but also throughout the curriculum, presupposing the use of active teaching methods based on problems or cases in small groups.

The method of teaching medicine, since Flexner's days, implies that students should first learn basic and biomedical sciences and then move to clinical sciences; however, this is not how patients are presented. A common criticism of this approach is that students will not see the relevance of basic and biomedical sciences applied to clinical practice, and it is preferable to encourage students to think as doctors from the day they enter medical school.

Integration is therefore of key importance for medical education because basic science learning is placed in the context of clinical and professional practice and is considered by students to be more meaningful and relevant. In the vast majority of curriculum reforms, vertical integration combines basic and clinical sciences, early clinical experience, clinician–scientist partnerships, and incorporation of sciences in the later years of the course. This is undoubtedly an advantage, but is based on a biologist's vision of the health-illness process.

#### **Curriculum Development & Implementation**

The process of curriculum development is adopted from Kern's Curriculum Development process. Our concept and process of curriculum implementation is grounded under following process:





**Curriculum Implementation** 

With dissemination of previous session's teaching activities

\*\* Faculty, Students & Support Staff



Curriculum Implementation

Curriculum Development

## 7 Star Doctor

At RMU we aim to produce seven-star doctor having the generic competencies of "Skill, Knowledge, Community Health Promoter, Critical Thinker, Professional, Scholar, Leader and Role Model", Rawalpindi Medical University has introduced modular integrated undergraduate curriculum as being first public sector university. These competencies are further outlined by various enabling traits specifying knowledge, skills, and attitude.



#### **Contextualization**

Contextualization in the curriculum refers to the process of integrating the local needs and global standards into the curriculum. It ensures that the curriculum is relevant to the needs of the local community, while also meeting the global standards. In the context of health professionals, contextualization is essential as it helps students to be better prepared for the real world, where they will be providing healthcare services to diverse populations. Content identification, contextualization, and validation at the time of curriculum development requires consideration of the local needs and global standards simultaneously, by the relevant leaders and experts.

At Rawalpindi Medical University we have a vision for conforming to any global health standards and is ever evolving for any newer innovative methodologies.



#### **Teaching Strategies:**

#### Case Based Learning

Case-based learning (CBL) is an established approach used across disciplines where students apply their knowledge to real-world scenarios, promoting higher levels of cognition. In CBL classrooms, students typically work in groups on case studies, stories involving one or more characters and/or scenarios. The cases present a disciplinary problem or problems for which students devise solutions under the guidance of the instructor. CBL has a strong history of successful implementation in medical, law, and business schools, and is increasingly used within undergraduate education, particularly within pre-professional majors and the sciences (Herreid, 1994). This method involves guided inquiry and is grounded in constructivism whereby students form new meanings by interacting with their knowledge and the environment (Lee, 2012).

There are a number of benefits to using CBL in the classroom. In a review of the literature, Williams (2005) describes how CBL: utilizes collaborative learning, facilitates the integration of learning, develops students' intrinsic and extrinsic motivation to learn, encourages learner self-reflection and critical reflection, allows for scientific inquiry, integrates knowledge and practice, and supports the development of a variety of learning skills.

CBL has several defining characteristics, including versatility, storytelling power, and efficient self-guided learning. In a systematic analysis of 104 articles in health professions education, CBL was found to be utilized in courses with less than 50 to over 1000 students (Thistlethwaite et al., 2012). In these classrooms, group sizes ranged from 1 to 30, with most consisting of 2 to 15 students. Instructors varied in the proportion of time they implemented CBL in the classroom, ranging from one case spanning two hours of classroom time, to year-long case-based courses. These findings demonstrate that instructors use CBL in a variety of ways in their classrooms.

### Small Group Discussion:

Small-group teaching and learning has achieved an admirable position in medical education and has become more popular as a means of encouraging the students in their studies and enhance the process of deep learning. The main characteristics of small group teaching are active involvement of the learners in entire learning cycle and well defined task orientation with achievable specific aims and objectives in a given time period. The essential components in the development of an ideal small group teaching and learning sessions are preliminary considerations at departmental and institutional level including educational strategies, group composition, physical environment, existing resources, diagnosis of the needs, formulation of the objectives and suitable teaching outline. Small group teaching increases the student interest, teamwork ability, retention of knowledge and skills, enhance transfer of concepts to innovative issues, and improve the self-directed learning. It develops self-motivation, investigating the issues, allows the student to test their thinking and higher-order activities. It also facilitates an adult style of learning, acceptance of personal responsibility for own progress. Moreover, it enhances student-faculty and peer-peer interaction, improves communication skills and provides opportunity to share the responsibility and clarify the points of bafflement.

## **Curriculum Committee**

#### **Members of Curriculum Committee**

1.	<b>Prof. Muhammad Umar</b> Vice Chancellor	Chairperson
2.	<b>Prof. Muhammad Rai Asghar</b> Chairman Pediatrics Director Department of Medical Education	Co-Chairper
3.	<b>Prof. Idrees Anwar</b> Dean of Surgery & Allied	Member
4.	<b>Prof. Lubna Ejaz</b> Professor of Gynae-Obstetrics	Member
5.	<b>Prof. Naeem Akhtar</b> Prof of Pathology	Member/Cor
6.	Associate Prof. Dr Asma Khan Head of Pharmacology	<b>Member</b> In-charge Deve 3 <sup>rd</sup> Year MBBS
7.	<b>Prof. Syed Arshad Sabir</b> Dean of Community Medicine & Public Health	<b>Member</b> In-charge Deve

8. Prof. Muhammad Khurram Dean of Medicine & Allied

9. Prof. Samia Sarwar Head of Physiology Department

10. Prof. Asad Tameezudin Head, Institute of Psychiatry

fember/Convener

ſember -charge Development & Execution of <sup>1</sup>Year MBBS Modular Curriculum

Iember In-charge Development & Execution of 4<sup>th</sup> Year MBBS Modular Curriculum

Member In-charge Development & Execution of Final Year MBBS Modular Curriculum

Member Dean Allied Health Sciences

Member

<b>11. Prof. Fuad Niazi</b> Professor of Ophthalmology	Member
<b>12. Prof. Tehzeeb-ul-Hassan</b> Head of Anatomy Department / Dean of Basic Sciences	Member
<b>13. Dr. Tehmina Qamar</b> Associate Professor Head of Biochemistry Department	Implementation incharge 1 <sup>st</sup> & 2 <sup>nd</sup> year MBBS
14. Controller of Examination	Member
15. Registrar/Deputy Registrar	Member
<b>16. Dr. Shazia Zeb</b> Deputy Director DME	Co-convener
<b>17. Dr. Arsalan Manzoor</b> Assistant Professor of Anatomy	Co-convener
<b>18. Dr. Sidra Hameed</b> Assistant Prof. Physiology/ Assistant Director DME	Coordinator 1 <sup>st</sup> & 2 <sup>nd</sup> year MBBS
<b>19. Dr. Omaima Asif</b> Assistant Director DME	Coordinator 3 <sup>rd</sup> , 4 <sup>th</sup> & Final Year MBBS
20. CR & GR (or 02 students from concerned class)	Class Representatives



### Terms of Reference for Curriculum Committee Integrated Modular Curriculum

- 1. The curriculum committee should comprise of the following members
  - a. Dean of faculty (chairperson)
  - b. All heads of department
  - c. Module coordinator/s (of the module to be discussed)
  - d. Representative from Medical Education Department
  - e. Representative from Examination Department
  - f. CR and GR as student representatives
- 2. Responsibilities of the curriculum committee
  - a. Planning, implementation and evaluation of the curriculum
  - b. Evaluation of innovations in the curriculum
  - c. Development and modification of the curriculum document
  - d. Development and modification of the study guides
  - e. Development of yearly planner
  - f. Review faculty feedback and student feedback of modules
  - g. Review faculty feedback and student feedback of examinations
  - h. Propose recommendations and ensure
- 3. Meeting should be held after every 6 months (after block examination)
- 4. The module coordinators should present the objectives and timetables of the module
- 5. DME should present student and faculty feedback of the block
- 6. Examination department should present faculty and student feedback of the block/prof exam
- 7. Minutes should be compiled, presented in deans committee and recorded by DME department

# Contributors

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Development and Implementation of Modular Curriculum for 3 <sup>rd</sup> Year MBBS								
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	(Vice Chancellor)							
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	Ambreen, Dr Omaima Asif							
Others:	Mr Muhammad Umar							
Computer Assistant	Muhammad Faisal							

# Modules of 3rd Year M.B.B.S

Sr no.	Module	Time Scheduled	Blocks
1.	Foundation 1	4 weeks	1
2.	Foundation II	4 weeks	1
3.	GIT, Hepatobiliary & Parasitology	5 weeks	2
4.	Microbes & Antimicrobials	7 weeks	2
5.	Haematology, Immunology & Research	5 weeks	3
б.	CVS & Respiration	5 weeks	5

Academic Calendar Session 2020-2021



#### ACADEMIC CALENDAR Session 2020-2021

		2023-24																													
2023	February	Ma	arch			April			May		Jt		June		July		Aug			September			October		November				December		
	8 17 26	3 6 7	13 18	20	10 15	17	24 30	2 8	21 27	29	30 3	5 1	17 25	1	3 18	30	1 5	7	15	6 1	6 1	8 19	24 1	l 21	23 28	1 11	. 13	17	21	18 25	2 3 23
		Block	i i								Block	cll								Block III						Preparation Leaves					
3 r d Y E A R	Foundation Module-I	Module Exam Foundation Module-II	Sports Week	Foundation Module-II (Conti)	Block Exam I	GIT HEPATOLOGY & PARASITOLOGY MODULE	Spring Vocations + Eid ul Fitar	GIT HEPATOLOGY & PAPASITOLOGY	MODULE (Conti)	Module Exam	MICROBES & ANTIMICROBIALS		Summer Vacations			MICROBES & ANTIMICROBIALS (Conti)		Block Exam II		Hematology & Immunology Module	Module Exam		CVS & RESPIRATION MODULE		Block Exam III	Preparation Exam Break	Sendup Block Exam I	Sendup Block Exam II	Sendup Block Exam III	Annual Prof	Final Prof Result 2023

Prepare by DME-NTB 25-2-23

# Foundation Module - I



## Introduction

The science of pharmacology is concerned with the effects of drugs on the cells, organs of human beings, influence of drugs on cellular mechanisms and the fate of drugs in the body. The teaching of pharmacology is limited to general principles of pharmacokinetics and pharmacodynamics of groups of commonly used drugs.

The general pathology presents a scientific study of diseases, the genetic basis of some diseases, the body's normal responses to noxious environmental stimuli and the principles of homeostasis.

Students are taught the legal aspects of medical practice and the legal implications of medical disorders, in collaboration with the departments of pathology, pharmacology, hospital casualty, and other clinical sciences. The emphasis is placed on those legal aspects of medicine that a young medical graduate may be expected to face in professional life

This subject is highly stressed in the curriculum to familiarize the students with community health problems

This field of study deals with medical diagnosis, treatment and care of a diseased person. It introduces the students to the art of history taking, teaches them the basic skills in performing the physical examination of patients, trains them to prescribe appropriate investigations, interpret the results rationally, to formulate their findings orally and in writing, and provide them with the basic knowledge needed to stimulate them to reach a reasonable differential diagnosis.

Included under this broad heading are subjects of general surgery and allied specialities consisting of orthopedics, anesthesiology, radiotherapy and radiology. Students are taught the general principles, indication and contra-indication of common surgical procedures. Emphasis is laid on developing skills in aseptic techniques, dressing, and mastering of minor surgical procedures along with pre- and post-operative care of patients.

Clinical clerkships in various clinical disciplines are essential to develop basic clinical skills for accurate assessment, analysis, synthesis, and critical thinking, leading to appropriate diagnosis and management. Students are exposed to common health problems of the community. They spend much of their time in clinics, hospitals, and community health facilities, with less reliance on conventional classroom lectures. Students actively involve in the day-to-day management of patients in the wards, outpatient clinics, community health facilities.

## Rationale

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

## **Terminal Objective**

- Acquire knowledge about the basic terminologies used in Pharmacology, Pathology & Forensic Medicine as well as the concepts of diseases in the community.
- Interpret and analyze various procedures/ practicals
- Demonstrate a professional attitude, team building spirit and good communication skills.

Date: 09<sup>th</sup> February, 2023 by DME, Main Campus



## Third Year MBBS 2023

Study Guide

Foundation Module -I

Date: 18<sup>th</sup> February, 2023 by DME, New Teaching Block

**2 |** P a g e

### **Table of Contents**

Foundation Module Team	5
University Moto, Vision, Values & Goals	6
Module I - Foundation Module	7
Section I - Terms & Abbreviations	8
Teaching and Learning Methodologies / Strategies of Pharmacology, Forensic Medicine, Pathology, Biomedical ethics, Family Medicine, & Artificial Intellegence	9
Section II-Learning Objectives, Teaching Strategies & Assesssments	10
Orientation Day	13
Clinically Integrated Learning Objectives	14
Self Directed Learning (SDL)	27
Integrated module Time Table	32
Teaching hours Summary	38
Venues for Academic Session	39
Section IV: Assessment Policies	40
Assessment plan	41
Types of Assessment:	42
Learning Resources	44
Section V	45
SECTION VI	46
Table of Specification (TOS) For Foundation Module Examination for First Year MBBS Modules during running academic session:	47
Annexure I	48

Sample MCQ & SEQ papers with analysis)	49
Annexure II	51

## Foundation Module Team

Mod	ule Name :	Foundation Module			
Dura	tion of module :	04 Weeks			
Coor	dinator :	Dr. Zunaira Hakim			
Co-c	oordinator	Dr. Zufishan Fatima			
Dovi	aw hu	Modulo Committoo			
Kevi	ew by .	Wodule Committee			
1.	Vice Chancellor RMU	Prof. Dr. Muhammad Umar	1	Coordinator	Dr. Zunaira Hakim (Assissant Professor of Pharmacology)
2.	Director DME	Prof. Dr. Rai Muhammad	2	DME Focal Person	Dr. Maryum Batool
	~ ~ ~ ~ ~	Asghar		~	
3.	Convener Curriculum	Prof. Dr. Naeem Akhter	3	Co-coordinator	Dr. Zoefishan Fatima (Demonstrator of Pharmacology)
4.	Dean BasicSciences	Prof. Dr. Ayesha Yousaf			
5.	Additional Director DME	Prof. Dr. Ifra Saeed			
б.	Chairperson Pharmacology & Implementation Incharge 3 <sup>rd</sup> year MBBS	Dr. Asma Khan		· · · · · ·	
7.	Chairperson Pathology	Prof. Dr. Mobina Dhodhy			
			1	Director DME	Prof. Dr. Rai Muhammad Asghar
8.	Chairperson Forensic Medicine	Dr Shahida Bashir	2	Add. Director DME	Prof. Dr. Ifra Saeed
9.	Focal Person Pharmacology	Dr Zunaira Hakim	3	Deputy Director DME	Dr Shazia Zaib
10	Focal Person Pathology	Dr Fareeha Afzal	4	Module planner & Implementation coordinator	Dr. Omaima Asif
11	Focal Person Forensic Medicine	Dr. Shahida Bashir	5	Editor	Dr Omaima Asif
12	Focal Person Medicine	Dr. Saima Ambreen		·	
13	Focal Person Behavioral Sciences	Dr. Saadia Yasir			
14	Focal Person Community Medicine	Dr. Afifa Kulsoom	7		
15	Focal Person Quran Translation	Mufti abdul Wahid	1		
	Lectures				
16	Focal Person Family Medicine	Dr Sadia			
17	Focal Person Bioethics Department	Prof. Dr. Akram Randhawa			
18	Focal Person Surgery	Dr Huma Sabir			

#### **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 I - 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 a 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

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

#### Skills

Interpret and analyze various practicals 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)
  - Problem- Based Learning (PBL)

#### Tables & Figures

- Table1. Domains of learning according to Blooms Taxonomy
- Figure 1. Prof Umar's Model of Integrated Lecture
- Table2. Standardization of teaching content in Small Group Discussions
- Table 3. Steps of taking Small Group Discussions
- Figure 2. PBL 7 Jumps Model

## Table1.

Domains of learning according to Blooms Taxonomy

<b>Sr.</b> #	Abbreviation	Domains of learning
1.	С	Cognitive Domain: knowledge and mental skills.
	• C1	Remembering
	• C2	Understanding
	• C3	Applying
	• C4	Analyzing
	• C5	Evaluating
	• C6	Creating
2.	Р	Psychomotor Domain: motor skills.
	• P1	Imitation
	• P2	Manipulation
	• P3	Precision
	• P4	Articulation
	• P5	Naturalization
3.	А	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 the 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 2.

#### Standardizationof 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%

## Steps of taking Discussions

Table 3.

Step 1	Sharing of Learning objectives by using students Study guides	First 5 minutes
Step 2	Asking students pre-planned questions from previous teaching sessionto 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	<b>11  </b> P a g e

Small Group

Date: 18<sup>th</sup> February, 2023 by DME, New Teaching Block

#### 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: i Will be online on LMS (Mid module/ end of Module)

ii.OSPE station

#### 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

- Introduction to RMU and Disciplines
- Medical Education and Integrated Disciplines
- Horizontally Integrated Basic Sciences (Anatomy, Physiology & Biochemistry)
- 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)
- Skill Laboratory
- Medicine & Allied
  - Surgery & Allied
  - Biochemistry

## Orientation Day Introduction to New Teaching Block & Hospital Disciplines

		Medical Education And Integrated Disciplines		
Topic	Facilitator	Learning Objectives	Teaching Strategy	
Introduction to RMUand Allied Hospitals	Vice Chancellor	Honorable VC will welcome and introduce the University and Allied Hospitals.	LGIS	
		The students will be able to:		
Introduction to MedicalEducation Department Introduction to Pre-Clinical	Assistant Director DME Implementation Incharge 3 <sup>rd</sup>	<ul> <li>Introduce DME</li> <li>Define Medical Education</li> <li>Discuss its role</li> <li>Appreciate role of DME in their curriculum</li> <li>Appreciate role of DME in attendance monitoring</li> <li>Illustrate the application</li> <li>Leave submission process</li> <li>Introduction to Departments</li> <li>Introduction to Hospitals</li> </ul>	LGIS	
Sciences	Incharge 3 <sup>ra</sup> Year MBB <b>S</b>	<ul> <li>Introduction to Hospitals</li> <li>Discussion about Teaching &amp; Learning strategies</li> <li>Assessment Model</li> <li>Discipline</li> </ul>		
Introduction to Medicine & Allied	Lecture by Dean of Medicine & Allied	<ul> <li>Define medicine</li> <li>Discuss History of medicine</li> <li>Describe Islamic concepts of medicine</li> <li>Identify Basic sciences involved in medicine</li> <li>Identify Clinical subjects and their role</li> <li>Describe practice of medicine</li> <li>Describe the process</li> </ul>	LGIS	

# Learning objectives Week 1

Code No	Торіс	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching strategies	Assessment tools
L-1	Orientation lecture					
	L-2 Surgical ethics	Surgery	Establish importance of ethics in operating room C3	С3		
L-2			<ul> <li>Establish common ethical issues in operating room (Exposure of body, Dress, People gathering and traffic, Noise, Comments and behavior, Honesty, Consent.) C3</li> </ul>	C3	LGIS	MCQs
			Define Ischemia and cell injury, C1	C1		
			Define Reversible and Irreversible Cell injury	C1		
			• Describe causes of cell injury and ischemia, C2	C2		MCQs SEQs VIVA
			<ul> <li>Describe morphology of reversible &amp; irreversible cell injury C2</li> </ul>	C2		
L-3	Reversible and L-3 irreversible cell injury	Pathology	<ul> <li>Explain depletion of ATP, mitochondrial damage and dysfunction, influx of Calcium and loss of calcium, hemostasis, free radical injury(oxidative stresses), defects in membrane permeability, damage to DNA and protein. C2</li> </ul>	C2	LGIS	
			Define adaptation C1	C1		
			Classify types of adaptation C1	C1		
			<ul> <li>Describe mechanism of hypertrophy hyperplasia, atrophy and metaplasia C2</li> </ul>	C2		
	Introduction to		<ul> <li>Define forensic medicine, medical jurisprudence, state medicine and forensic pathology C1</li> </ul>	C1		MCQs
L-4	Forensic Medicine	Forensic Medicine	<ul> <li>Define inquest with examples of its application in Medicolegal work C1</li> </ul>	C1	LGIS	SEQs VIVA
			<ul> <li>Describe various methods of judicial investigations C2</li> </ul>	C2		
L-5	lemaniyat-l	The Holy Quran	Comprehend about the Ayat of Sorat Furqan	С3	LGIS	MCQ SEQ
L-6	Medicine in Practice	Medicine	<ul> <li>Recognize importance of clinical medicine and context for theoretical learning so that one can see how learning about body system and</li> </ul>	C3	LGIS	MCQs

			social sciences are applied to care of patient. C3			
			<ul> <li>Recognize importance of clinical decision making. C3</li> </ul>	C3		
			• Explain clinical reasoning and clinical skills. C2	C2		
			Understands problems with diagnostic errors.     C3	C3		
			<ul> <li>Explain the use and interpretation of diagnostic tests. C2</li> </ul>	C2		
			Analysis of patient- physician relationship. C4	C4		
			• Explain evidence based medicine. C2	C2		
			Explain expanding role of physician C2	C2		
S-1	Cellular adaptation	Pathology	Classify various cellular adaptations to stress	C1	SGD	MCQs, SEQs/VIVA
			Enlist different routes of drug administration	C1		
6.2	Routes of drug <b>S-2</b> administration and dosage forms	Pharmacology	<ul> <li>Discuss the merits and demerits of each route of administration C2</li> </ul>	C2	SCD	OSPE
3-2		Filamacology	Enumerate different dosage forms C1	C1	390	
			<ul> <li>Discuss the utility of different dosage form in different clinical situations C2</li> </ul>	C2		
	Routes of drug		Enlist different routes of drug administration	C1		
6.2		rug n and <b>Pharmacology</b> ns	• Discuss the merits and demerits of each route of administration <b>C2</b>	C2	600	OCDE
3-3	dosage forms		Enumerate different dosage forms C1	C1	300	USPE
			• Discuss the utility of different dosage form in different clinical situations <b>C2</b>	C2		
			<ul> <li>Discuss the importance of understanding human behavior if patient care is to improve.</li> </ul>	C2		
L-7	Patient safety and quality	Surgery	• Describe the importance of patient safety and the scale of the problem.	C2	LGIS	MCQs SEQs
	improvement		<ul> <li>Explain medical error and its definitions including adverse events and near misses.</li> </ul>	C2		
			Discuss patient safety strategies and solutions.	C3		
	Absorption of		Define absorption of drugs. C1	C1		MCQs
L-8	drugs	Pharmacology	<ul> <li>Describe the processes by which drugs are absorbed through different barriers C2</li> </ul>	C2	LGIS	SEQs VIVA
			Describe various types of medical evidences	C2		MCOs
L-9	Importance of Medical consent	Forensic Medicine	Describe principles of a medical witness C2	C2	LGIS	SEQs VIVA
S-4	Absorption of drugs	Pharmacology	<ul> <li>Discuss different factors (drug based and biological) affecting absorption of drugs.C2</li> </ul>	C2	SGD	MCQs SEQs
L-10	Medical ethics introduction	Medicine	<ul> <li>Recognize and evaluate different ethical problems including gap block, priority setting, moral dilemma and resolving conflict. C1</li> </ul>	C1	LGIS	MCQs SEQs VIVA

			<ul> <li>Analysis different ethical problems and knows different approaches. C4</li> </ul>	C4		
			<ul> <li>Recognize importance of informed consent before examining a patient or any procedure.</li> <li>C1</li> </ul>	C1		
			<ul> <li>Recognize importance of counseling of patients and attendants in different clinical settings. C1</li> </ul>	C1		
			<ul> <li>Recognize respect for patient autonomy and acting in best interest of patient and maintaining confidentiality. C1</li> </ul>	C1		
			<ul> <li>Define the Mechanisms that causes and counteracts cellular aging, C1</li> </ul>	C1		
			• Discuss the causes of DNA damage <b>C2</b>	C2		
Cellular aging & S-5 intracellular accumulations	Collular aging &	Pathology	<ul> <li>Describe mechanism of decreased cellular replication C2</li> </ul>	C2		MCOs
	intracellular accumulations		<ul> <li>Explain role of telomers and telomerase and defective protein homeostasis leading to cellular aging C2</li> </ul>	C2	SGD	SEQs VIVA
			Define intracellular accumulations C1	C1		
			<ul> <li>Describe causes , mechanisms and clinical correlations of the following abnormal accumulations in cells and tissues: C2</li> </ul>	C2		
P-1	Pharmacological calculations-I	Pharmacology	<ul> <li>Solve the pharmacological calculations using the basic formulae</li> </ul>		Practical	OSPE
P-2	Documentary record (ID Card)	Forensic Medicine	• Describe Importance of personal identity. Describe the Parameters of personal identity with special emphasis on the CNIC <b>C2</b>	C2	Practical	OSPE
	, , , , , , , , , , , , , , , , , , ,		Enlist the detail of entries on CNIC.			
			Identify a person in the light of CNIC.			
			Classity various cellular adaptations to stress	C1		
	Cellular		<ul> <li>Identify various clinical conditions which lead to hypertrophy, atrophy and metaplasia</li> </ul>	P2		
P-3	adaptations to stress	aptations to Pathology stress	<ul> <li>Identify the morphology of hypertrophy, atrophy and metaplasia</li> </ul>	P3	Practical	OSPE
			• Demonstrate positive attitude towards safe handling of laboratory specimens A3	A3		

	•							
			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		
code no	Topic	Discipline	Explain causes of calcification in given scenario C2	C2	reaching strategies			
				-				
			<ul> <li>Discuss other sites and types of calcification C2</li> </ul>	C2				
			<ul> <li>Discuss morphological appearance and complications of calcification C2</li> </ul>	C2				
C-1	Pathological	Pathology	<ul> <li>Differentiate between various types of calcifications with respect to their sites and accessition with different</li> </ul>	C2	CBI	PBOs		
	cultineation	i utilology	pathological conditions			1543		
			<ul> <li>Apply knowledge in identifying the significance of calcification with normal and abnormal pathological significance page</li> </ul>	P2				
			<ul> <li>Demonstrate collaborative team work and problem solving</li> </ul>	A3				
			aptitude A3					
			Define drug distribution C1	C1		MCQs SEQs		
	Distribution of	n of Pharmacology	• Describe the distribution of a drug through various body compartments C2	C2				
L-11	drugs -I		• Define volume of distribution C1	C1	LGIS	SEQS VIVA		
			Express volume of distribution mathematically C1	C1				
			Calculate the volume of distribution of given drug	-				
			<ul> <li>Discuss the characteristics of plasma protein binding &amp; their clinical significance.C2</li> </ul>	C2				
L-12	Distribution of	Pharmacology	<ul> <li>Describe relationship among volume of distribution &amp; PPB.C2</li> </ul>	C2	LGIS	MCQs SEQs		
	ulugs ii		• Discuss the drug reservoirs in the body. C2	C2		VIVA		
			• Discuss different factors affecting distribution of drugs <b>C2</b>	C2				
			Define Biotransformation C1	C1				
			<ul> <li>Describe the outcomes and clinical significance of Biotropoformation C2</li> </ul>	C2		MCO		
1-13	Biotransformation	Pharmacology	Enlist types of hiotransformation (microsomal and non –	C1	IGIS	SEOs		
- 10	I		microsomal) C1	UI		VIVA		
			<ul> <li>Describe characteristics of Phase 1 and Phase 2 biotransformation reactions C2</li> </ul>	C2	1			
1 44	L4 Biotransformation	Dhaumassis	Discuss different factors affecting biotransformation C2	C2		MCQs		
L-14		II Pharmacology	Discuss enzyme induction and inhibition C2	C2	LUIS	SEQS VIVA		
L-15	Ethics in primary	Family Medicine	Define ethics in medicine	C1	LGIS	MCQs		
		- 10						

	care		<ul> <li>to understand the scope of ethical practice</li> <li>To understand the value and significance of applying ethics</li> </ul>	C2 C2		SEQs
			in medical practice	-		
			To learn the principles of medical ethics	63		
L-16	lemaniyat-ll	The Holy Quran	Comprehend ayat from Sorat Nimmal	C3	LGIS	MCQs
			• The characteristics of the common surgical pathogens and their sensitivities	С3		MCOs
			• The classification of sources of infection and their severity.	C2		
L-17	Surgical infections	Surgery	The clinical presentation of surgical infections.	C2	LGIS	SEQs
			• The indications for and choice of prophylactic antibiotic.	C2		
			To learn the management of abscesses			
	Role of enzyme inducers and		• Recall the phenomenon of enzyme induction and inhibition C1	C1		MCQs SEQs VIVA
S-6	inhibitors in drug metabolism	Pharmacology	• Recognize the effect of enzyme induction and enzyme inhibition on co administered drugs C2	C2	SGD	
	Professional Medical negligence, PM& DC rules and		Define to Medical Ethics C1	C1		
			<ul> <li>Define and describe the medical negligence with examples</li> <li>C1</li> </ul>	C1		
1 10		negligence, PM& DC rules and	Foronsis Modisino	<ul> <li>Define and describe contributory negligence and precautions against medical negligence C1</li> </ul>	C1	IGIS
L-10	regulation governing medical	Porensic Medicine	<ul> <li>Describe the structure of PM &amp;DC C2</li> </ul>	C2	LOIS	VIVA
	procedures		Describe role and function of PM &DC C2	C2		
			• Discuss duties of a Medical practitioner & duties of patients			
			Describe Stimuli for acute inflammation C2	C2		
	Acute	<b>-</b>	• Explain vascular Changes including vascular flow, caliber,	C2		MCQs
L-19	Inflammation	Pathology	and increased vascular permeability. C2		LGIS	SEQS
	vasculai events		• (vascular Leakage)			VIVA
	Confidentiality		Preparation of Medical Certificate C3	C3		MCQs
L-20	and legal medical	Forensic Medicine	Preparation of Medicolegal report C3	С3	LGIS	SEQs
	practice		Preparation of Postmortem report C3	C3		VIVA
			• To understand:			MCOs
L-21	Sterilization and	Surgery	• The concept of sterilization and disinfection.		LGIS	SEQs
	disinfection	-	• The importance of aseptic and antiseptic techniques.			VIVA
L-22	Bioavailability	Pharmacology	Define bioavailability C1	C1	LGIS	MCQs

			• Express it mathematically and graphically C1	C1		SEQs
			• Describe the clinical significance of bioavailability C2	C2		VIVA
			• Define first pass metabolism C1	C1		
			<ul> <li>Recognize the effect of first pass metabolism on bioavailability of drugs C2</li> </ul>	C2		
			• Discuss the factors affecting bioavailability of drugs C2	C2		
			<ul> <li>Differentiate between bioequivalence, therapeutic equivalence &amp; chemical equivalence C3</li> </ul>	C3		
			Define half-life C1	C1		
			Express it mathematically C1	C1		
			<ul> <li>Discuss phases with graphical representation of half- life.(alpha and beta half life) C2</li> </ul>	C2		MCOc
L-23	Half life of drugs	Pharmacology	Discuss first and zero order kinetics C2	C2	LGIS	SEOs
			Describe factors affecting half-life.C2	C2		VIVA
			• Discuss the clinical significance of half-life. C2	C2		
			• Discuss steady state concentration and its importance <b>C2</b>	C2		
			<ul> <li>Determine the half life of the given drug.</li> </ul>			
	Cellular Events Of		<ul> <li>Describe cellular events (Extravasation and phagocytosis)</li> <li>C2</li> </ul>	C2		
			Describe Leukocytes Adhesions and Transmigration C2	C2		MCOs
L-24	Acute	Pathology	Describe Chemotaxis, Leukocyte Activation, C2	C2	LGIS	SEQs
	Innamination		Phagocytosis and Release of Leukocytes Products			VIVA
			<ul> <li>Describe Leukocyte-Induced Tissue injury and Defects in Leukocytes Function C2</li> </ul>	C2		
			Classify Cell Derived Mediators C1	C1		
S-7	Chemical Mediators of	Pathology	• Discuss mechanism of actions of all mediators C2	C2	SGD	MCQs SEQs
	inflammation		<ul> <li>Demonstrate effective collaboration within the group as a member or leader A3</li> </ul>	A3		VIVA
P-4	Pharmacological calculations-II	Pharmacology	Solve the pharmacological calculations using the basic formulae		Practical	OSPE
	Identification of		<ul> <li>Describe the distinguishing features of male and female skull C2</li> </ul>	C2		
P-5	male and female skull Forensic Med	Forensic Medicine	<ul> <li>Knowledge of estimation of stature, Race, Age and anatomical details of skull with special reference of MLC/Autopsy C3</li> </ul>	C3	Practical	OSPE

			Distinguish male and female skull.			
			<ul> <li>Relate anatomical details of skull with reference to personal identity.</li> </ul>			
			<ul> <li>The student keen enough to utilize the basic anatomical details of skull for its Medicolegal utilization</li> </ul>			
			<ul> <li>Enlist various conditions which can lead to fatty change calcification and pigmentation</li> </ul>			
D.C.	Fatty change, Calcification, Pigmentation	Itty change, alcification, Pathology	<ul> <li>Identify various clinical conditions which lead to fatty change, calcification and pigmentation P2</li> </ul>	Ρ2	Practical	OSPE
F-0			<ul> <li>Identify the morphology of fatty change, calcification and pigmentation P3</li> </ul>	Р3		
			Demonstrate collaborative working skills A2	A2		

	3 <sup>rd</sup> Week						
Code no	Торіс	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching strategies	Assessment tools	
	Morphological Patterns and		<ul> <li>Identify Morphologic Patterns of Acute inflammation C1</li> <li>Describe the termination events of acute inflammation C2</li> </ul>	C1 C2		MCQs SEQs VIVA	
SL-1	Acute inflammation	Pathology	<ul> <li>Describe complications of Acute inflammation C2</li> <li>Demonstrate responsibility of self learning A3</li> </ul>	C2 A3	LGIS		
			<ul> <li>Define excretion of drug C1</li> <li>Identify sites of drug excretion C1</li> </ul>	C1 C1			
			<ul> <li>Discuss processes involved in drug excretion C2</li> <li>Define drug clearance C1</li> </ul>	C2 C1	LGIS	MCQs SEQs VIVA	
L-25 E	Excretion Of drugs	Pharmacology	<ul> <li>Express it mathematically C1</li> <li>Define extraction ratio C1</li> </ul>	C1 C1			
			<ul> <li>Describe factors affecting CLC2</li> <li>Outline the significance of clearance C2</li> </ul>	C2 C2			
S-8	Chronic Inflammation	Pathology	<ul> <li>Describe the causes of chronic Inflammation.C2</li> <li>Describe Role of Macrophages C2</li> </ul>	C2 C2	SGD	MCQs SEQs VIVA	
	Mashanian of drug		<ul> <li>Discuss different ways of drug interactions C2</li> <li>Chemical &amp; physical interaction</li> <li>Drug –Receptor interaction</li> </ul>	C2		MCQs	
L-26	action- I	Pharmacology	<ul> <li>Define receptor, its types and distribution C1</li> <li>Define ligand C1</li> </ul>	C1 C1	LGIS	SEQs VIVA	
			Discuss different receptor ligand interaction (agonist, partial agonist, inverse agonist and antagonist) C2	C2			
C-2	Granulomatous inflammation	Pathology	Demonstrate the pathogenesis , morphology , etiology, and causes and reasons of granulomatous inflammation C2	C2	CBL	PBQs	
	Inflammation		<ul> <li>Differentiate between different granulomatous diseases C4</li> </ul>	C4			

			<ul> <li>Identify diagnostic criteria for granulomatous inflammation P2</li> </ul>	P2		
			Demonstrate clinical reasoning and problem solving attitude with	A3		
			collaborative team work A3			
	Courts and legal	Forensic	Describe Legal procedures in Pakistan C2	C2	1.010	MCQs
L-27	procedures (Pakistan)	Medicine	Describe various type of courts in Pakistan C2	C2	LGIS	SEQs VIVA
			Recognize mechanism of acute inflammation. C1	C1		
			• Describe what acute phase response are. C2	C2		
	Acute and chronic		Explain acute phase proteins. C2	C2		MCOr
1-28	inflammation	Medicine	• Explain mechanism of sepsis and septic shock. C2	C2	IGIS	MICQS SEOs
L-20	;Medical	Weulenie	Differentiate between acute and chronic inflammation. C4	C4	LOID	VIVA
	perspective		Recognize the investigations involved in inflammation. C1	C1		
			<ul> <li>Describe presenting modes of inflammation and problems related to it. C2</li> </ul>	C2		
		The Holy	Comprehend Ayat from Sorat Al- Ehzab & Sorat	С3		
L-29	lemaniyat-ili	Quran	Furqan		LGIS	MCQ
	Concernance of		Explain Systemic effects of inflammation C2	C2		MCQs
S-9	inflammation	Pathology	• Describe consequences of defective or excessive inflammation C2	C2	SGD	SEQs VIVA
L-30	Mechanism of drug action- II	Pharmacology	• Discuss different receptor signal transduction mechanisms C2	C2	LGIS	MCQs SEQs
			Define inferential statistics	C1		
			Explain role of inferential statistics in health research	C2		
			decision making			
			<ul> <li>Appreciate concept of normal distribution curve and</li> </ul>	C2		
			standard normal curve			
	Normal distribution		<ul> <li>standard normal curve</li> <li>Enlist properties of normal distribution curve and</li> </ul>	C2		MCQs
L-31	Normal distribution curve	Research	<ul> <li>standard normal curve</li> <li>Enlist properties of normal distribution curve and application of concept of normal distribution curve to solve</li> </ul>	C2	LGIS	MCQs SEQs
L-31	Normal distribution curve	Research	<ul> <li>standard normal curve</li> <li>Enlist properties of normal distribution curve and application of concept of normal distribution curve to solve community problems</li> </ul>	C2	LGIS	MCQs SEQs VIVA
L-31	Normal distribution curve	Research	<ul> <li>standard normal curve</li> <li>Enlist properties of normal distribution curve and application of concept of normal distribution curve to solve community problems</li> <li>Conceptualize the methods of generalization of result of sample over population</li> </ul>	C2 C3	LGIS	MCQs SEQs VIVA
L-31	Normal distribution curve	Research	<ul> <li>standard normal curve</li> <li>Enlist properties of normal distribution curve and application of concept of normal distribution curve to solve community problems</li> <li>Conceptualize the methods of generalization of result of sample over population</li> <li>Explain concept standard error, confidence interval,</li> </ul>	C2 C3 C2	LGIS	MCQs SEQs VIVA
L-31	Normal distribution curve	Research	<ul> <li>standard normal curve</li> <li>Enlist properties of normal distribution curve and application of concept of normal distribution curve to solve community problems</li> <li>Conceptualize the methods of generalization of result of sample over population</li> <li>Explain concept standard error, confidence interval, coefficient of variation and degree of freedom with</li> </ul>	C2 C3 C2	LGIS	MCQs SEQs VIVA
L-31	Normal distribution curve	Research	<ul> <li>standard normal curve</li> <li>Enlist properties of normal distribution curve and application of concept of normal distribution curve to solve community problems</li> <li>Conceptualize the methods of generalization of result of sample over population</li> <li>Explain concept standard error, confidence interval, coefficient of variation and degree of freedom with interpretation.</li> </ul>	C2 C3 C2	LGIS	MCQs SEQs VIVA
L-31	Normal distribution curve	Research	<ul> <li>standard normal curve</li> <li>Enlist properties of normal distribution curve and application of concept of normal distribution curve to solve community problems</li> <li>Conceptualize the methods of generalization of result of sample over population</li> <li>Explain concept standard error, confidence interval, coefficient of variation and degree of freedom with interpretation.</li> <li>Recall infectious agents including prions, viruses, prokaryotes and eukaryotes. C1</li> </ul>	C2 C3 C2 C1	LGIS	MCQs SEQs VIVA
L-31	Normal distribution curve Physiological	Research	<ul> <li>standard normal curve</li> <li>Enlist properties of normal distribution curve and application of concept of normal distribution curve to solve community problems</li> <li>Conceptualize the methods of generalization of result of sample over population</li> <li>Explain concept standard error, confidence interval, coefficient of variation and degree of freedom with interpretation.</li> <li>Recall infectious agents including prions, viruses, prokaryotes and eukaryotes. C1</li> <li>Recognize the meaning of normal flora. C1</li> </ul>	C2 C3 C2 C1 C1	LGIS	MCQs SEQs VIVA MCQs
L-31	Normal distribution curve Physiological response to	Research Medicine	<ul> <li>standard normal curve</li> <li>Enlist properties of normal distribution curve and application of concept of normal distribution curve to solve community problems</li> <li>Conceptualize the methods of generalization of result of sample over population</li> <li>Explain concept standard error, confidence interval, coefficient of variation and degree of freedom with interpretation.</li> <li>Recall infectious agents including prions, viruses, prokaryotes and eukaryotes. C1</li> <li>Recognize the meaning of normal flora. C1</li> <li>Describe host pathogen interactions. C2</li> </ul>	C2 C3 C2 C1 C1 C2 C1 C2	LGIS	MCQs SEQs VIVA MCQs SEQs
L-31	Normal distribution curve Physiological response to infection	Research Medicine	<ul> <li>standard normal curve</li> <li>Enlist properties of normal distribution curve and application of concept of normal distribution curve to solve community problems</li> <li>Conceptualize the methods of generalization of result of sample over population</li> <li>Explain concept standard error, confidence interval, coefficient of variation and degree of freedom with interpretation.</li> <li>Recall infectious agents including prions, viruses, prokaryotes and eukaryotes. C1</li> <li>Recognize the meaning of normal flora. C1</li> <li>Describe host pathogen interactions. C2</li> <li>Explain pathogenesis of infectious diseases. C2</li> </ul>	C2 C3 C2 C1 C1 C1 C1 C2 C2 C2 C2	LGIS	MCQs SEQs VIVA MCQs SEQs

			Recall epidemiology of infection. C1	C1		
			Know modes of transmission of infections. C1	C1		
			Classical concepts of homeostasis.	C2		
	Metabolic response		Mediators of metabolic response to injury	C2		MCQs
L-33	to injury	Surgery	Physiological and biochemical changes that occur during injury.	C2	LGIS	SEQs VIVA
			Avoidable factors that enhance metabolic response to injury	C2		
			Define Dose response curve C1	C1		
1.24	Dose response	Dharmacology	• Discuss different types of dose response curve C2	C2		MCQs
L-34	curve -l	Filamacology	• Describe the information that can be obtained from a Graded Dose Response Curve with its clinical significance <b>C2</b>	C2	LGIS	VIVA
			Explain Quantal Dose Response Curve C2	C2		
L-35	Dose response	Dose response curve-II Pharmacology	<ul> <li>Describe the information that can be obtained from a Quantal Dose Response Curve C2</li> </ul>	C2	LGIS	MCQs SEQs
	curve-n		<ul> <li>Describe differences between Graded and Quantal Dose Response Curve C2</li> </ul>	C2		VIVA
			Describe Importance of personal identity. C2	C2		
			Describe the Parameters of personal identity with special	C2		MCOs
L-36	Introduction to	Forensic	emphasis on the following		LGIS	SEQs
	personal identity	iviedicine	<ul> <li>Teeth, Age, Sex, Race and communal characters, Complexion, Eastures, Hairs, Stature, Deformities, Tattee, marks, Scare</li> </ul>			VIVA
			Occupational, stigmata, Anthropometry <b>C2</b>			
	Control of normal		• Explain tissue proliferative activity of Stem cell C2	C2		MCOs
S-10	cell Proliferation	Pathology	Explain signaling Mechanism in Cell Growth C2	C2	SGD	SEOs
	and Tissue Growth		• Describe cell Cycle and the Regulation of cell Replication C2	C2		VIVA
P-7	Half life and	Pharmacology	Discuss the clinical pharmacology and application of these	C2	Practical	OSPE
	Bioavailabillity		pharmacokinetic parameters in real life settings C2			
			• Describe the distinguishing features of male and female skull C2	12		
			Knowledge of estimation of stature, Race, Age and anatomical	С3		
	Identification of	Foronsis	details of skull with special reference of MLC/Autopsy C3			
P-8	skull	Medicine	Distinguish male and female skull.	C3	Practical	OSPE
			<ul> <li>Relate anatomical details of skull with reference to personal identity</li> </ul>	C2	-	
			The student keep enough to utilize the basic anatomical details of	<u>()</u>		
			skull for its Medicolegal utilization			
			<ul> <li>Identify acute inflammatory condition on the basis of gross and</li> </ul>	P3		
P-9	Diagnosis of Acute	Pathology	microscopic findings.P3		Practical	OSPE
	inflammation		• Value the role of basic investigations in clinical management A3	A3		

			<mark>4<sup>th</sup> Week</mark>			
Code no	Торіс	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching strategies	Assessment tools
S-11	Dose response curve (clinical applications)	Pharmacology	<ul> <li>Discuss the clinical application of different types of dose response curves C2</li> </ul>	C2	SGD	MCQs SEQs VIVA
			Define Tolerance & Tachyphylaxis with clinical examples     C2	C2		
1-37	Tolerance and	Pharmacology	• Differentiate between Tolerance and Tachyphylaxis C2	C2	IGIS	MCQs SEOs
2.57	tachyphylaxis	тапасоюду	<ul> <li>Discuss different types and mechanism of drug tolerance C2</li> </ul>	C2	2015	VIVA
			• Define drug dependence C1	C1		
			• Discuss the stages of drug dependence C2	C2		
L-38	Factors affecting drug actions I	Pharmacology	<ul> <li>Discuss different factors affecting drug dose and action C2</li> <li>Physiological</li> <li>Pathological</li> <li>Psychological</li> <li>Genetic</li> <li>Drug related (drug interactions)</li> <li>Environmental</li> </ul>	C2	LGIS	MCQs SEQs VIVA
L-39	Factors affecting drug actions II	Pharmacology	<ul> <li>Explain Synergism, Summation and Potentiation , Accumulation C2</li> </ul>	C2	LGIS	MCQs SEQs VIVA
			Describe mechanism of tissue regeneration	C2		
S-12	Mechanism of Tissue	ism of Pathology	<ul> <li>Define: Collagen, Elastin, Fibrillin,cell adhesion Proteins, Glycosaminoglycans, Proteoglycans C1</li> </ul>	C1	SGD	MCQs SEQs
	Regeneration		<ul> <li>Demonstrate collaborative team work and problem solving aptitude A3</li> </ul>	A3		VIVA
	Idontification in		Define mass disaster C1	C1		MCOs
1-40	mass	Forensic	Mention the objective of Forensic investigations C2	C2	IGIS	SEOs
2 40	disasters	Medicine	Describe the importance of fragmentary remains C2	C2	2015	VIVA
			Describe role of photography in mass disasters C2	C2		
	Common	_	Describe patho-physiology of pain. C2	C2		MCQs
L-41	Medical Issues-I	Medicine	Describe evaluation of patient with pain. C2	C2	LGIS	SEQs
L-42	Wound healing	Surgery	Normal healing and how it can be adversely affected.	C2	LGIS	MCQs SEOs
L-42 and repair	nd repair Surgery	<ul> <li>Management of wounds of different types.</li> </ul>	C3			

			Differentiation between acute and chronic wounds	С3										
			• Differentiate between repair and regeneration C4	C4										
			Describe Mechanism of Angiogenesis C2	C2										
			<ul> <li>Wound healing by first and second intention</li> </ul>											
			Describe factors that influence the inflammatory	()										
	Healing by		reparative response. C2											
C-3	secondary	Pathology	Describe wound remodeling, formation of granulation	C2	CBL	PBQs								
	Intention		tissue and complications of wound healing. C2											
			<ul> <li>Apply his/her knowledge to identify the mechanism of healing in different circumstances</li> </ul>	A2										
			Demonstrate critical thinking attitude needed for											
			application of basic knowledge into clinical situations. A3	A3										
			• Define adverse drug reaction(ADR) C1	C1										
			• Classify ADRs based on type and severity C1	C1										
	Adverse drug		• Describe the characteristic of each type of ADR C2	C2		MCQs								
L-43	reactions	Pharmacology	• Identify predisposing risk factors and approaches to ADR	C2	LGIS	SEQs								
			prevention C2			VIVA								
			• Illustrate ways of ADR detection during pre & post	C2										
			Elaborate the concept of hypothesis testing	<u></u>										
			Endotrate the concept of hypothesis testing     Enlist the steps of hypothesis testing	C1										
		Research	<ul> <li>Explain role of statistical test of significance in hypothesis</li> </ul>											
			testing	C2	LGIS	1460-								
1-44	Hypothesis		• Differentiate between parametric , non-parametric	C2		SEQs VIVA								
L-44	testing		• Interpret p-value and Confidence Interval in published	C3										
			research result											
			• Describe concept of generalization of results to the	C2										
			Illustrate source of type I and type II errors	C2										
			Fvaluate cause of chest discomfort and describe approach											
			to a patient with fever.	C3										
	Common		• Differentiate between faintness, syncope, dizziness and	<b>C</b> 4		MCO								
1-45	medical issues-	Medicine	vertigo.	C4	IGIS	SEOs								
245	ll	Weaterie	<ul> <li>Describe approach to a patient with hypertension.</li> </ul>	C2	2015	VIVA								
			•											
			<ul> <li>Describe approach to a patient with lymphadenopathy</li> </ul>	C2										
			Concentualize the Dharmacovigilance	<u> </u>										
			<ul> <li>Conceptualize the rharmacovigilance</li> <li>Define Pharmacovigilance (WHO DRAP) guidelines on</li> </ul>			MCOs								
L-46	Pharmacovigila	Biomedical	the management of high alert medication	C2	LGIS	SEOs								
	nce	Ethics	Ethics	Ethics —	Ethics –	Ethics —	Ethics	Ethics	Ethics	Ethics	• Elaborate adverse events reporting guidelines for	C		VIVA
			healthcare professionals. $\mathbf{C2}$	τ2										

			• Enlist the various tools available to minimize the medical errors C1	C1		
			Elaborate the disclosure policy	C2		
			<ul> <li>Role of Pharmaceutical industry in research enterprise</li> <li>and how the "conflict of interest" affects research. (some overlap with Pharma-physician issues in</li> <li>clinical ethics)</li> </ul>	C3		
			Define therapeutic drug monitoring C1	C1		
	Therapeutic		<ul> <li>Identify the need/significance of therapeutic drug monitoring C1</li> </ul>	C1		MCQs
SL-2	drug monitoring	Pharmacology	<ul> <li>Discuss the characteristics and process of therapeutic drug monitoring C2</li> </ul>	C2	LGIS	SEQs VIVA
			<ul> <li>Enumerate the factors affecting therapeutic drug monitoring C1</li> </ul>	C1		
C-4	Pharmacogenet ics	Pharmacology	<ul> <li>Describe the importance of Pharmacogenetics in this specific case C2</li> </ul>	C2	CBL	PBQs
			• Explain application of sampling distribution of means in calculating SE and 95% Cl for sample mean	A2		
			Compute SE of difference between two sample means	С3		
L-47	Test of significance	Research	• Apply student t-test for computing difference between 2 means and interpret the results	A3	LGIS	MCQs SEQs VIVA
			Elaborate types of t-test	С3		
			• Differentiate between one sample, independent and paired t test	С3		
L-48	Problem oriented history taking	Family medicine	<ul> <li>Comprehend the concept of doctor patient relationship.</li> <li>Llearn the important components of history taking.</li> <li>Iinterpret patients history findings to formulate a diagnosis</li> </ul>		LGIS	MCQs SEQs VIVA
D 10	Biostatistics	Pharmacology	Define mean, median, mode& standard Deviation C1	C1	Dractical	OSDE
P-10			Interpret the data.	С3	Fidelical	USPE
			<ul> <li>Describe the pattern of fingerprints and different methods for recording of fingerprints.C2</li> </ul>	C2		
P-11	Dactylography	Forensic Medicine	<ul> <li>Define the forensic importance and application of DNA finger printing C1</li> </ul>	C1	Practical	OSPE
			Identify the pattern of a fingerprint.	C2		
			Record a finger print.	P1		
P-12	Chronic and granulomatous	Pathology	<ul> <li>Identify the microscopic features and gross</li> <li>appearance of Chronic and Granulomatous Inflammation</li> </ul>	P1	Practical	OSPE
	inflammation		<ul> <li>Value the role of basic investigations in clinical management A3</li> </ul>	A3		

**SDL Curriculum** (Self Directed Learning)

	Week-1	
	Pharmacology	
Торіс	Learning Objectives	References
Drug development and new therapeutic approaches	<ul> <li>Define drug</li> <li>Identify sources of drug</li> <li>Discuss the phases of drug development</li> <li>Outline the new therapeutic approaches</li> </ul>	<ol> <li>Basic and Clinical Pharmacology by Bertram Z. Katzung 15th Edition</li> <li>Chapter 1, Page 2-6, 15-24</li> <li>Goodman and Gillmans The Pharmacological basics of Therapeutics, 13th Edition, Chapter 1, Pg 1-8</li> <li>Alamgir, A.N.M. (2017). Drugs: Their Natural, Synthetic, and Biosynthetic Sources. In: Therapeutic</li> <li>Use of Medicinal Plants and Their Extracts: Volume 1. Progress in Drug Research, vol 73. Springer, Cham. https://doi.org/10.1007/978-3-319-63862-1_4</li> </ol>
	Pathology	
The genome and cellular house keeping	<ul> <li>Describe the components and regulators of gene function</li> <li>Describe the functions of coding and non-coding genome</li> <li>Describe the components of cell and regulation of cell function</li> </ul>	Robbins & Cotran Pathologic Basis OF Disease 10 <sup>th</sup> Edition Chapter 1 Pg 115
	Forensic Medicine	
Importance of Medical consent	<ul> <li>Describe various types of medical evidences and consent</li> <li>Describe principles of a medical witness</li> </ul>	Parikh"text book of medical jurisprudence forensic medicine and toxicology Edition 9

	Week-2										
	Pharmacology										
Торіс	Learning Objectives	References									
Pharmacokinetic interactions & Their mechanisms	<ul> <li>Define drug interactions and its types</li> <li>Classify drug interactions at different pharmacokinetic processes with examples absorption, distribution, metabolism and excretion</li> <li>Discuss clinical implications of these interactions</li> </ul>	<ul> <li>Important Drug Interactions &amp; Their Mechanisms, Chapter 67, Page No:1156,1173, Basic &amp; Clinical Pharmacology, Katzung</li> <li>DuBuske, L.M., 2005. The role of P-glycoprotein and organic anion-transporting polypeptides in drug interactions. <i>Drug safety</i>, 28, pp.789-801</li> </ul>									
	Pathology										
Cell Growth	<ul> <li>Describe the cell signaling pathways</li> <li>Describe the cell cycle and its regulators</li> <li>Describe the role of growth factors and their receptors in cell growth</li> <li>Describe the role of extracellular matrix in cell growth</li> <li>Describe the role of stem cells in replenishing cellular populations</li> </ul>	Robbins & COTRAN Pathologic Basis OF Disease 10th Edition Chapter 1 Pg 1529									
	Forensic Medicine										
Professional Medical negligence	<ul> <li>Introduction to Medical Ethics</li> <li>Define and describe the medical negligence with examples</li> <li>Define and describe contributory negligence and precautions against medical negligence</li> </ul>	Parikh"text book of medical jurisprudence forensic medicine and toxicology Edition 9									

	Week-3									
Pharmacology										
Торіс	Learning Objectives	References								
Principles of Prescription Order Writing and Patient Compliance	<ul> <li>Describe different steps of writing a rational prescription</li> <li>Identify different components of prescription</li> <li>Enlist and discuss different abbreviations and terms used in prescriptions and chart orders</li> <li>Recognize main prescription errors</li> </ul>	<ul> <li>Rational Prescribing &amp; Prescription Writing, Chapter 66, Page Number:1146-1150 Basic &amp; Clinical Pharmacology, Katzung</li> <li>Ozavci, G., Bucknall, T., Woodward-Kron, R., Hughes, C., Jorm, C., Joseph, K. and Manias, E., 2021. A systematic review of older patients' experiences and perceptions of communication about managing medication across transitions of care. Research in Social and Administrative Pharmacy, 17(2), pp.273- 291.</li> </ul>								
	Pathology									
Morphological Patterns and complications of Acute inflammation	<ul> <li>Identify Morphologic Patterns of Acute inflammation</li> <li>Describe the termination events of acute inflammation</li> <li>Describe complications of Acute inflammation</li> <li>Demonstrate responsibility for self- learning</li> </ul>	Robbins & Cotran Pathologic Basis OF Disease 10th Edition Chapter 3 Pg 9396								
	Forensic Medicine									
Personal identity	<ul> <li>Describe Importance of personal identity.</li> <li>Describe the Parameters of personal identity with special emphasis on the following</li> <li>Teeth, Age, Sex, Race and communal characters, Complexion, Features, Hairs, Stature, Deformities, Tattoo marks, Scars, Occupational, stigmata, Anthropometry,</li> </ul>	Parikh"text book of medical jurisprudence forensic medicine and toxicology Edition 9								

	Week-4										
Pharmacology											
Торіс	Learning Objectives	References									
Therapeutic drug monitoring	<ul> <li>Define therapeutic drug monitoring</li> <li>Identify the need/significance of therapeutic drug monitoring</li> <li>Discuss the characteristics and process of therapeutic drug monitoring</li> <li>Enumerate the factors affecting therapeutic drug monitoring</li> </ul>	<ol> <li>Ali, A.S., Abdel-Rhaman, M.S., Rahman, A.F., &amp; Osman, O.H. (2013). Basic Principles of Therapeutic Drug Monitoring.</li> <li>Goodman and Gillmans The Pharmacological basics of Therapeutics, 13th Edition, Chapter 2, Pg 29</li> </ol>									
	Pathology										
Phagocytosis and Clearance of the Offending Agent	<ul> <li>Describe the role of cells involved in Phagocytosis and Clearance of the Offending Agent</li> <li>Describe the process of phagocytosis and opsonization</li> <li>Describe the mechanism of action of NETs</li> </ul>	Robbins & Cotran Pathologic Basis OF Disease 10th Edition Chapter 3 Pg 8085									
	Forensic Medicine										
Identification in mass disasters	<ul> <li>Define mass disaster</li> <li>Mention the objective of Forensic investigations</li> <li>Describe the importance of fragmentary remains</li> <li>Role of photography in mass disasters</li> </ul>	Parikh"text book of medical jurisprudence forensic medicine and toxicology Edition 9									

Integrated Modular Curriculum Foundation Module I

3<sup>rd</sup> Year MBBS

Time Table 2023

Duration Of Module:

O4 Weeks

Coordinator:

Dr. Zunera Hakim

Co-Coordinators: Dr. Zoefishan, Dr Omaima

Reviewed by: Module committee

Members Of Module Committee	
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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 Mudassira Zahid	Focal Person	Pathology Department
Dr Shahida	Focal Person	Forensic Medicine Department
Dr Saima Ambreen	Focal Person	Medicine Department
Dr Huma Sabir	Focal Person	Surgery Department

Approved by: Curriculum Committee

Documented By Dr Omaima Asif

Prepared By DR. Zunera Hakim AP Pharmacology Department

#### Time Table 3<sup>rd</sup> Year MBBS -FOUNDATION MODULE I -2023

(1st Week)

DATE / DAY		8:00 AM	11:00 AM		11:00am	– 12:00pm										
		Clinical	Clerkship													
	08:	00 AM - 11:00	) AM		11:00 AM -	- 12:00 PM	12:00 PM - 02:00 PM									
					Pharmacology	* L-1	-1 Batch Discipline Topic of Practical									
Wednesday 08-02-2023					Orientation Lecture	C	Pharmacol	ogy P-1 Phar	macological Calculations-I	Dr.Haseeba Pharmacology Lab			Lab			
		Batch : A	Medicine		Even	Odd	A	Forensic M	Iedicine P-2 Docu	imentary record (ID Card)	Dr. Raheel Ba	ig	Forensic Lab			
		Batch : B	Surgery		Dr.Asma Khan	Dr Omaima	В	Pathology	P-3 Cellu	alar adaptation to stress	Dr Fatima Riz	zvi	Pathology Lab	, NTB		
		Batch : C St	ub-Specialty		Surgery *	* L-2	Pathology	*L-3			Forensic Medicine *L-4					
Thursday		(Refer to a	innexure 2)		Surgica	al Ethics		1	12:00 PM - 01:00 PM		01:00 PM - 02:00 PM					
09-02-2023								Introduction to Forensic Medicine								
					Even	Odd	E	ven		Odd	Even		Odd			
					Dr Yasmeen	Dr Ruqia Mushtaq	Pro	f. Mobina	Prof. V	I	Dr Gulzaib	Dr Rah	eel			
	08:00am - 08:45am		08:45am -	- 09:30am	09:30am	– 10:15am	10:15am	- 11:00am	11:00am –	- 12:00pm						
Friday 10-02-2023	Quran * L	-5	Medicir	ne *L-6	Patholog	y **S-1	Pharmacolo	ogy ** S-2 Pharmacology **S-3								
	Iemaniyat	-I	Medicine in practice		Cellular adaptations		Routes of drug administration and dosage forms		Routes of drug administration	-						
	Even	Odd	Even	Odd	Even	Odd	Even	Odd	Even	Odd	-					
	Mufti Wahid		Dr. Javeria	Dr Tahir	Dr Rabbiya Khalid	Dr Sara Rafi	Dr. Rubina	Dr Zoefishan	Dr. Rubina	Dr Zoefishan						
					Dr Tayyaba Ali	Dr Assiya Naizi	Dr. Zaheer	Dr. Arsheen	Dr. Zaheer	Dr . Arsheen						
	08:00am - 08:4	45am	08:45am -	- 09:30am	09:30am	– 10:30am	10:130m	- 11:00am	11:00am –	12:00pm	12:00:pm –	01:00pm	01:00pn	n – 02:pm		
	Surgery *L-7		Pharmacology	*L-8	Forensic Medicine *	L-9			Pharmacology **S-4		Medicine *L-	·10	Pathology **	<b>S</b> 5		
							מת									
Saturday 11-02-2023	Saturday 11-02-2023Patient safety and quality improvement		Absorption of drug (processes of drug	gs absorption)	Importance of Medical	consent			Absorption of drugs (factors affecting absorption	n of drugs)	Medical ethics introduction		Cellular aging and intra cellular accumulations			
	Even	Odd	Even	Odd	Even	Odd	and the second		Even	Odd	Even	Odd	Even	Odd		
	Dr.Rahat	Dr Nazan	Dr Sobia Javed	Dr Asma Khan	Dr. Gulzaib	Dr. Raheel	1		Dr. Rubina Dr. Zaheer	Dr Zoefishan Dr . Arsheen	Dr. Javeria	Dr Tahir	Dr Rabbiya Dr Huma	Dr Sara Dr Mudassira		

\*The batches whose practical is missed due to commencement of module mid week will be adjusted in 2 week along with the scheduled practical

#### TIME TABLE 3<sup>rd</sup> YEAR MBBS -FOUNDATION MODULE I -2023

(2<sup>nd</sup> Week)

DATE / DAY	8:00 AM 11:00 AM				11:00am	– 12:00pm	12:00 PM - 02:00 PM								
	1	Clinical	l Clerkship		Pathology ***	C-1	Batch	Discipline		Topic of Practic	al				
					Pathological Calcifi	ication	А	Pharmacology P	<b>P</b> -4	Pharmacologica	harmacological Calculations-II			Pharmacology	/ Lab
Monday					Even	Odd									
13-02-2023		Batch : A Batch : B	Medicine Surgery Batch		Dr Fatima Dr Nida	Dr Iqbal Dr Saeed	В	Forensic Medicine P	-5	Identification of	male and female skull	Dr.Gulzaib		Forensic Lab	
		: C Sub-Specialty(Refer to annexure 2)				С	Pathology P	<b>P-</b> 6	Fatty change, Ca Pigmentation	lcification,	Dr. Syeda Ais	ha	Pathology La	b, NTB	
					Pharmacology * 1	L-11	Batch	Discipline		Topic of Practic	al				
Tuesday					Distribution of drug	gs-I	В	Pharmacology P	<b>P</b> -4	Pharmacological	Calculations -II	Dr. Arsheen		Pharmacology	/ Lab
14-02-2023					Even	Odd									
					Dr Sobia Javed	Dr Haseeba	С	Forensic Medicine P	9-5	Identification of	male and female skull	Dr. Gulzaib		Forensic Lab	
							А	Pathology P	<b>P-</b> 6	Fatty change, Calcification, Pigmentation		Dr. Syeda Aisha		Pathology Lab	o, NTB
					Pharmacology *	L-12	Batch	Discipline		Topic of Practic	al				
Wednesday					Distribution of drug (factors affecting di	s-II stribution)	С	Pharmacology P	2-4	Pharmacological	Calculations -II	Dr. Arhseen		Pharmacology	' Lab
15-02-2023					Even	Odd									
					Dr Sobia Javed	Dr Haseeba	А	Forensic Medicine P	9-5	Identification of male and female skull		Dr.Gluzaib		Forensic Lab	
							В	Pathology P	<b>P-</b> 6	Fatty change, Ca Pigmentation	lcification,	Dr. Syeda Ais	ha	Pathology La	b, NTB
					Pharmacology *L-	13	Pharmaco	ology *L-14				Family Medio	cine *L-15		
Th				Biotransformation -I 12:00 PM – 01:00 PM			01:00 PM	- 02:00 PM							
1 nursday 16-02-2023							Biotransfo	rmation -II				Ethics in prim	ary care		
10-02-2023					Even	Odd		Even		(	Odd	Even	5	0	dd
					Dr Zunera	Dr Attiya	Dr Zunera		Dr	r Attiya	Dr Sadia				
	08:00am	- 08:45am	08:45am - 09:30a	m	09:30am	– 10:15am	10:15am - 11:00am			11:00am					
	Qur	an *L-16	Surgery (LGIS)*	L-17	Pharmacology * *S-6		Forensic N	Medicine * L-18		Patholo					
Friday 17-02-2023	Iemaniyat -II		Surgical Infection	Surgical Infection		Role of enzyme inducers and inhibitorsin drug metabolism		Professional Medical negligence PM& DC rules and regulation governing medical procedures		Acute inflammation vascular events					
	Even	Odd	Even	Odd	Even	Odd	Even	Odd		Even	Odd				
	Mufti Wahid		Dr Muhammad Qasim	Dr Irfan Malik	Dr. Rubina Dr. Zaheer	Dr Zoefishan Dr .Omaima	Dr Naila	Dr Shahida		Prof. Mobina	Prof. Wafa Omer				
	08:00am	- 08:45am	08:45am	- 09:30am	09:30am	– 10:30am	10	):30am - 11:00am		11:00am	– 12:00pm	12:00:pm –	01:00pm	01:00pm -	- 02:00pm
	Forensic Medicin	e * L-20	Surgery * L	21	Pharmacology	* L-22	BREAK		Ph	harmacology *L-2	3	Pathology	* L-24	Pathology **	S-7
Saturday 18-02-2023	Confidentiality and practice	d legal medical	Sterilization and di	Sterilization and disinfection		Bioavailability of drugs				Half life		Cellular event inflammation	Cellular events of acute Chemical mediators of inflammation		liators of
	Even	Odd	Even	Odd	Even	Odd	2000-004 000 02299902			Even	Odd	Even	Odd	Even	Odd
	Dr Naila	Dr Shahida	Dr Aurangzeb	Dr Muhammad Arif	Dr. Zunera Hakim	Dr Attiya Munir			Dr	r Attiya Munir	Dr Asma Khan	Prof. Mobina	Prof. Wafa	Dr Tayyaba Dr Abid	Dr Ayesha Dr. Asiya
												35	Page		-

#### TIME TABLE 3rd YEAR MBBS -FOUNDATION MODULE I -2023

(3<sup>rd</sup> Week)

DATE / DAY	8:00 AM 11:00 AM			11:00an	n – 12:00pm				12:00 PM - 02:00 PM						
		Clinical	Clerkship		Pathology ****S	L-1	Batch	Discipline	e	Topic of Practi	cal				
Monday 20-02-2023					Morphological Pa complications of a <b>Even</b>	tterns and icute inflammation Odd	A	Pharmacology	P-7	Half life Bioavailability		Dr Rubina Dr Zaheer		Pharmacolog	y Lab
		Batch : A Batch : B	Medicine Surgery		Dr Saeed	Dr Iqbal	В	Forensic Medicine	P-8	Identification of	male and female pelvis	Dr Naila		Forensic Lab	
		Batch : C St	ib-Specialty				С	Pathology	P-9	Diagnosis of acu	ite inflammation	Dr. Fariha Sa	rdar	Pathology La	ıb, NTB
		(Refer to annexure 2) Pharmacology *L-25 Batch Discip					Discipline	e	Topic of Practical						
					Excretion of drugs	3	В	Pharmacology	P-7	Half life		Dr Rubina		Pharmacolog	y Lab
Tuesday 21-02-2023					Even	Odd	_			Bioavailability		Dr Zaheer			
21-02-2023					Dr Asma	Dr Haseeba	С	Forensic Medicine	P-8	Identification of	male and female pelvis	Dr Naila		Forensic Lab	
							А	Pathology	P-9	Diagnosis of act	Diagnosis of acute inflammation		Dr. Fariha Sardar		b, NTB
					Pathology **S-8		Batch	Discipline	e	Topic of Practi	cal				
Wednesday					Chronic Inflamma Even	tion Odd	С	Pharmacology	P-7	Half life Bioavailability		Dr Rubina Dr Zaheer		Pharmacology	y Lab
22-02-2023					Dr Mudassira	Dr Fareeha	А	Forensic Medicine	P-8	Identification of	male and female pelvis	Dr Naila		Forensic Lab	
					Dr Huma	Dr Unaiza	В	Pathology	P-9	Diagnosis of acute inflammation		Dr. Fariha Sardar		Pathology Lab, NTB	
					Pharmacology *	L-26	Pathology	***C-2				Forensic Mee	dicine * 1	L-27	
Thursday 23-02-2023				Mechanism of dru	g action-I		1	2:00 PM	1 – 01:00 PM			01:00 PM	- 02:00 PM		
					Granulomatous inflammation					Courts and legal practices (Pakistan )					
					Even Odd			Even			Odd	Even		Odd	
					Dr. Zunera Hakim Dr Attiya Munir		Dr Iqbal Dr. Fatima			Dr. Nida Dr. Saeed		Dr Gulzaib		Dr Naila	
	08:00am -	· 08:45am	08:45am – 09:30ar	n	09:30an	n – 10:15am	10:15am - 11:00am			11:00am					
	Medicine * L	-28	Quran *L-29		Pathology **	S-9	Pharmacology * L-30			Research *L-31					
Friday 24-02-2023	Acute and chronic Medical related per	inflammation; rspectives	Iemaniyat -III		Consequences of i	nflammation	Mechanism	of drug action-II		Normal distribution	curve	-			
	Even	Odd	Even	Odd	Even	Odd	Even	Odd		Even	Odd	-			
	Dr Seemab	Dr.Iqra	Mufti Wahid		Dr Mudassira Dr Huma	Dr Fareeha Dr Unaiza	Dr. Zunera Hakim	Dr Attiya Munir		Dr Imrana	Dr Abdul Qadoos				
	08:00am -	08:45am	08:45am -	- 09:30am	09:30an	n – 10:30am	10	:30am - 11:00am		11:00am	n – 12:00pm	12:00:pm -	- 01:00pm	01:00pn	n – 02:pm
	Medicine *	L-32	Surgery * L-	33	Pharmacology	*L-34	BREAK			Pharmacology	*L-35	Forensic Me	dicine *	Pathology **	*S 10
												L-36			
Saturday 25-02-2023	Physiological resp	oonse to infection	Metabolic respons	e to injury	Dose response curve-I (Graded dose response curve)		30005343 (c++ 427998); 2			Dose response curve (Quantal dose respon	-II nse curve)	Introduction t identity	o personal	Control of not proliferation of growth	rmal cell & tissue
	Even	Odd	Even	Odd	Even	Even Odd				Even	Odd	Even	Odd	Even	Odd
	Dr Seemab	Dr.Iqra	Dr Huma Sabir	Dr Muhammad Iqbal	Dr Sobia Javed	Dr Asma Khan				Dr Sobia Javed	Dr Asma Khan	Dr Gulzaib Dr Naila		Dr Mudassira Dr Huma	Dr Fareeha Dr Unaiza

#### TIME TABLE 3rd YEAR MBBS -FOUNDATION MODULE I -2022

DATE / DAY		8:00 AM	11:00 AM		11:00an	n – 12:00pm					12:00 PM - 02:00 PM				
		Clinica	ıl Clerkship		Pharamcology *	*S-11	Batch	Disciplin	e	Topic of Practi	cal				
Monday 27-02-2023		Ratch • A	Medicine		Dose response cur (clinical application Even	Ons) Odd Dr Haaseha	A	Pharmacology	P-10	Biostatistics		Dr Uzma		Pharmacolog	y Lab
		Batch : B	Surgery		Dr. Zaheer	Dr Arsheen	D	Forensic Medicine	P-11	Dactylography		Di Kaneel Ba	aig	Forensic Lab	
		Batch : C S (Refer to a	Sub-Specialty nnexure 2)		Dr. Lancer	Dr./ Hisheen	С	Pathology	P-12	Diagnosis of chi granulomatous i	ronic and inflammation	Dr. Iqbal Hai	ider	Pathology La	ab, NTB
	_				Pharmacology *I	L-37	Batch	Disciplin	e	Topic of Practi	cal				
Tuesday					Tolerance and tack	hyphylaxis Odd	В	Pharmacology	P-10	Biostatistics		DrUzma		Pharmacolog	y Lab
28-02-2023					Dr Zunera	Dr Attiya	С	Forensic Medicine	P-11	Dactylography		Dr Raheel Ba	aig	Forensic Lab	,
							А	Pathology	P-12	Diagnosis of chi granulomatous i	ronic and inflammation	Dr. Iqbal Hai	ider	Pathology La	ıb, NTB
					Pharmacology *I	L-38	Batch	Disciplin	e	Topic of Practi	cal				
Wednesday					Factors affecting of Even	drug action -I Odd	C	Pharmacology	P-10	Biostatistics		Dr Uzma		Pharmacolog	y Lab
01-03-2023					Dr Attiya	Dr Asma	А	Forensic Medicine	P-11	Dactylography		Dr Raheel Ba	aig	Forensic Lab	1
							В	Pathology	P-12	Diagnosis of chr granulomatous i	ronic and nflammation	Dr. Iqbal Hai	ider	Pathology La	ab, NTB
					Pharmacology *I	L-39	Pathology	***S 12				Forensic Me	edicine *L-40		
					Factors affecting of	drug action -II		1	12:00 PM	1 – 01:00 PM			01:00 PM	I – 02:00 PM	
Thursday							Mechanis	n of Tissue Regenera	tion			Identification	ı in mass disas	ter	
02-03-2023					Even	Odd		Even			Odd	Even		0	Odd
					Dr Attiya	Dr Asma	Dr Tayyab Dr Abid	a		Dr Ayesha Dr. Asiya		Dr Raheel			
	08:00an	1 - 08:45am	08:45am - 09:30a	m	09:30an	n – 10:15am	10:15am -	11:00am		11:00an	n – 12:00pm				
	Medicine *L-41		Surgery *L-42		Pathology ***C-	3	Pharmaco	ology *L-43		Research *L-44					
Friday 03-03-2023	Common M	ledical Issues-I	Wound healing &	repair	Healing by Second	dary intention	ADR			Hypothesis testing					
	Even	Odd	Even	Odd	Even	Odd	Even	Odd		Even	Odd				
	Dr Seemab	Dr.Iqra	Dr Muhammad Zafar	Dr Gohar Rasheed	Dr Iqbal Dr. Fatima	Dr. Nida Dr. Saeed	Dr Zunera	Dr Sobia		Dr Imrana	Dr Abdul Qadoos				
	08:00an	n - 08:45am	08:45am	– 09:30am	09:30an	n – 10:30am	10	):30am - 11:00am		11:00an	n – 12:00pm	12:00:pm	– 01:00pm	01:00pm	n – 02:pm
	Medicine *L-45		Ethics *L-46		Pharmacology**	**SL-2	BREAK			Pharmacology ***	C-4	Research *L	-47	Family Medi	icine * L-48
Saturday 04.03-2023	Common M	edical Issues-II	Pharmacovigilanc	e	Therapeutic drug	monitoring				Pharmcogenetics		Test of signif	ficance	Problem orien taking	nted history
04-03-2023	Even	Odd	Even	Odd	Even	Odd	10000000000000000000000000000000000000			Even	Odd	Even	Odd	Even	Odd
	Dr Seemab	Dr.Iqra	Prof Akram Rand	hawa	Dr Zunera	Dr Asma				Dr. Rubina Dr. Zaheer	Dr Omaima Dr .Arsheen	Dr Imrana Dr Abdul Qa	adoos	Dr Sadia	

## **Teaching Hours**

Sr. No.	Disciplines	LGIS	SGD	CBL	SDL	Hours
1.	Pharmacology	17	05	01	04	27
2.	Pathology	03	07	03	04	17
3.	Forensic Medicine	07	0	0	04	11
4.	Surgery	06	0	0	0	06
5.	Medicine	06	0	0	0	06
6.	Family Medicine	02	0	0	0	02
7.	Research	03	0	0	0	03
8.	Ethics	01	0	0	0	01
9.	Quran	03	0	0	0	03
	Total hours	48	12	04	12	76

## **Practical & Clerkship Hours**

Disciplines	Practical hours	Disciplines	Clerkship hours
Pharmacology	2x4 = 08 hrs	Surgery	2.5  x  14 = 35  hrs
Pathology	2x4 = 08 hrs	Medicine	2.5  x  14 = 35  hrs
Forensic Medicine	2x4 = 08 hrs	Sub Specialty	$2.5 \times 14 = 35 \text{ hrs}$

➢ 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 04 Lecture Hall 05 } In case of non availability of these venues due to 3<sup>rd</sup>/4<sup>th</sup> Year Prof CPC will be used for two batches

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

Rawalpindi Medical University Rawalpindi

### **Section IV- Assessment Policies**

### Contents

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

### **Section IV: 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  $(2/3^{rd})$  of the module is complete) level through MS Teams. Tool for this assessment is best choice questions and all subjects are given theshare according to their hour percentage.

#### Summative Assessment:

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

### **Modular Examinations**

### **Theory Paper**

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

On completion of a block which consists of two modules, there is a block examination 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 I

Block		Module – 1	Type of Assessments	Total Assessmen	ts Time		No. of Asses	sments
	Sr#	Foundation Module Components		Assessment	Summative	Formative		
				Time	Assessment	Assessment		
					Time	Time		
	1	Mid Module Examinations LMS based	Summative	30 Minutes		30 Minutes	1 Formative	5 Summative
		(Pharmacology, Pathology, Forensic		(Every Thursday)				
		Medicine, Medicine, Surgery, Paeds)						
н	2	Topics of SDL Examination on MS Team	Formative	30 Minutes				
ock-	3	End Module Examinations (SEQ & MCQs Based)	Summative	6 Hours				
BI	4	Pharmacology Structured and Clinically Oriented Viva	Summative	10 Minutes				
	5.	Forensic Medicine Structured and Clinically oriented Viva	Summative	10 Minutes	7 Hours Minutes			
	5	Pathology Structured & Clinically oriented Viva	Summative	10 Minutes				

# Learning Resources

Subject	Resources
Community Medicine	<ul> <li>TEXT BOOKS</li> <li>1. Community Medicine by Parikh 25<sup>th</sup> edition.</li> <li>2. Community Medicine by M Illyas 8<sup>th</sup> edition.</li> <li>3. Basic Statistics for the Health Sciences by Jan W Kuzma 5<sup>th</sup> edition.</li> </ul>
Pathology/Microbiology	<ol> <li>Robbins &amp; Cotran, Pathologic Basis of Disease, 10<sup>th</sup> edition.</li> <li>Rapid Review Pathology, 5<sup>th</sup> edition by Edward F. Goljan MD.</li> <li>http://library.med.utah.edu/WebPath/webpath.html</li> </ol>
Pharmacology	<b>TEXT BOOKS</b> 1. Lippincot Illustrated Pharmacology 9 <sup>th</sup> edition.
Forensic Medicine	<b>TEXT BOOKS</b> 1. Parikh Text Book of Medical Jurisprudence Forensic Medicine & Toxicology Edition 9

# **SECTION VI**

Table of Specification (TOS) For Foundation Module Examination for 3rd Year MBBS Modules during<br/>running academic session:

Sr. #	Discipline	No. of MCQs	No. of Motor No. of No.	CQs acc itive doi	ording nain	No. 0	f SEQs %)	N ac	o. of SE cording	Qs to	Viva voce	Total Marks
		(%)				No. of	Marks	cogr	nitive do	main		
			C1	C2	C3	items		C1	C2	C3		
1.	Pharmacology	20	3	13	4	4	20	1	3	1	10	50
2.	Forensic Medicine	10	2	5	3	2	10	0	2	0	5	25
3.	Pathology	15	3	10	2	2	10	0	2	0	15	50
4.	Bioethics	5	1	2	1	0	0	0	0	0	0	5
6.	Research	5	0	3	2	0	0	0	0	0	0	5
7.	Medicine	5	1	3	1	0	0	0	0	0	0	5
8.	Surgery	5	1	3	1	0	0	0	0	0	0	5
9.	Paeds	5	2	2	1	0	0	0	0	0	0	5
									Gran	d Total	1:	50

Annexure I

(Sample MCQ & SEQ papers with analysis)

1/13 I weight loss for last 6 What are the two main Total Marks: 55 Fime Allowed: 60min pain removal of plaster cast. The patient states that the plaster was 8 weeks ago. After removal of the cast the resident notices that 2e as compared to the right one. What is the cause of this ROLL NO. marked right lower abdominal pain over the past day. On physical rness on palpation at the right iliac fossa. Laparoscopic surgery was und to be swollen, erythernatous, and partly covered by a yellowish best describes the process? viates her and fever grade ary tube RAWALPINDI MEDICAL UNIVERSITY DEPARTMENT OF PATHOLOGY car woman takes acetylsalicylic acid (aspirin) for arthritis. The asp n reduction in the synthesis of which of the following mediators? Complement C1q RMU & Allied Hospitals SEND-UP EXAMINATION 2022 3rd Year MBBS NO tive cough, having pulm D. Nitric oxide
 E. Prostaglandins
 HORIZONTAL INTEGRATION PHARMACOLOGY C1 INFLAMMATION MCQs PAPER productive osed as havi BLOCK-I years man presented with complains of pr is. After investigation he has been diagnose pes involved in this inflammatory disease? Basophils and Macrophages D. Tissue necrosis
 E. Fibrosis and repair
 VERTICAL INTEGRATION SURGERY C2 INFLAMMATION A 29-year man comes to a resident surgeon for applied due to fracture of his left femoral bone the diameter of the left calf has decreased in siz observation? B. Macrophages and Lymphocyt
 B. Eosinophils and neutrophils
 D. Neutrophils and lymphocytes
 E. Basophils and neutrophils
 CORE INFLAMMATION C2 performed, and the appendix was exudate. Which one of the followin A. Acute inflammation ter A. Aplasia
 B. Atrophy
 B. Oystrophy
 C. Dystrophy
 D. Dysplasia
 E. Hypoplasia
 CORE C2 CELLULAR ADAPTATIONS Granuloma formation Chronic inflammation A 22-year college student dev examination there is rebound ne E4 Histamine eukotriei vears A 35-year v through rec A 34 yea months. cell type A. U B Y Date: ---. Time: -:-u o u B.A. ÷ N e. 4 .... 2023/02/18 10.4

### Sample Of MCQs Paper

## 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
Type of Integration	Question No 1, 3, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 19, 26, 27,	Total	Percentage
Type of Integration Core	Question No 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	Total 34	Percentage 62%
Type of Integration Core Horizontal	Question No 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 4, 17, 24, 38, 52	<b>Total</b> 34 05	Percentage 62% 9%
Type of Integration Core Horizontal Vertical	Question No 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 4, 17, 24, 38, 52 2, 18, 21, 25, 31, 44, 50	<b>Total</b> 34 05 07	Percentage 62% 9% 13%
Type of Integration Core Horizontal Vertical Spiral	Question No           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           4, 17, 24, 38, 52           2, 18, 21, 25, 31, 44, 50           5, 8, 20, 23, 45, 54	Total           34           05           07           06	Percentage 62% 9% 13% 11%

Matsur Prof. Mobina Ahsan Dodhy

Assistant Director Department of Medical Education

Rawalpindi Medical University

Chairperson Pathology Department Rawalpindi Medical University

Vice Chancellon 19/12/12

Rawalpindi Medical University Rawalpindi

**ОРРО А54** ∙ ⊚love ya 2023/02/18 10:44
# Sample Paper Of SEQs

	RAWALPINDI MEDICAL UNIVERSITY DEPARTMENT OF PATHOLOGY	ROLL NO.
Contraction Harris	atalom Immunology & Research Module Ass	essment
Haem	3 <sup>rd</sup> Year MBBS	
Date: 07th November 2022	SEQs PAPER	Total Marks: 35 Time: 12:00noon
Time Allowed: 45min		
Q1. A 3 years boy presen consanguineous marriage frontal bossing and hepat	nts with failure to thrive, repeated infections, lethargy and p b. His elder sister is on regular transfusion. Physical examini- tosplenomegaly. His CBC reveals Hb3.4 g/dL, MCV 52 fL, MC	ballor. Mother gives history of ation of the boy shows Pallor, H 18 pg with normal WBC and
platelet count.	likely diagnosis?	01
<ul> <li>a) What is the most</li> <li>b) What further test:</li> </ul>	s you would like to perform to confirm diagnosis?	02
c) What advice you v	would give to the parents of this child?	02
Q2. A 65-years man prese he has experienced 10 lb the costal margin, the re 10 <sup>9</sup> /L) and an elevated lat	ents to clinic with fatigue, night sweats, and lethargy of 6 mc weight loss over that period. On physical examination, the est of his examination is normal. Laboratory testing is rer ctate dehydrogenase level. A complete spectrum of myelo	onths duration. He tells you that e spleen is palpable 6 cm below narkable for leukocytosis (85 X id cells is seen in the peripheral pher of hasophils.
blood with biomodel peak	c of neutrophils and myelocytes. There is also increased hui	01
a) What is the most	probable diagnosis?	2.5
<ul> <li>b) Briefly discuss the</li> </ul>	e underlying genetic mutation.	1.5
c) Enumerate the ph	lases of this disease.	
O3. A 30 years female w	with history of easy bruising and increased menstrual flo	w was evaluated for a bleeding
disorder. She was diagnos	ed with immune thrombocytopenic purpura (ITP).	25
a) Discuss Peripheral	I film and Bone marrow examination findings.	2.5
b) Enlist the causes of	of thrombocytopenia.	
Q4. A 47 years woman p infections. Physical examin	presented in basic health unit of district Jehlum with co nation shows scattered bruises on body. Her laboratory	omplains of fatigue and repeated investigations reveals Hb 7.3 g/dL s on peripheral film.
WBC 174 x 10 <sup>9</sup> /L and plate	elet count is 24 x 10 /L. Pathologist reports solar charter	02
a) Briefly compare th	he morphology of lymphoblast and mychoblast and	myeloblast? 01
b) Which cytochemic	canatic abnormalities seen in Acute myeloid leukemia.	02
c) Give any two cyto	genetic abitorinances see and a	
Q5. A renal transplant immunomodulatory drugs	recipient experiences gradual rise of creatinine in . He states that he was alright and all his lab results we	n 10-month time period desp ere normal for few months after t
transplant but then his cor	noninon deteriorated slowly.	C
a) Which type of graf	rejection is this?	(
b) Classify different t	ypes of grants on the basis of type of action	
<li>c) Differentiate betw</li>	een uneet and maneet Brant antigen reception	
Q6. A physician is suspect physician has asked them	ing Hepatitis B in a patient in the ward. The laborate to perform ELISA for confirmation as it is based o	ory performs a rapid kit test but in specific antigen antibody rea
technique.		
Le critte e e e	nt types of antigen antibody reactions	
a) Enlist 4 the differen		
<ul> <li>a) Enlist 4 the difference</li> <li>b) Enumerate 3 types</li> </ul>	of ELISA with the underlying principle in each	
a) Enlist 4 the differen b) Enumerate 3 types	of ELISA with the underlying principle in each	and aland Her thyroid function
<ul> <li>a) Enlist 4 the difference</li> <li>b) Enumerate 3 types</li> <li>O7. A 45 years female pr</li> </ul>	s of ELISA with the underlying principle in each resented with painless diffuse enlargement of thyr	oid gland. Her thyroid function
<ul> <li>a) Enlist 4 the difference</li> <li>b) Enumerate 3 types</li> <li>Q7. A 45 years female preshows decreased T3 and T4</li> </ul>	s of ELISA with the underlying principle in each resented with painless diffuse enlargement of thyr 4 levels and she is positive for circulating antithyroid	oid gland. Her thyroid functior antibodies.
<ul> <li>a) Enlist 4 the difference</li> <li>b) Enumerate 3 types</li> <li>Q7. A 45 years female prishows decreased T3 and T4</li> <li>a) What is your most</li> </ul>	s of ELISA with the underlying principle in each resented with painless diffuse enlargement of thyr 4 levels and she is positive for circulating antithyroid likelydiagnosis?	oid gland. Her thyroid functior antibodies.
<ul> <li>a) Enlist 4 the difference</li> <li>b) Enumerate 3 types</li> <li>Q7. A 45 years female preshows decreased T3 and T4</li> <li>a) What is your most</li> <li>P ChA 5 conservation state</li> </ul>	s of ELISA with the underlying principle in each resented with painless diffuse enlargement of thyr 4 levels and she is positive for circulating antithyroid likelydiagnosis? secific autoimmunediseases?	oid gland. Her thyroid function antibodies.

# **Detailed Analysis Of SEQs Paper**

C1	Question number	Total 3	Percentage	
C2	2b, 2c, 3b, 4a, 4b, 5c, 6b and 7b	8	42%	
C3	1a, 1b, 1c, 2a, 3a, 4c, 5a and 7a	8	42%	
	RAWALPIN	E CHANCELLOR DI MEDICAL UNI	VERSITY	

### **ANNEXURE II**

					MEDICIN	E					SURG	ERY + TR	AUMA		
	ates	HFH Unit-	1 HFH	Unit-11	BBH Unit	-1 BE	H Unit-11	DHQ	HFH Unit	t-1 HF	H Unit-11	BBH Un	it-1 BB	H Unit-II	DHO
<u>S.P.W</u> <u>S.P.V</u>	08-02-2023 To 30-04-2023	AI		A2	A3		A4	A5	B5		B4	B3		B2	BI
<u>s.v</u>	01-05-2023 To 06-08-2022	CI	-	C2	C3		C4		A5		A4	A3		A2	Al
07-0	8-2023 To 0-2023	B1 B2 B3 B4 B5		C5		C4 C		3 C2		CI					
	_						MISCEL	ANEOUS	5				_	-	-
	8-2-23 To 19-2-23	20-2-23 To 5-3-23	6-3-23 To 19-3-23	5.P.W 20-3-23 To 9-4-23	<u>S.P.V</u> 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	5.V 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	2-10-3 To 15-10-
Patholog	v Cl	C2	C3	C4	C5	B1	B2	B3	B4	B5	A1	A2	A3	A4	AS
D L'		Cl	C2	C3	C4	B5	B1	B2	B3	B4	A5	Al	A2	A3	A4
Psychiatr	<b>y</b> C5		C1	~	C3	B4	B5	B1	B2	B3	A4	A5	A1	A2	A3
Radiolog	y C4	6	CI			D2	B4	B5	BI	B2	A3	A4	A5	Al	A2
Skill La	6 C3	C4	C5	CI	C2	BJ				DI	42	A3	A4	A5	`AI
E.R	C2	C3	C4	C5	C1	B2	B3	B4	BS	ы	712		1000	1	-
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Date: 2nd March, 2023 by DME, Main Campus



Study Guide

Third Year MBBS 2023

Foundation Module -II

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

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### Table of Contents

	_
Foundation Module Team	5
University Moto, Vision, Values & Goals	6
Module I -	
Foundation Module	7
Section I - Terms & Abbreviations	8
Teaching and Learning Methodologies / Strategies	9
Section II- Learning Objectives, Teaching Strategies & Assessments of Pharmacology, Pathology, Forensic medicine, Bioethics, Family Medicine, Surgery, Medicine	10
Clinically Integrated Learning Objectives	
Self-Directed Learning (SDL)	
Integrated module Time Table	
Teaching hours Summary	
Venues for Academic Session	
Section III: Assessment Policies	40
Assessment plan	41
Types of Assessment:	
Learning Resources	
Section IV	45
SECTION V	
	3   Page

Table of Specification (TOS) For Foundation II Module Assessment for Third Year MBBS Modules during running academic session:	.47
Annexure I	.48
(Model Papers of Assessments (MCQ & SEQ with analysis)	.49
Annexure II	.51

# Module Team

Modu	ile Name :	Foundation II Module				
Durat	ion of module :	04 Weeks				
Coord	linator :	Dr. Attiya Munir				
Co-co	oordinator :	Dr. Omaima Asif/ Dr Hase	eeba T	Tala	ıt	
Revie	ew by :	Module Committee				
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3.	Convener Curriculum	Prof. Dr. Naeem Akhter		3	Co-coordinator	Dr. Omaima, Dr Haseeba (Demonstrator of Pharmacology)
4.	Dean Basic Sciences	Prof. Dr. Ayesha Yousaf				
5.	Additional Director DME	Prof. Dr. Ifra Saeed				
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7.	Chairperson Pathology	Prof. Dr. Mobina Dhodhy			DM	E Implementation Team
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14.	Focal Person Community Medicine	Dr. Afifa Kulsoom				
15.	Focal Person Quran Translation Lectures	Mufti abdul Wahid				
16.	Focal Person Family Medicine	Dr Sadia Khan				
17.	Focal Person Bioethics Department	Prof. Dr. Akram Randhawa				
18.	Focal Person Surgery	Dr Huma Sabir				

#### **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)

#### Tables & Figures

• Table1.

Domains of learning according to BloomsTaxonomy

- Figure 1. Prof Umar's Model of Integrated Lecture
- 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.	С	Cognitive Domain: knowledge and mental skills.
	C1	Remembering
	C2	Understanding
	C3	Applying
	C4	Analyzing
	C5	Evaluating
	C6	Creating
2.	Р	Psychomotor Domain: motor skills.
	P1	Imitation
	P2	Manipulation
	P3	Precision
	P4	Articulation
	P5	Naturalization
3.	А	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 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%

#### Table 3.Steps of conducting 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 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
- $\Box$  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.
- $\Box$  Case scenario will be given to the students
- □ Will engage students in discussion of specific scenarios that resemble or typically are real-world examples.
- $\hfill\square$  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	Торіс	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	Forensic medicine	Define ossification centers	C2	LGIS	MCQ SEQs
	identity		• Enlist ossification centers in bones and their appearance with relation to age.	C1		VIVA
			Assessment of age of an individual using radiology	C3	]	
			Assessment of sex of skeletal remains	C3	]	
			Forensic assessment of a skeletal injury	C3		
L-2	Role of D.N.A finger	Forensic medicine	Describe the pattern of fingerprints	C2	LGIS	MCQs
	printing in personal identity		• Define Dactylography, Poroscopy, Footprint, and DNA finger printing	C1		SEQs VIVA
			• Define the forensic importance and application of DNA finger printing	C1		
L-3	Introduction to ANS	Pharmacology	Describe the general organization of autonomic nervous system	C2	LGIS	MCQ
			• Describe the basic characteristic of sympathetic and parasympathetic systems	C2		SEQs VIVA
L-4	Symptomology- 1 (common symptoms)	Medicine	• Recognize common symptoms including dyspnea, chest pain, cough, palpitations, vomiting, fever, edema, dysuria and fatigue.	C1	LGIS	MCQs SEQs
			Distinguish between acute, chronic and persistent symptoms.	C4		VIVA
			• Knows important steps involved in history taking of common symptoms.	C1	-	
			Recognize abnormal lab findings in common symptoms	C1		
L-5	Introduction to	Forensic Medicine	Define legal definition of a poison	C1	LGIS	MCQs
	toxicology		Describe route of administration of poisons	C2	]	SEQs
			Discuss the factors which modify the actions of poison	C2		VIVA
L-6	Pathophysiology of	Pathology	Define Thrombus & Virchow's triad	C1	LGIS	MCQs
	Thrombo- embolism		Describe Causes of hypercoagulability	C2	1	SEQs
			• Explain fate of thrombus, morphology of venous thrombosis	C2		VIVA
			Differentiate between arterial and venous thrombosis	C3	1	
		Correlate pathogenesis of Disseminated-intravascular coagulati clinical presentation	Correlate pathogenesis of Disseminated-intravascular coagulation clinical presentation	C3		
			Classify embolism on the basis of etiology	C1	1	
S-1	Edema	Pathology	Classify edema on the basis of etiology and pathogenesis	C3	SGD	MCQs SEOs
			Differentiate b/w edema in various clinical settings	C3	1	VIVA

			•			
L-7	Sympathomimetics I	Pharmacology	Classify Sympathomimetics	C1	LGIS	MCQs
	(classification)		Identify receptors selectivity of sympathomimetic drugs	C1		SEQs VIVA
			Discuss structure activity relationship of sympathomimetics	C2		
			Differentiate between catecholamines and non catecholamines	C3		
L-8	Investigations and Diagnosis in surgery	Surgery	• Understand the basic principles of radiation protection and know the law in relation to the use of ionizing radiation	C2	LGIS	MCQs SEQs
			• Understand the principles of different imaging techniques and their advantages and disadvantages in different clinical scenarios	C3		
			• Discuss the role of imaging in directing treatment in various surgical scenarios	C2		
L-9	Sympathomimetics-II (directly acting drugs)	mimetics-II Pharmacology cting drugs)	Describe the pharmacological affects, produced by sympathomimetics	C2	LGIS	MCQs SEOs
	(uncerty acting drugs)		Enlist uses and adverse effect of sympathomimetics	C1		VIVA
L-10	Sympathomimetics-III (indirectly acting drugs)	Pharmacology	Compare different sympathomimetics in relation with epinephrine	C1	LGIS	MCQs SEQs VIVA
L-11	Symptomology- II (specific symptoms	Symptomology- II Medicine	Recognize important signs during clinical Assessment.	C1	C1 LGIS	MCQs SEQs
	and lab investigations)		Recognize abnormal lab findings in common symptoms	C1		5- <b>2</b> 0
S-2	Morphological changes	Pathology	Define Infarct.	C1	SGD	MCQs
	in Infarction		• Explain types of infarct.	C2		SEQs
			Explain causes, of infarct.	C2		VIVA
			Describe morphology of infarct.	C2		
C-1	Anaphylactic shock	Pharmacology	Manage the given case	C3	CBL	PBQS
			• Describe the effect of epinephrine on vascular and pulmonary systems and the receptors involved	C2		
			• Enlist other uses and adverse effects of epinephrine	C1	1	
			• Explain the epinephrine reversal phenomenon	C2	1	
			•		1	

2 <sup>nd</sup> Week								
Code no	Торіс	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		
			Describe Normal coagulation cascade.	C2		SEQs		
			• Enlist Types of hemorrhages with examples.	C1		VIVA		
			Describe Concept of Petechiae, ecchymosis, bruises	C2				
C-2	Etio-pathogenesis of	Pathology	Define shock C1	CBL	PBQS			
	Shock		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		
			<ul> <li>Describe the mechanism of action, pharmacological effects, uses and adverse effects of α – blockers.</li> </ul>	C2	_	SEQs VIVA		
			Discuss "epinephrine reversal"	C2				
L-13	Beta blockers-I	Pharmacology	Classify beta adrenergic blockers	C1	LGIS	MCQs		
	(classification)		Describe the mechanism of action of beta adrenergic blockers	C2		SEQs VIVA		
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		
			Describe history and branches of genetics	C2	_	SEQs		
			Explain relationship between genes and human diseases	C2		VIVA		
			• 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	<ul> <li>To understand preoperative preparation for surgery.</li> <li>Concept of taking consentC2</li> </ul>	C2	LGIS	MCQs SEQs		

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			To understand basics of postoperative care in surgery	C2		VIVA
L-18	Beta Blockers-III (clinical	Pharmacology	Describe the uses and adverse effects of beta blockers	C1	CBL	MCQs
	uses and adverse effects)		Discuss absolute and relative contraindications of beta blockers	C2	Z2 SEQS VIVA	
L-19	Mendalian Disorders	Pathology	• Explain Mandelin's laws of genetics.	C2	LGIS	MCQs
			Correlate inheritance with pathogenesis of various genetic disorders	C3		SEQs VIVA
L-20	L-20 Introduction to child Peads growth and development		• Describe the developmental milestones according to gross motor, fine motor, vision, hearing, speech and social behavior at different ages.	C2	LGIS	MCQs SEQs
			Assess developmental age.	C3		
			Recognize warning signs for developmental delay.	C3		
L-21	Shock and Blood	Surgery	• To understand the pathophysiology of shock and ischaemia-reperfusion injury	C2	LGIS	MCQs
	transfusion		• Use of blood and blood products, the benefits and risks of blood transfusion	C2		SEQs
			The different patterns of shock and the principles and priorities of resuscitation	C2		
			Appropriate monitoring and end points of resuscitation	C2		
S-5	Types of gene disorders	Pathology	Classify normal Karyotype	C1	SGD	MCQs
	and Prenatal diagnosis		Explain chromosomal disorders of autosomes and sex chromosomes	C2		SEQs VIVA
			• Explain Down' syndrome and turner's syndrome	C2		VIVA
			Explain single gene disorders with non-classical inheritance.	C2		
			Explain multifactorial genetic disorders	C2		
			Identify diseases caused by triplet repeat mutation	C2		
			Identify diagnostic test related to genetic diseases	C2		
C-4	Beta blockers	Pharmacology	Discuss the clinical pharmacology of beta blockers	C2	CBL	PBQS
			Rationalize the use of specific beta blockers in specific clinical situations	C3		
L-22	Classification of antidotes	Forensic Medicine	Define antidotes	C1	LGIS	MCQs
			Classify antidotes	C1	]	SEQs
			Preparation of universal antidote	C2		VIVA
			• Classification of antidotes and their uses in respective poisoning	C2		
L-23	History taking	Family medicine	To define the components of history taking	C2	LGIS	MCQs
	fundamentals		• To understand chief complains and presenting problem of patient.	C2		SEQs VIVA
			· · · · · · · · · · · · · · · · · · ·			•

P1	Pharmacological calculations III	Pharmacology	• Solve the pharmacological calculations using the basic formulae	P1	practical	OSPE
P2	Chronic Venous Congestion, Thrombosis,	Pathology	• Illustrate morphology of Chronic Venous Congestion, Thrombosis and Infarction with help of diagram	Р3	practical	OSPE
	Infarction		Interpret report of coagulation profile	P3		
			• Be considerate of cost effectiveness and risk-benefit analysis while ordering	A2		
			investigations in a patient			
P3	Role of radiology in	Forensic medicine	The list of ossification centers in bones and their appearance with relation to age.	P1	practical	OSPE
	personal identity		Assessment of age of an individual using radiology	P1		
			Assessment of sex of skeletal remains	P2		
			• Forensic assessment of a skeletal injury	P2		

3 <sup>rd</sup> Week						
Cod e no	Торіс	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	• Identify location of cholinergic receptors and molecular mechanism of their activation	C1	LGIS	MCQs SEQs
			Classify cholinomimetic	C1		VIVA
			• Describe the pharmacological effects produced by the activation of these receptors	C2		
			Describe uses and adverse effects of cholinomimetic.	C2		
L-25	Parasympathomimetics-11	Pharmacology	Classify anticholinesterases	C1	LGIS	MCQs
	(indirectly acting)		• Describe the mechanism of action and adverse effects of anticholinesterases	C2		SEQs VIVA
			Enlist their clinical uses	C1		
			• Outline the role of anticholinesterase in the diagnosis and treatment of myasthenia gravis	C2		
L-26	Anti cholinergics-I (classification and	Pharmacology	• Classify anticholinergic drugs (chemical & therapeutic).	C2	LGIS	MCQs SEQs
	mechanism of action)		• Discuss in detail pharmacokinetics, mechanism of action, pharmacological action, therapeutic uses & adverse effects of anticholinergics.	C2		VIVA
L-27	Anti cholinergics-II	Pharmacology	Compare & contrast hyoscine & atropine.	C3	LGIS	MCQs SEQs VIVA
S-6	Single-Gene Disorders	Pathology	Enlist various single gene disorders	C1	SGD	PBQs
			• Describe the mechanisms involved in single gene disorders	C2		
L-28	Inferential Statistics 4 (Chi square test)	Research	• Explain principles of sampling distribution of proportion and standard error proportion	C2	LGIS	MCQ SEQ
	-		Calculate SEP for a given sample proportion	C3		
			Calculate standard error of difference between two proportions	03		
		Do hypothesis testing by applying chi-square test	Do hypothesis testing by applying chi-square test     Interpret results of chi-square test	C3	4	
			Elaborate fisher's exact test	C4 C3		
L-29	Patient Safety and quality improvement	Surgery	• The importance of understanding human behavior if patient care is to improve.	C2	LGIS	MCQs SEQs

			• The importance of patient safety and the scale of the problem.	C2		
			• Medical error and its definitions including adverse events and near misses.	C3		
			• Patient safety strategies and solutions.	C3		
C-4	Diagnosis of Klinefelter Syndrome	Pathology	• Explain causes and evaluation of chromosomal abnormalities	C2	CBL	MCQs SEOs
	~ y		Explain causes of facial features and complication of this syndrome	C2		VIVA
			Correlate the clinical features with genetic basis	C2		
			• Identify different Chromosomal abnormalities on the basis of history taking and physical Assessment	C3		
			• Apply his/her knowledge to differentiate different common chromosomal abnormalities	C3		
L-30	Signs and symptoms of	Forensic Medicine	Identify case of poisoning.	C1	LGIS	MCQs
	common poisoning and its		Diagnostic criteria for a case of poisoning	C4		SEQs
	Management		• Classify antidotes and their uses in respective poisoning	C1		VIVA
			Describe the role of elimination of unabsorbed poison	C2		
			• Describe the role of elimination of absorbed poison with special emphasis on forced diuresis and exchange transfusion	C2		
L-31	Nomenclature &	Pathology	Define and classify neoplasia	C1	LGIS	MCQs SEOs
	neoplasms		Describe nomenclature of neoplasms	C2		VIVA
	1		Differentiate between benign and malignant tumors	C3		
C-5	Organophosphate poisoning	Pharmacology	Recognize the clinical features of Organophosphate Poisoning	C2	CBL	PBQS
	1		• Evaluate the role of oximes in organophosphate poisoning	C2		
			Design the management plan for organophosphate poisoning	C3		
L-32	Surgical infection	Surgery	• The characteristics of the common surgical pathogens and their sensitivities	C1	LGIS	MCQs SEQs
			• The classification of sources of infection and their severity.	C1		
			The clinical presentation of surgical infections.	C2		
			• The indications for and choice of prophylactic antibiotic.	C2		
			To learn the management of abscesses	C2		
L-33	Legal duties of a doctor and stator law relating to drugs	Forensic Medicine	• Role of medical practitioner in a case of suspected poisoning	C2	LGIS	MCQs SEQs VIVA
C-6	Mushroom and dhatura	Pharmacology	Recognize the clinical features of both poisonings	C2	CBL	PBQS
	1					

	poisoning		• Evaluate the role of anticholinergics in both poisonings	C2		
			• Design the management plan for both poisonings	C3		
S-7	Epidemiology of neoplasia	Pathology	• Explain cancer incidence along with environmental and geographic distribution C2	C2	SGD	MCQs SEQs
			• Explain Genetic predisposition to cancer and Non hereditary predisposing conditions	C2		VIVA
			• Design the management plan for both poisonings	C2		
S-8	Molecular basis of cancer	Pathology	Describe essential alterations for malignant transformation	C2	SGD	MCQs SEQs
			• Define oncogenes, protooncogenes and oncoproteins	C1		VIVA
			• Explain role of RAS oncogenes, BRAF ,MYC oncogenes ,Cyclin and cyclin dependent kinase in carcinogenesis	C2		
L-34	Inferential Statistics 5 (Correlation	Research	• Explain principles of correlation analysis for comparing two continuous variables in same subjects in given data set	C1	LGIS	MCQs SEQs
			• Explain with examples concept of correlation and association in research data	C1		
			Compute co efficient of correlation and interpret results	C2		
P-4	Effect of mydriatics on frog's eve	Pharmacology	Recall the mydriatic groups	P1	Practical	OSPE
			• Interpret the results of the drug instilled in rabbit's eye	P3		
P-5	Diagnosis of benign Neoplasia	Pathology	• Diagnose a case of benign tumor on the basis of different laboratory tests	Р3	Practical	OSPE
	- · · · F · · · · ·		• Describe morphology of benign tumors (gross & microscopy)	P2		
			• Demonstrate adequate interpersonal skills and collaborative team work	A2		
P-6	Role of D.N.A finger	Forensic medicine	• Describe the pattern of fingerprints	P1	Practical	OSPE
	printing in personal		Define Dactylography	P1		
	Identity		Define Porospcopy	P1		
			Define Footprint,	P1		
			Define DNA finger printing	P1		
			• Define the forensic importance and application of DNA finger printing	P1		
		1				
						age

4 <sup>th</sup> Week
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Code no	Торіс	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	• Explain carcinogenesis by Tumor suppressor genes ,RB gene ,P53 gene	C2	SGD	MCQs SEQs	
			• Explain role of ApC /b-catenin pathway in carcinogenesis	C2		VIVA	
S-10	Microbial & radiation carcinogenesis	Pathology	Enlist examples of microbial and radiation carcinogenesis	C2	SGD	MCQs SEQs	
			• Correlate the etio-pathogenesis of microbial carcinogenesis with the genetic alterations in tumor genomics	C3		VIVA	
			• Correlate the mechanism of radiation oncogenesis with predisposing environment for carcinogenesis	C3			
			• Describe the genetic pathways involved in the radiation oncogenesis	C2			
L-35	Diagnostic approach of malignant tumors	Pathology	• Diagnose a case of malignant tumor on the basis of different laboratory tests	C2	LGIS MC		
			Describe morphology of malignant tumors (gross & microscopy)	C2		VIVA	
			Demonstrate adequate interpersonal skills and collaborative team work	A2			
L-36	Autopsy findings in	Forensic Medicine	Identify case of poisoning during autopsy	C1	LGIS	MCQs	
	poisoning and Collection, preservation and dispatch of body		• Collection of remains of poisoning in viscera of a case of poisoning and their referral of Forensic Pathological assessment	C4		SEQs VIVA	
S-11	Carcinogenic agents and Tumor immunity	Pathology	• Classify carcinogenesis on the basis of various mechanism involved	C2	SGD	MCQs SEQs	
			Describe the steps involved in carcinogenesis	C2		VIVA	
			• Explain chemical, radiational and microbial carcinogenesis	C2			
			Explain Immune surveillance	C2			
L-37	Malnutrition: Assessment	Peads	Define Malnutrition	C1	LGIS	MCQs	
	and management		Enlist common etiological factors	C1		SEQs	
			• Evaluate malnourished child from history and physical Assessment C3	C3	]		
			Plot Growth parameters on the percentile charts C5	C5			

				Know WHO management protocol for severe malnutrition C2     C2				
				Enlist the steps of nutritional rehabilitation C1     C1	-			
S-12	Pathophysiol Environmental	ogy of Diseases	Pathology	Environmental Effects on Global Disease Burden, C1	SG	D	MC SE(	Qs Os
	Environmentar	Diseuses		• Explain Health effects of Climate changes C1	—		VIV	A A
				Describe Toxicity of chemical and physical agents     C2				
L-38	Ibadat-1	1	Quran	•		IS	MC	Qs
C-7	Lead poiso	ning	Pathology	Discuss causes of lead poisoning     C2	CB	L	PBO	Qs
				Describe the pathogenic effects of lead poisoning     C2				
				Discuss clinical and morphological features of lead poisoning anemia     C2				
L-39	Communication	Skills in	Family Medici	• Define communication skills C1	LG	IS	MC	Qs
	patient care			• Understand the significance of good communications for doctors C2			SEC	Qs
				Apply communication skills in patient care.     A1				
	Inferential Stat	tistics 5	Research	• Explain principles of correlation analysis for comparing two continuous C1	LG	(S	MC	Qs
L-39	(Correlatio	on)		variables in same subjects in given data set			SEC	Qs
				• Explain with examples concept of correlation and association in research data C2				
P-7	Effect of drugs of	f Rabbit's	Pharmacolog	<ul> <li>Recall the miotic drug groups</li> <li>P1</li> </ul>	Pract	ical	OSI	PE
	Eye			• Interpret the results of the drug instilled in rabbit's eye P3				
P-8			Forensic Medic	• Identification of a case of poisoning. P1	Pract	ical	OSI	PE
	Signs and sym	ptoms of		Diagnostic criteria for a case of poisoning     P2				
	Common poisonin Management	ng and its		Describe the role of elimination of unabsorbed poison     P1				
				• Describe the role of elimination of absorbed poison with special emphasis on forced diuresis and exchange transfusion P1				
ΡQ	Diagnosis of m	alignant	Pathology	Identify the microscopic features and gross appearance of Chronic and P1     Granulomatous Inflammation	Pract	ical	OSI	PE
1-9	Reoptasi	a		Granulomatous innanimation				
				• Value the role of basic investigations in clinical management A3				
			•	Family Medicine				
History taking fund	lamentals	Family	y medicine	To define the components of history taking		C	2	MCOs
, ,		-		<ul> <li>To understand chief complains and presenting problem of patient.</li> </ul>		C	2	MCOs
Communication S	kills in patient	Family	/ Medicine	Define communication skills		C		
care				Understand the significance of good communications for doctors		C	2	
				Apply communication skills in patient care.		A	l	

SDL Curriculum (Self Directed Learning)

Week-1					
	Pharmacology				
Торіс	Learning Objectives	References			
• Receptors and neurotransmitters involved in ANS	• Revise the knowledge of receptors and neurotransmitters regarding their functional roles	<ol> <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				
• Embolism and types of embolism	<ul> <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 112114			
	Forensic Medicine				
• .Role of radiology in personal identity	<ul> <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					
Торіс	Learning Objectives	References				
Pheochromocytoma	<ul> <li>Discuss the signs and symptoms of pheochromocytoma</li> <li>Discuss the pharmacological</li> </ul>	Basic and Clinical Pharmacology by Bertram Z. Katzung 15th Edition, Chapter 10, Page 165-166				
	management of pheochromocytoma					
	Pathology					
Cytogenetic disorders	<ul> <li>Explain General Features of Chrosomal 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					
• Role of D.N.A finger printing in personal identity	<ul> <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						
Торіс	Learning Objectives	References					
• Ganglion blockers	<ul> <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	·					
Nutritional disorder Macronutrients/Micronutrient insufficiency	<ul> <li>Explain Macronutrient/Micro- nutrient 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	1					
Classification of antidotes	<ul> <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'stext book of medical jurisprudence forensic medicine and toxicology Edition 9					

	Week-4						
Pharmacology							
Торіс	Learning Objectives	References					
Use of botulinum in aesthetics	• Discuss mechanism of action of botulinum	Basic and Clinical Pharmacologyby Bertram Z.Katzung 15th Edition, Chapter 6, Page 99 pg 136,1232					
	• Enumerate uses and adverse effects of botulinum						
	Pathology						
• Environmental pollution	<ul> <li>Outline salient features of environmental pollution in an article.</li> <li>Demonstrate responsible behavior toward self-learning.</li> </ul>	• Robbins & COTRAN Pathologic Basis OF Disease, 10 <sup>th</sup> Edition, Chapter 1, Pg 302307					
	Forensic Medicine						
• Signs and symptoms of common poisoning and its Management	<ul> <li>Identification of a case of poisoning.</li> <li>Diagnostic criteria for a case of poisoning</li> <li>Describe the role of elimination of unabsorbed poison</li> <li>Describe the role of elimination of absorbed poison with special emphasis on forced diueresis and exchange transfusion</li> </ul>	Parikhs"text book of forensic and toxicology, edition 9					

Time Table 2023

Integrated Modular Curriculum

Foundation Module II

3<sup>rd</sup> Year MBBS

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

Duration Of Module:

O4 Weeks

Coordinator:

Dr. Attiya Munir

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

Reviewed by: 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 Khola Noreen	Focal Person	Research
Dr Sadia Khan	Focal Person	Family Medicine Department
Mufti Abdul Wahid	Focal Person	Quran Teachings

Members of Module Committee

Approved by: Curriculum Committee Documented By Dr Omaima Asif

Prepared By

Dr Attiya Munir AP Pharmacology Department

(1st Week)

DATE / DAY																
Monday 06-03-2023				F01 (8	undation I Theo 8:30am to 2:00	ry Exam ) pm)										
	11am-12pm       Forensic Medicine * L-1       12:00pm to 02:00pm															
					Role of radiology in	personal identity					-100pm					
Tuesday 07-03-2023					Even Dr. Naila Batool	Odd Dr. Raheel Baig		Batch Wise Viva Foundation I								
		Batch: A M Batch: B Su	ledicine ırgery		Forensic Medicine Role of DNA finge	* L-2	dentity	12:00pm To 02:00pm								
Wednesday 08-03-2023	esday Batch: C Sub-Specialty 3-2023 (Refer to annexure2)					Odd Dr. Naila Batool		Batch Wise Viva Foundation I								
					Pharmacology * L-	3		12:00pm To 02:00pm								
Thursday 09-03-2023					Introduction of Au	tonomic nervous syste	m	Batch Wise Viva Foundation I								
					Even Dr. Asma Khan	Odd										
	08:00am	- 08:45am	08:45am –	09:30am	09:30	am – 10:15am	10:15am - 1	- 11:00am 11:00am – 12:00pm								
	Medicine *L-4		Forensic Medicine	*L-5	Pathology *L-6		Pathology ** S-1		Pharmao	nacology * L-7						
Friday	Symptomology I ( symptoms)	Common	Introduction to tox	icology	Pathophysiology of	f Thrombosis	Edema		Sympath	mpathomimetics-I (Classification)		on)				
10-03-2023	Even	Odd	Even	Even	Even	Odd	Even	Odd	Eve	en		Odd				
	Dr. Javeria	Dr. Tahira	Dr. Raheel Baig	DrGulzaib	Prof Mobina Dodh	y Prof Wafa Ome	r Dr. Mudassira, Dr. Aisha	Dr. Huma, Dr.Unaiza	Dr. Zun	era Hakim	Dr. S	SobiaJaved				
	08:00am	- 08:45am	08:45am –	09:30am	09:30	am – 10:30am	10:30am-11:00pm	11	:00 am – 1	2:00 pm		12:00 pm – 1:0	00 pm	1:00 pm – 2:00	pm	
	Surg	ery L* 8	Pharmacology	*L-9	Pharmace	ology * L-10		Medicine *L-11				Pathology ** S-2	1 7	Pharmacology ***	C-1	
Saturday 11-03-2023	Investigations and Diagnosis in surgery		Sympathomimetics-II (Directly acting drugs)		Sympathomimetics-III (Indirectly acting drugs)			Symptomology –II (Specific symptomology –II (Specific symptomology)		ific symptoms a	fic symptoms and lab Morphological Infarction		anges in	Anaphylactic Shoc	k	
	Even	Odd	Even	Odd	Even	Odd	BREAK	Even	Even Od			Even	Odd	Even	Od d	
	Dr. Muhammad Atif	Dr. Muhammad Iqbal	Dr. Zunera Hakim	Dr. Sobia Javed	Dr. Zunera Hakim	Dr. Sobia Javed		Dr. Javeria		Dr. Tahira		Dr. Mudassira ,Dr.Rabia	Dr. Huma, Dr.Nida Fatima	Dr.Zaheer, Dr zoefeshan	Dr.Omai ma Dr. Arsheen	

DATE / DAY	8:00 AM - 11:00am - 12:00am 11:00 AM								12:00 AM - 02:00 PM						
			Clinical Clerkship		Pathology	**S-3		Batch	Discipline	Topic of Practica	1	Teacher	Venue		
Monday 13-03-2023					Types of He Even	Types of Hemorrhage       Even     Odd		A Ph	armacology P-1	Pharmacological	calculations III	Dr.UzmaUmer	Pharmacology Lab		
	Batch : A Medicine Batch :					Dr. Rabbia	r. Rabbia Khalid,	B Fo	orensic Medicine P-2	Spectroscopic As	sessment of blood	Dr. Raheel	Forensic Lab		
			urgery Batch		Fatima, DrHuma	DrM	udassira	C F	Pathology P-3	Chronic Venous Thrombosis, Infa	Congestion, rction	Dr. Abid Hassan	Pathology Lab, NTB		
		(Refer	to		Pathology	*** C-2		Batch	Discipline	Topic of Practica	1				
Tuesday 14-03-2023		annexu	ure2)		Etio-pathogenesis of Shock			В	Pharmacology P-1	1 Pharmacological	calculations III	Dr.UzmaUmer	Pharmacology Lab		
11 03 2023						Even Odd									
					Dr. Fatima, Dr Dr. Saeed, Iqbal DrAmna			С	P-2	ine Spectroscopic Assessment ofBlood		Dr. Raheel	Forensic Lab		
								А	Patho logy P-3	Chronic Venous Congestion, Thrombosis, Infarction		Dr. Abid Hassan	Pathology Lab, NTB		
					Pharmacology * L-12			Batch	Discipline	Topic of Practica	1	-			
Wednesday					Alpha block	ers	44	C P	harmacology P-1	Pharmacological	calculations III	Dr.UzmaUmer	Pharmacology Lab		
13-03-2025			Even Odd												
						Dr. Dr.Sobia Javed			Forensic Medicine-2	2 Spectroscopic As	sessment ofBlood	Dr. Raheel	Forensic Lab		
						Hakim			Patho logy- 3	Chronic Venous Congestion, Thrombosis, Infarction		Dr. Abid Hassan	Pathology Lab, NTB		
Thursday		Pharmacology * L-13 Beta Blockers-I (Classification)			Pharmacology * L-14				Forensic Medicine	* L-15					
16-03-2023					12:00 AM - 1	:00PM		1:00	1:00 PM - 02:00 PM						
								Beta Blockers	s-II (Mechanism of Actio	on)		Classification of poisons			
					Even	Even Odd		Ev	Even Odd			Even	Odd		
	00.00	00.45	00.45 00.00		Dr Asma Khan Dr Sobia Javed			Dr Asma Kha	Dr Asma Khan Dr Sobia Javed			Dr Raheel	Dr Gulzaib		
Friday 17-03-2023	Quran * L-16	n - 08:45am	Pathology **	s-4	09:30am – 10:15am Surgery * L-17			Pharmacology	Pharmacology *L-18 Pathology *L-19						
	Imaniat IV		Introduction to ge	enetics	Perioperative care			Beta Blockers and adverse e	Blockers-III (Clinical uses         Mendalian Disorders           Jverse effects)         Image: Clinical uses						
	Even	Odd	Even	Odd	Even Odd		Even	Odd	Even	Odd					
	Mufti Wahid Dr. Mudassira, Dr. Huma, Dr. Aisha Dr.Unaiza		Dr. Huma, Dr.Unaiza	Dr. Ali Dr. Amjad Kamran		DAsma Khan	Dr Sobia javed	Prof Wafa Omer	Dr.Mobina Dodhy						
Saturday	08:00an	n - 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				
18-03-2023	Peads   * L-20   Surgery   * L-21		Pathology	Pathology ** S-5		Pharmacology	*** C-3	Forensic Medicine *L- 22		Family Medicine *L-23					
	Introduction to child growth and developmentShock and Blood transfusionEvenOddEvenOddDr. Jaweria ZainDr. HafeezDr. Hafiza Kiran BashirDr. Sehrish Bashir		Types of gene disorders and Prenatal diagnosis		Beta Blockers		Classification of antidotes		History taking fundamentals						
			Even	Odd	Even Odd		BREAK	Even	Odd	Even	Odd	Even	Odd		
			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	32   Page			

# Time Table 3<sup>rd</sup> Year MBBS –Foundation Module II -2023

(3rd Week)

DATE / DAY		8:00 AM -	11:00		11:	00am – 12:00pm	1							
	Clinical Clerkship					Pharmacology *L-24			Disci	Discipline Topic of Practical				
					Parasympathom	imetics-I (Direct	ly acting )	A	Pharmacolog	v P-4	Effect of mydriatics on rabbit's eye		DrRubina	Pharmacology Lab
Monday					Even	<u>`</u>	Odd	-	c		5	5		
2003-2023	23				Dr Attiva	Dr	Zunera Hakim	B	Forensic Me	licine P-5	General Toxico	logy & Management of	Dr. Gulzaih	Forensic Lab
	Batch : A Medicine				Di. Milya	DI		Б	i orensie wie	fielder 1.5	human poisonin	human poisoning		Torensie Eulo
		Batch : B					С	Pathology	P-6	Diagnosis of be	enign neoplasm	Dr. Nida Fatima	Pathology Lab, NTB	
	(Refer to anneyure?)					*L-25		Batch	Discij	oli ne	Topic of Practi	cal	•	
		(iterer to uni	lexure2)		Parasympathomimetics-II (Indirectly acting)			В	Pharmacolog	Pharmacology P-4 Effect of mydriatics on		atics on rabbit's eye	DrRubina	Pharmacology Lab
Tuesday					Even		Odd							
21-03-2023	3				Dr. Attiya	Dr.	Zunera Hakim	С	Forensic Me	licine P-5	General Toxico	blogy & Management of	Dr. Gulzaib	Forensic Lab
								А	Pathology	P-6	5 Diagnosis of benign neoplasm		Dr. Nida Fatima	Pathology Lab, NTB
	_				Pharmacology *	L-26		Batch	Disci	oline	Topic of Practi	Topic of Practical		
					Anti cholinergics –I (Classification and mechanism of action)			С	Pharmacolog	у Р-4	Effect of mydri	atics on rabbit's eye	DrRubina	Pharmacology Lab
Wednesday					Even		Odd							
22-03-2023					Dr. Attiya	D	r.Asma Khan	А	Forensic Me	licine P-5	General Toxicology & Management of human poisoning		Dr. Gulzaib	Forensic Lab
								В	Pathology	P-6	Diagnosis of be	enign neoplasm	Dr. Nida Fatima	Pathology Lab, NTB
						L-27		Pathology	** S-6					
T11					Anticholinergics	s-II (Therapeutic	uses and			12:00 P	M – 1:00 PM			
23-03-2023	sday 3-2023						Single gene	disorder						
					Even Odd			Even Odd						
					DrAsma Khan	D	rAttiyaMunir	DrMudassira, DrRabia Khalid			DrHuma, Dr. Nida	Fatima		
	08:00am - 08:45am 08:45am - 09:30am				09:30am – 10:15am			10:15am - 11:00am 11:00am - 12:00pm				n – 12:00pm		
	Surgery * L-2	Surgery * L-28 Pathology ***C-4			Forensic Medici	ne *L-29		Pathology	*L-30		Pharmacology	***C-5		
Friday	Fluid and Electrolyte Diagnosis of Klienfilter				Signs and sympt	toms of common	poisoning	Nomenclati	ure & Characteri	stics of	Organophosphate p	oisoning	-	
24-03-2023	balance	alance syndrome		and its Management			neoplasms			8bb.				
	Even	Odd	Even	Od	Even		Odd	Even		Ddd	Even	Odd	-	
				d			-						4	
	Dr. Asifa	Dr. Umer Kaleem	Dr Fatima	Dr	Dr. Gulzaib		Dr Shahida	Prof Wafa (	Omer Dr	_	Dr. Uzma	Dr.Omaima		
	Dayan		Kizvi, Dr.	Saeed,					.Mobii Dodh	ia	Dr. Haseeba	Dr. Zoelesnan		
			iquai	Amna					Douity					
	08:00am	- 08:50am	08:50an	n – 09:40am	09:40am - 10:30am			10:30am - 11:20am			11:20:ar	n – 12:10pm	12:10pm – 1:00 pm	
	Surgery * L-31 Forensic Medi		Forensic Medicine * L-32		*** 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			Epidemiology of Neoplasia			Molecular Basis of Cancer		Inferential Statistics 4 (Chi Square test)	
25-03-2023	Even	Even Odd		Odd	Even	Odd	1	Even		Odd	Even	Odd	Even	Odd
25 05-2025	Dr. Huma Sabir	Dr. Asad Amir	Dr. Filza	Dr. Naila	Dr. Uzma Dr.	Dr.Omaima	1	Dr Tayyal	ba, Dr A	siya, Dr.	Dr Tayyaba, Dr	Dr Asiya, Dr. Abid	Dr. Imrana	Dr. Abdul Qudoos
	Khan			Batool	Haseeba	Dr.Arsheen		Dr Fariha		Abid	Fariha			
DATE / DAY	AY 8:00 AM - 10:45 AM		10:45am – 11	11:30 PM - 01:00 PM										
------------------------	-----------------------	------------------------------------	-------------------------	----------------------------	----------------------	------------------------	--------------------------	------------------------	---------------------	---------------------------------	-----------------------	--------------------		
	Clinical	Clerkship		Pathology **S	S-9	Batch	Discipline		Topic of Practic	cal				
		-		Tumor suppressor genes in	n cancer	А	Pharmacology	P-7	Effect of miotic	cs on rabbit's eye	Dr. Haseeba	Pharmacology Lab		
Monday 2703-2023				Even	Odd	_				-				
	Batch : A	Medicine Batch		DrTayyaba, DrFariha	DrAsiya, Dr.	В	Forensic Medicine	P-8	Practical journa	l preparation	Dr. Naila	Forensic Lab		
	: B Su	gery Batch : C			Abid	С	Pathology	P-9	Diagnosis of ma	Diagnosis of malignant neoplasm		Pathology Lab, NTB		
	Sub-Spec	ialty (Refer to		Pathology ** S-10	)	Batch	Discipline		Topic of Practic	Topic of Practical				
	annexure	2)		Microbial and radiation ca	arcinogenesis	В	Pharmacology	P-7	Effect of miotic	es on rabbit's eye	Dr. Haseeba	Pharmacology Lab		
Tuesday				Even	Odd									
28-03-2023				DrTayyaba, DrFariha	DrAsiya, Dr. Abid	С	Forensic Medicine	P-8	Practical journa	l preparation	Dr. Naila	Forensic Lab		
						А	Pathology	P-9	Diagnosis of ma	alignant neoplasm	Dr. Amna Noor	Pathology Lab, NTB		
	1			Pathology * L-34		Batch	Discipline		Topic of Practic	cal	<u> </u>	I		
				Diagnostic approach of ma	alignant tumors	С	Pharmacology	P-7	Effect of miotic	s on rabbit's eye	Dr Haseeeba	Pharmacology Lab		
Wednesday				Even	Odd									
29-03-2023				Prof Wafa Omer	Dr.Mobina	А	Forensic Medicine	P-8	Practical journa	l preparation	Dr. Naila	Forensic Lab		
					Dodhy	В	Pathology	P-9	Diagnosis of ma	alignant neoplasm	Dr.Amna Noor	Pathology Lab, NTB		
				Forensic Medicine * L-35		Pathology	** S-11		•		Peads*L-36			
Thursday				Autopsy findings in poiso	ning and Collection,		11:	:30 AM	1 – 12:15 PM		12:1	5 PM - 01:00 PM		
30-03-2023				preservation and dis	spatch of body	Carcinogen	ic agents and Tumor in	mmunit	ty		Malnutrition assessme	ent and management		
				Even	Odd		Even			Odd	Even	Odd		
				Dr. Filza	Dr. NailaBatool	Dr. Tayyaba, Dr. Aisha			Dr. Asiya, Dr. Saee	d	Dr. Farah	Dr. Sadaf		
	08:00am - 08:45am	08:45am - 09:30	am	09:30am - 10	10:15am - 11:00am			11:00am	n – 12:00pm					
	Quran * L-37	Pathology **	S-12	Family Medicine * L-38	Pathology ***C-7			Research *L-39						
Friday 31-03-2023	Ibadiat I	Pathophysiology Environmental D	of viseases	Communication Skills in p	Lead Poisoning			Inferential Statistics	4 (Correlation)					
1	Even Odd	Even	Odd	Even	Odd	Even	Odd		Even	Odd				
	Mufti Wahid	Dr. Tayyaba, Dr. Nida	Dr. Asiya, Dr. Saeed	Dr. Sadia		Dr. Fatima Iqbal	Dr. Dr. Saeed, D Amna	Dr.	Dr. Imrana	Dr. Abdul Qudoos	-			
Saturday 01-04-2023		1		Prep L	Leave					1				

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

• <u>Small Group Discussion (SGD) /Case Based Learning (CBL)</u>

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.

Rawalpindi Medical University Rawalpindi

## Section III-Assessment Policies

#### Contents

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

Date: 18th February, 2023 by DME, New Teaching Block

## 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  $(2/3^{rd})$  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		Module – 2	Type of Assessme <u>nts</u>	Total Assessmer	nts Time		No. of Asse	ssments
	Sr #	Foundation Module Components		Assessment Time	Summative Assessment Time	Formative Assessment Time		
	1	Mid Module Assessments LMS based(Pharmacology, Pathology, Forensic Medicine, Medicine, Surgery, Peads, Family Medicine, Research)	Summative	30 Minutes		30 Minutes	1 Formative	5 Summative
ck-I	2	Topics of SDL Assessment on MS Team	Formative	10 Minutes (Every Friday)				
Blo	3	End Module Assessments (SEQ & MCQs Based)	Summative	6 Hours	7 hours			
	4	Pharmacology Structured and Clinically Oriented Viva	Summative	10 Minutes	/ nours			
	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	TEXT BOOKS 1. Robbins & Cotran, Pathologic Basis of Disease, 10 <sup>th</sup> edition. 2. Rapid Review Pathology, 5 <sup>th</sup> edition by Edward F. Goljan MD. 3. http://library.med.utah.edu/WebPath/webpath.html
Pharmacology	TEXT BOOKS 1. Basic and Clinical Pharmacology by Bertram Z. Katzung 15th Edition 2.Goodman and Gillmans The Pharmacological basics of Therapeutics, 13th Edition
Forensic Medicine	TEXT BOOKS 1. Parikh Text Book of Medical Jurisprudence Forensic Medicine & Toxicology Edition 9
Medicine	TEXT BOOKS Davidsons Textbook of Medicine
Surgery	TEXT BOOKS Balley & Love textbook of surgery
Research	Digital library

# SECTION IV

# Table of Specification (TOS) For Foundation II Module Assessment

Sr. #	Discipline	No. of MCQs (%)	No. of M accord cognit	ACQs lingto tive dom	ain	No SE (*	o. of EQs %)	N ao	o. of SE ccording cognitiv	Qs to re	Viva voce	OSPE Marks	Total Marks
						No of items	Marks		domain	1			
			C1	C2	C3			C1	C2	C3			
1.	Pharmacology	15	2	9	4	7	3 5	2	4	1	30	20	100
2.	Forensic Medicine	15	4	9	3	5	2 5	2	2	1	10	0	50
3.	Pathology	25	2	5	3	7	3 5	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
									Grand	l Total		275	j

Annexure I

(Sample MCQ & SEQ papers with analysis)

Date: 18<sup>th</sup> February, 2023 by DME, New Teaching Block



Time: --:--Date: --

DEPARTMENT OF PATHOLOGY RAWALPINDI MEDICAL UNIVERSITY SEND-UP EXAMINATION 2022 **RMU & Allied Hospitals** 3rd Year MBBS **MCQs PAPER** BLOCK-I

ROLL NO.

Total Marks: 55 Time Allowed: 60min

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

- Aplasia Ä
- Atrophy B.
- Dystrophy ن
- Hypoplasia Dysplasia D. шi

CORE C2 CELLULAR ADAPTATIONS

- performed, and the appendix was found to be swollen, erythematous, and partly covered by a yellowish examination there is rebound tenderness on palpation at the right iliac fossa. Laparoscopic surgery was A 22-year college student developed marked right lower abdominal pain over the past day. On physical exudate. Which one of the following best describes the process? N
  - Acute inflammation ¥.
- Granuloma formation B.
  - Chronic inflammation i
    - Tissue necrosis Ö.
    - Fibrosis and repair шi

VERTICAL INTEGRATION SURGERY C2 INFLAMMATION

- 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 è.
  - cell types involved in this inflammatory disease?
    - **Basophils and Macrophages** Ä
- Macrophages and Lymphocytes В.
  - Eosinophils and neutrophils J
- Neutrophils and lymphocytes D.
  - Basophils and neutrophils шi

CORE INFLAMMATION C2

A 35-year woman takes acetylsalicylic acid (aspirin) for arthritis. The aspirin therapy alleviates her pain mainly 4

- through reduction in the synthesis of which of the following mediators?
  - Complement C1q Ä
- Histamine В.
- Leukotriene E4 i

  - Nitric oxide D.
- Prostaglandins ш

HORIZONTAL INTEGRATION PHARMACOLOGY C1 INFLAMMATION

1/13

Sample of MCQs Paper

## 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%

Motenna 15/11/22

Prof. Mobina Ahsan Dodhy Chairperson Pathology Department Rawalpindi Medical University

22 Assistant Director

Department of Medical Education Rawalpindi Medical University

Vice Chancellon 9/12/12 Rawalpindi Medical University Rawalpindi

**OPPO A54** · ⊚love ya 2023/02/18 10:44

**46 |** Page

Date: 18<sup>th</sup>

	Sample	Paper of SEQs	<u>م</u> د	
ROLL NO. ent Total Marks: 35 Time: 12:00noon	Aother gives history of the boy shows Pallor, with normal WBC and 01 02 02 02 02 02 02 02 02 02 02 02 02 02	evaluated for a bleeding 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5	nonth time period despite mal for few months after the 01 02 02 02 02	dies.
RAWALPINDI MEDICAL UNIVERSITY DEPARTMENT OF PATHOLOGY RMU & Allied Hospitals tology Immunology & Research Module Assessme 3 <sup>rd</sup> Year MBBS SEQS PAPER	s with failure to thrive, repeated infections, lethargy and pallor. N His elder sister is on regular transfusion. Physical examination of splenomegaly. His CBC reveals Hb3.4 g/dL, MCV 52 fL, MCH 18 pg eely diagnosis? you would like to perform to confirm diagnosis? you would like to perform to confirm diagnosis? to the parents of this child? sto clinic with fatigue, night sweats, and lethargy of 6 months du reight loss over that period. On physical examination, the spleen reight loss over that period. On physical examination, the spleen to of his examination is normal. Laboratory testing is remarkabl ate dehydrogenase level. A complete spectrum of myeloid cells ate dehydrogenase level. A complete spectrum of myeloid cells of neutrophils and myelocytes. There is also increased number of robable diagnosis? inderlying genetic mutation.	th history of easy bruising and increased menstrual flow was d with immune thrombocytopenic purpura (ITP). Film and Bone marrow examination findings. thrombocytopenia. esented in basic health unit of district Jehlum with complain esented in basic health unit of district Jehlum with complain estimation shows scattered bruises on body. Her laboratory investig ation shows scattered bruises on body. Her laboratory investig et count is 24 x 10 <sup>9</sup> /L. Pathologist reports 90% blast cells on pe in morphology of lymphoblast and myeloblast? I stain helps to differentiate between lymphoblast and myelob enetic abnormalities seen in Acute myeloid leukemia.	ecipient experiences gradual rise of creatinine in 10-m He states that he was alright and all his lab results were norr lition deteriorated slowly. rejection is this? Des of grafts on the basis of type of donor. en direct and indirect graft antigen recognition g Hepatitis B in a patient in the ward. The laboratory per	to perform ELISA for confirmation as it is based on spec types of antigen antibody reactions of ELISA with the underlying principle in each sented with painless diffuse enlargement of thyroid gla levels and she is positive for circulating antithyroidantibod kelydiagnosis? ecfic autoimmunediseases?
Haema Haema Date: 07th November 2022 Time Allowed: 45min	<ul> <li>Q1. A 3 years boy present consanguineous marriage frontal bossing and hepatt platelet count.</li> <li>a) What is the most l</li> <li>b) What further tests</li> <li>c) What advice you w</li> <li>c) What advice you w</li> <li>d) 2. A 65-years man present he has experienced 10 lb the costal margin, the rest he costal margin, the rest he blood with biomodel peak</li> <li>a) What is the most he cost biomerate the pheces</li> </ul>	<ul> <li>Q3. A 30 years female w disorder. She was diagnose disorder. She was diagnose a) Discuss Peripheral b) Enlist the causes o</li> <li>Q4. A 47 years woman pl infections. Physical examir WBC 174 x 10<sup>9</sup>/L and plate a) Briefly compare th b) Which cytochemic b) Which cytochemic c) Give any two cytog</li> </ul>	<ul> <li>Q5. A renal transplant immunomodulatory drugs. transplant but then his con a) Which type of graft b) Classify different type c) Differentiate betwe</li> <li>O6. A physician is suspecti</li> </ul>	physician has asked them technique. a) Enlist 4 the differer b) Enumerate 3 types d7. A 45 years female pre shows decreased T3 and T4 a) What is your most 1 a) What is your most 1 b, Endmer&u 0,g=n is 3/02/78-nd 0; 243 nune to

47 Page

## Detailed Analysis of SEQs Paper

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

PROF. MOBINA AHSAN DODHY Chairperson, Department of Pathology, RMU ASSISTANT DIRECTOR Department of Medical Education, RMU

VICE CHANCELLOR RAWALPINDI MEDICAL UNIVERSITY

Date: 18<sup>th</sup> February, 2023 by DME, New Teaching Block

#### ANNEXURE II

		1			MEDICIN	F					CUDCI				-
1		ALER U.S. A. LIEU Unit 11			BBH Unit-1 BBH Unit-11			DHO	HFH Unit	-1 HE	H Unit 11	PRU II	AUMA	MA	
D	ates	HFH Unit-	I nrn	Unit-11	DDH Unit	-1 0	Dir Cuit II			-1 III	n onu-n	BBH Un	II-1 BB	H Unit-II	DHQ
<u>S.P.W</u> <u>S.P.V</u>	08-02-2023 To 30-04-2023	Al	1	A2	A3		A4	A5	B5		B4	B3		B2	Bl
<u>S.V</u> 01-05-2023 To 06-08-2022		CI		C2	C3	C4		C5	A5		A4	.4 A3		A2	
07-08 T 15-10	-2023 'o -2023	B1		B2	B3		B4		C5		C4	C3		C2	CI
							MISCEL	LANEOUS	i				_	-	-
	8-2-23 To 19-2-23	20-2-23 To 5-3-23	6-3-23 To 19-3-23	5.P.W 20-3-23 To 9-4-23	<u>S.P.V</u> 10-4-23 To 30-4-23	1-5-23 To 14-5-2	15-5-23 To 28-5-23	29-5-23 To 11-6-23	12-6-23 To 25-6-23	5.V 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- To 15-10-
Pathology	CI	C2	C3	C4	C5	B1	B2	B3	B4	B5	Al	A2	A3	A4	AS
Druchiate	C5	Cl	C2	C3	C4	B5	B1	B2	B3	B4	A5	Al	A2	A3	A4
r sychiaci		C5	Cl	02	C3	B4	B5	B1	B2	B3	A4	A5	A1	A2	A3
Radiology						D3	R4	B5	BI	B2	A3	A4	A5	Al	A2
Skill Lab	C3	C4	C5	CI	C2	55			D5	BI	A2	A3	A4	A5	`A1
E.R	C2	C3	C4	C5	C1	B2	B3	B4	ВЗ	01					-
*	Tentative Ho Sport Sprin	Week (S.P.W) Vocations (S.P.	.V)	12-03-2023 24-04-2023 03-07-2023	то то то	19-03-202 30-04-202 30-07-202					A	ctivat	Swin	Anne	10r



Third Year MBBS 2023

Study Guide

GIT, Hepatobilliary & Parasitology Module

1 Page

Table of Contents	
GIT and parasitology Module Team	
University Moto, Vision, Values & Goals	
Module - GIT and parasitology Module	
Section I -	
Terms & Abbreviations	
Teaching and Learning Methodologies / Strategies	
Section II-	
Learning Objectives, Teaching Strategies & Assessments	
Clinically Integrated Learning Objectives	
Self-Directed Learning (SDL)	
Section III:	
Teaching strategy & Learning Objectives	
Integrated Modular Timetable	
Teaching hours Summary	
Venues for Academic Session	
Section IV:	
Assessment Policies	
Assessment plan	
Types of Assessment:	
Learning Resources	
SECTION V:	
Date of GIT module assessment	
Table of Specification (TOS) For GI MODULE 3rd year MBBS Modules during running academic session	
Annexure I	
(Sample MCQ & SEQ papers with analysis)	
Annexure II	
al Clerkship Model	

# GIT, Hepatobiliary & Parasitology Module Team

Module Name	:	GIT, Hepatobiliary & parasitology Module
Duration of module	:	05/ 06 Weeks
Coordinator	:	Dr. Aasiya Niazi
Co-coordinator	:	Dr. Nida Fatima
Review by	:	Module Committee

	Module				Module Task Force	
	Committee				Team	
1.	Vice Chancellor RMU	Prof. Dr. Muhammad Umar	1	Coordinator	Dr. Aasiya Niazi (Assissant Professor of Pathology)	
2.	Director DME	Prof. Dr. Rai Muhammad Asghar	2     DME Focal Person     Dr. Maryum Batool		Dr. Maryum Batool	
3.	Convener Curriculum	Prof. Dr. Naeem Akhter	3	Co-coordinator	Dr. Nida Fatima (Demonstrator of Pathology)	
4.	Dean BasicSciences	Prof. Dr. Ayesha Yousaf				
5.	Additional Director DME	Prof. Dr. Ifra Saeed				
6.	Chairperson Pharmacology & Implementation Incharge 3 <sup>rd</sup> year MBBS	Dr. Asma Khan				
7.	Chairperson Pathology	Prof. Dr. Mobina Dhodhy		DME Implementation Team		
			1.	Director DME	Prof. Dr. Rai Muhammad Asghar	
8.	Chairperson Forensic Medicine	Dr Filza	2.	Add. Director DME	Prof. Dr. Asma khan	
9.	Focal Person Pharmacology	Dr Sobia	3.	Assistant Director DME	Dr Omaima Asif	
10.	Focal Person Pathology	Dr Fareeha Afzal	4.	Module planner & Implementationcoordinator	Dr. Omaima Asif	
11.	Focal Person Forensic Medicine	Dr. Gulzeb	5.	Editor	Dr Omaima Asif	
12.	Focal Person Medicine	Dr. Saima Ambreen				
13.	Focal Person of Gynaecology	Dr. Sobia Nawaz				
14.	Focal Person Community Medicine	Dr. Afifa Kulsoom				
15.	Focal Person Quran Translation Lectures	Mufti abdul Wahid				
16.	Focal Person Family Medicine	Dr Sadia Khan				
17.	Focal Person Bioethics Department	Prof. Dr. Akram Randhawa				
18.	Focal Person Surgery	Dr Huma Sabir				

#### 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.

## Module - GIT, Hepatobiliary and Parasitology

Introduction: GI and parasitology module provides integration of core concepts that underlie the basic science/pathology of GI diseases 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 GI and parasitology module is designed to impart basic knowledge about Pharmacology, Pathology, Forensic Medicine, Community Medicine, family medicineMedicine & Surgery. This knowledge will serve as a 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
- Professionalism/ Communication Skills
- 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)

#### Tables & Figures

- Table1. Domains of learning according to Blooms Taxonomy
- Figure 1. Prof Umar's Model of Integrated Lecture
- Table2. Standardization of teaching content in Small Group Discussions
- Table 3. Steps of taking Small Group Discussions

## Table1.

# Domains of learning according to Blooms Taxonomy

<b>Sr.</b> #	Abbreviation	Domains of learning
	С	Cognitive Domain: knowledge and mental skills.
	C1	Remembering
	C2	Understanding
1.	C3	Applying
	C4	Analyzing
	C5	Evaluating
	C6	Creating
	Р	Psychomotor Domain: motor skills.
	P1	Imitation
2	P2	Manipulation
2.	P3	Precision
	P4	Articulation
	P5	Naturalization
	А	Affective Domain: feelings, values, dispositions, attitudes, etc
	A1	Receive
2	A2	Respond
5.	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 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 sessionto develop co-relation (these questions will be standardized)	5minutes	
Step 3	Students divided into groups of three and allocation of learningobjectives	5minutes	
Step 4	ACTIVITY: Students will discuss the learning objectives amongthemselves         15 minu		
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	9 Page	

#### Table 2.

#### Standardization f teaching content in Small Group Discussions

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

#### Self Directed Learning (SDL)

- Self- directed learning is a process where students take primary charge of planning, continuing and evaluating their learningexperiences.
- Time Home assignment
- Learning objectives will be defined
- Learning resources will be given to students : Text book (page no), website
- 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 inpractice
  - 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	Торіс	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching strategies	Assessment tools
		Devision	<ul> <li>Describe the general organization and topography ofGastrointestinal tract.</li> </ul>	C2		
L1	Revision of Anatomy	Revision	<ul> <li>Explain abdominal wall, peritoneum and viscera ofGastrointestinal tract.</li> </ul>	C2	LGIS	MCQs SEQs
			<ul> <li>Discuss neurovascular organization and lymphatic drainage of Gastrointestinal tract.</li> </ul>	C2		VIVA
			<ul> <li>Describe Causes and pathological features of Inflammatory/</li> </ul>	C2		
			reactive Lesions of oral cavity .			
	Oral Cavity&		•Explain oral Manifestations of Systemic Disease with examples.	C2		
	Salivary Gland Pathology	nd Pathology	• Explain causes and pathogenesis of Precancerous and	C2		
L2			CancerousLesion.	<b>6</b> 2	SGD	MCQs SEQs
			•Discuss epidemiology, pathogenesis morphology of Squamous Cell Carcinoma.	C2		VIVA
			<ul> <li>Classify salivary gland non neoplastic lesions.</li> </ul>	C3		
			<ul> <li>Discuss Xerostomia and Sialadenitis.</li> </ul>	C2		
			<ul> <li>Classify salivary gland tumors.</li> </ul>	C2		
	Salivary Gland	Pathology	<ul> <li>Describe the clinical presentation of salivary gland tumors</li> </ul>	C3		
C1	Tumor		• Discuss the morphological features of salivary gland tumors.	C2	CBL	PBQS
			Differentiate between morphological features of	C3		
			Pleomorphicadenoma, Warthin tumor, Mucoepidermoid			
			Carcinoma.	61		
			Classify anti-emetics.     A Describe the mechanism of estion of Metaclementide			
12	A ations atio days	Dharmanala	Describe the mechanism of action of Metoclopramide.	C2	LCIS	MCO <sub>2</sub> SEO <sub>2</sub>
L3	Antiemetic drugs	gy	• Describe the uses & adverse effects of Metoclopramide.	C2	LGIS	VIVA
			<ul> <li>Describe mechanism of action and adverse effects of other anti-</li> </ul>	C2		
			emetics (5HT3 antagonists, H1 antagonists & hyoscine.			

L4	Hyperemesis gravidarum	Gynaecol ogy	<ul> <li>Define hyperemesis</li> <li>Enlist cause of hyperemesis.</li> <li>Enumerate Complications of Hyperemesis</li> <li>Know the Principles of management</li> </ul>	C1 C1 C2 C2	LGIS	MCQs SEQs VIVA
L5	Tilawate Quran	Quran Class				
L6	Approach to a patient with dysphagia Students will beable to	Surgery	<ul> <li>Define dysphagia</li> <li>Enlist causes of dysphagia</li> <li>Understand approach to diagnosis and investigations in apatient of dysphagia</li> <li>Briefly outline surgical management of dysphagia (especially inachalasia cardia, hiatal hernia, malignancy, corrosive strictures)</li> </ul>	C2 C2 C3 C2 C2 C2	LGIS	MCQs SEQs VIVA
L7	Introduction, Symptoms and Analysis of GI Investigation	Medicine	<ul> <li>Discuss different symptoms of gastrointestinal disease andtheir differential diagnosis.</li> <li>Discuss relevant qualifications in history of commonpresentations in Gastroenterology.</li> <li>Describe important investigations (e.g. endoscopy) in gastroenterology and their indications and interpretation of results.</li> <li>Acquire accurate history from symptoms.</li> </ul>	C2 C2 C2 C2 C2 C2 A2	LGIS	MCQs SEQs VIVA
C2	Anti emetic drugs	Pharmacolo gy	<ul> <li>Interpret linical pharmacology of drugs used for vomitin.</li> </ul>	C3	CBL	PBQS
S1	Introduction to parasitology	Pathology	<ul> <li>Define and Differentiate between, Definitive host, Intermediatehost, Vector, Carrier state, Reservoir, Symbiosis, Mutualism, Forms in which parasites exist.</li> <li>Classify medically important parasites.</li> </ul>	C2 C2	SGD	MCQs SEQs VIVA
L8	Neoplastic lesions of esophagus	Pathology	<ul> <li>Describe etiology, pathogenesis and morphological features ofReflux Esophagitis, Esophageal Varices, Barrett's Esophagus.</li> <li>enlist the risk factors for carcinoma of esophagus.</li> <li>Classify different types of esophageal tumors on the basis ofmorphology.</li> <li>correlate the pathogenesis of Barretts esophagitis with GERD</li> </ul>	C2 C2 C3 C3	SGD	MCQs SEQs VIVA

	Week 2								
Code No	Торіс	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching strategies	Assessment tools			
			Define dyspepsia.	C1					
L9	Approach to patient with dyspepsia	Medicine	<ul> <li>Describe pathophysiology of gastric acid secretion.</li> <li>Describe and discuss different clinical presentations and treatment</li> </ul>	C2	LGIS	MCQs SEQs VIVA			
			options for dyspepsia.	C2					
L10	Types of gastritis and gastropathies	Pathology	<ul> <li>Differentiate between etio-pathogenesis and morphologicalfeatures of gastropathy and Acute Gastritis, Chronic Gastritis.</li> <li>Differentiate morphological features of Helicobacter pyloriGastritis and Autoimmune Gastritis. Explain causes, Pathogenesis and morphological features of Ménétrier Disease and Zollinger-Ellison Syndrome.</li> </ul>	C3C3C2	SGD	MCQs SEQs VIVA			
L11	H.Pylori Gastritis and Peptic Ulcer	Pathology	<ul> <li>Correlate pathogenesis of Peptic ulcer disease with its morphologyand clinical presentation.</li> <li>Correlate the etiology &amp; pathogenesis of Helicobacter pylori-associated chronic gastritis with clinical presentation.</li> <li>Enlist the complications and other diseases caused by H Pylori infection.</li> </ul>	C3 C3 C1	LGIS	MCQs SEQs VIVA			
L12	Drugs Used in Peptic Ulcer (H2 receptor antagonist)	Pharmacology	<ul> <li>Classify drugs used in the treatment of Peptic Ulcer.</li> <li>Describe the mechanism of action of antacids used in thetreatment of Peptic Ulcer.</li> <li>Describe the adverse effects of antacids.</li> <li>Describe the mechanism of action of H2 receptor blockers.</li> <li>Describe the adverse effects of H2 Receptor Blockers.</li> <li>Tabulate differences between cimetidine &amp; other H2receptor blockers.</li> </ul>	C1 C2C3C2 C2C4	LGIS	MCQs SEQs VIVA			
L13	Intestinal cestodes	Pathology	<ul> <li>Classify the cestodes.</li> <li>Describe morphological features of cestodes.</li> <li>Enlist diseases caused by each type</li> <li>Describe life cycle of these parasites.</li> <li>Explain transmission, epidemiologyand Pathogenesis of</li> </ul>	C2 C2 C2 C2 C2	CBL	PBQS			

			diseasescaused by them.	C2		
			<ul> <li>Explain the diagnosis on the basis of clinical features</li> </ul>			
			andlaboratory findings.	C2C2		
			Describe treatment and prevention.			
			<ul> <li>Describe the types of Analgesics used commonly as self harm</li> </ul>	C2		
			<ul> <li>Describe the clinical presentation of analgesic intoxication</li> </ul>	C2		
L14	Analgesics	Forensic medicine	<ul> <li>Describe the Medicolegal and forensic importance of</li> </ul>	C2	LGIS	MCQs SEQs
		&toxicology	analgesicintoxication.	C2		VIVA
			Describe the management of acute analgesic intoxication in			
			general.	C2		
	Introduction to P drugs		<ul> <li>illustrate P drug &amp; prescription writing for motion sickness</li> </ul>	P1		
P1	andprescription writing	Pharmacology	illustrate P drug & prescription writing for VOMITING INPREGNANCY	P1	PRACTICA	OSPE
	in				L	
	hyperemesis gravidarum					
			<ul> <li>Describe the physical properties of Organoposphours</li> </ul>	C2		
			compounds.	C2		
			<ul> <li>Describe mechanism of action in humans.</li> </ul>			
	Organophosphorus	Foresnsic medicine	<ul> <li>Describe the clinical features of Organoposphours</li> </ul>	C2		
P2	Compounds	and toxicology	compoundspoisoning and its management.		PRACTICL	OSPE
			<ul> <li>Describe the Medicolegal importance of</li> </ul>	C2		
			Organoposphourscompounds poisoning.			
			<ul> <li>Describe the autopsy findings of Organoposphours</li> </ul>	C2		
			compoundspoisoning.	P3		
			Identify specimen of Organoposphours compounds.			
			<ul> <li>Recognize and draw histopathological features of</li> </ul>	C2		
	Salivary tumor, CA		pleomorphicadenoma of parotid gland.			
P3	esophagus, peptic ulcer, CA	Pathology	<ul> <li>Describe the pathological features of gastric ulcers and</li> </ul>	C2	PRACTICA	OSPE
	stomach		carcinomaof esophagus and stomach.			
			Identify the slides and recognize two points of identification of	P3		
			pleomorphic adenoma, CA stomach and CA esophagus.			

	Week 3								
Code No	Торіс	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching strategies	Assessment tools			
L15	Drugs used in pepticulcer (Proton pump inibitors )	Pharmaco logy	<ul> <li>Describe the mechanism of action of Proton Pump Inhibitors.</li> <li>Describe adverse effects of PPIs.</li> <li>Discuss the mechanism of action of Mucosal protective agents.</li> <li>Discuss adverse effects of Mucosal protective agents.</li> <li>Discuss the drugs used for eradication of H. Pylori infection.</li> <li>Identify gross and microscopic images of gastric adenocarcinoma.</li> </ul>	C2 C2 C2 C2 C2 C2 P3	LGIS	MCQs SEQs VIVA			
S2	Drug used in acid peptic disorders	Pharmaco logy	• Describe Clinical pharmacology of drugs used in Peptic ulcer caused by H Pylori.	C2	SGD	MCQs SEQs VIVA			
			<ul> <li>Classify different types of gastric Polyps.</li> </ul>	C2					
L16	Neoplastic lesions ofstomach	Pathology	<ul> <li>Explain epidemiology, etiology, Pathogenesis of CA Stomach.</li> <li>Diagnosis of Gastric adenocarcinoma Morphology.</li> <li>Identify microscopic images of inflammatory bowel disease.</li> </ul>	C2 C3	LGIS	MCQs SEQs VIVA			
				P3					
L17	Classification ofFoods	Community Medicine	<ul> <li>Define nutrition</li> <li>describe food pyramid</li> <li>utilize food pyramid</li> <li>classify food according to function</li> <li>classify food according to nutritive value</li> <li>classify food according to origin</li> <li>classify food by chemical composition</li> </ul>	C1 C2 C2 C2 C2 C2 C2 C2 C2 C2	LGIS	MCQs SEQs VIVA			
L18	Pesticides	Forensic Medicine &toxicology	<ul> <li>Describe the types of Pesticides commonly implicated in poisoning</li> <li>Describe the clinical presentation of organophosphorus compound poisoning</li> <li>Describe the Absorption, metabolism and excretion of organophosphorus compounds.</li> <li>Describe the mechanism of action of organophosphorus compounds.</li> <li>Describe the causes of death due to organophosphorus compounds poisoning.</li> <li>Describe the Medicolegal and forensic importance of organophosphorus compounds.</li> <li>Describe the management of organophosphorus compounds with special emphasis on decontamination, removal of ingested and absorbed poison.</li> <li>Use of antidotes.</li> </ul>	C2 C2 C2 C2 C2 C2 C2 C2 C2 C2 C2 C2	LGIS	MCQs SEQs VIVA			

L19	Taqwa	Quran Class			LGIS	MCQs SEQs VIVA
L20	Small intestinal diseases	pathology	<ul> <li>Describe Causes, Pathogenesis and morphological features Intestinal Obstruction.</li> <li>Discuss causes, pathogenesis and diagnosis of Malabsorption and Diarrhea.</li> <li>Explain Pathogenesis and diagnosis of Cystic Fibrosis.</li> <li>Describe the pathogenesis and morphology of Celiac disease.</li> </ul>	C2 C2 C2 C3	LGIS	MCQs SEQs VIVA
C4	Diarrhea causing protozoa	Pathology	<ul> <li>Describe transmission &amp; Life cycle</li> <li>Enlist Clinical features of intestinal Amoebiasis</li> <li>Explain Extra intestinal amoebiasis</li> <li>Interpret Lab diagnosis</li> <li>Differentiate between amebic and bacillary dysentery</li> <li>Plan treatment &amp; prevention</li> <li>Describe life cycle and diseases caused by Giardia and enlist other non pathogenic amoebas.</li> <li>Describe clinical features of diarrhea caused by different protozoa Identify etiological cause of diarrhea on the basis of clinical features andmorphology of fecal specimen.</li> </ul>	C2 C1 C2 C3 C2 C3 C2 C2 C2 P3	CBL	PBQS
С5	Antiamebic drugs	Pharmacolo gy	<ul> <li>Classify amoebic drugs C1</li> <li>Describe their mechanism of action C2</li> <li>Describe MOA, other uses and adverse effect of metronidazole C2</li> <li>Discuss important drug interactions of metronidazole. C2 Identify the egg/ova on stool examination</li> </ul>	C1 C2 C2 C2 P3	CBL	PBQS
L21	Anti amebic drugs	Pharmacolo gy	Discuss Clinical pharmacology of drugs used in amoebiasis	C2	LGIS	MCQs SEQs VIVA
L22	Approach to a Patient With UpperGI bleed	Medicine	<ul> <li>Define hematemesis, malena and hematochezia. C1</li> <li>Describe anatomical basis and patho-physiological correlation of GI.</li> <li>bleed e.g. potential bleeding areas and mechanism of bleeding from the gut.C2</li> <li>Discuss common causes of GI bleeding including common life threatening conditions.C2</li> <li>Describe and discuss relevant questions to differentiate between different causesof upper GI bleed, for example: Peptic Ulcer Variceal bleed, Gastric carcinoma, Mallory Weiss tear.</li> </ul>	C1 C2 C2 C2 C2 C2	LGIS	MCQs SEQs VIVA
L23	Approach to a patient with acuteabdomen	Surgery	<ul> <li>Students will be able to</li> <li>Describe signs and symptoms of acute surgical abdomen.</li> <li>Enlist common causes of acute abdomen (appendicitis, obstruction,</li> <li>Peritonitis, intestinal perforation, duodenal perforation etc.)</li> <li>Describe resuscitation of an acute abdomen</li> <li>Understand investigations and diagnosis of a patient with acute abdomen Outline management options in a patient with acute abdomen ( basics of surgical</li> </ul>	C2C1 C3	LGIS	MCQs SEQs VIVA

			management i-e treat the cause e.g appendectomy, exploratory laparotomy and			
			management according to cause)	<u> </u>		
L24	Prokinetics	Pharmacolo	Define Prokinetic drugs.     Classify the group of drugs that are used as Drokinetics		LOIG	VIVA
			• Classify the group of drugs that are used as Prokinetics.		LGIS	*1*1
	-	gy	explain the , MOA uses and adverse effects of D2 blockers drugs.	02		
L25	Types of colitis and Inflammatory bowel disease	Pathology	Describe causes, pathogenesis and morphological features of Inflammatory	C2		
			Bowel Disease.		LGIS	MCQs SEQs
			Differentiate between Ulcerative colitis and crohn's disease, Microscopic Colitisand	C3		VIVA
			Graft-Versus-Host Disease.			
		Pharmacolo gy	• Enlist drugs used in IBD.	C1		
	Drugs used		• Describe the therapeutic pyramid approach to inflammatory bowel disease and	C2		
L26	inflammatory bowel		how treatment choice is made.		LGIS	MCQs SEQs
			• Enlist drugs used in IBD.	C1		VIVA
			Describe the therapeutic pyramid approach to inflammatory bowel disease andhow	C2		
			treatment choice is made.			
	Tissue cestodes	pathology	Classify the cestodes.	C1		
			Describe morphological features of cestodes.	C2		
L27			• Enlist diseases caused by each type.	C1		
			• Describe life cycle of these parasites.	C2	SGD	MCQs SEQs
			Explain transmission, epidemiology and Pathogenesis of diseases caused by them	C2	502	VIVA
			• Establish the diagnosis on the basis of clinical features and laboratory findings.	C3		
			Describe treatment and prevention.	C2		
			<ul> <li>. identification of all the parts of chymograph</li> </ul>	C3		
P4	Rabbit ileum	pharmacolo	Demonstrate the effects of gradually increasing doses of acetylcholine on dose		PRACTICA	OSPE
		gy	response curve.		L	
	Vegetable poison	Forensic Medicine	Describe the physical properties of Castor Croton Capsicum Ergot Abrus	C2		
C3			Describe mechanism of action in humans.	C2		
			• Describe the clinical features of Organic irritants poisoning and its management.	C2	CBL	PBQS
			• Describe the Medicolegal importance of Organic irritants poisoning.	C2		
			<ul> <li>Describe the autopsy findings of Organic irritants poisoning.</li> </ul>	C2		
			Identify specimen of Castor Croton Capsicum Ergot Abrus	P3		
Р5	Acute appendicitis		Recall pathological features of acute appendicitis.	C1		
	Intestinal TB Crohn'	Pathology	• Differentiate between Intestinal tuberculosis and IBD.	C2	PRACTICA	OSPE
	disease CA colon		Identify the slides and recognize two important points of identification of acute	P3	L	
			appendicitis Intestinal TB,Crohn' disease and CA colon.			

Week 4						
Code No	Торіс	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching strategie s	Assessment tools
L28	Major food groups	Commun ity medicin e	<ul> <li>Describe major food groups</li> <li>Discuss functions of proteins</li> <li>Describe requirements and sources of proteins</li> <li>Explain functions of carbohydrates</li> <li>Describe requirements and sources of carbohydrates</li> <li>Discuss functions of fats</li> <li>State requirements and sources of fats.</li> </ul>	C1 C2 C2 C2 C2 C2 C2 C2 C2 C2	L G I S	MCQs SEQs VIVA
L29	Neoplastic lesion ofintestine	Pathology	<ul> <li>Classify intestinal inflammatory and neoplastic Polyps.</li> <li>Describe syndromic association of polyps.</li> <li>Discuss epidemiology, etiology, Pathogenesis and morphological features of intestinal Tumors.</li> </ul>	C3 C2 C2 C3	S G D	MCQs SEQs VIVA
			<ul> <li>Explain genetic etiology and molecular pathogenesis of colorectaladenocarcinoma.</li> <li>Describe hereditary Non-Polyposis Colorectal carcinoma.</li> <li>Conclude staging of colorectal Adenocarcinoma</li> </ul>	C2C2C3		
C6	Colorectal carcinoma	Pathology	<ul> <li>Discuss differential diagnosis based on clinical and morphological features.</li> <li>Classify intestinal inflammatory and neoplastic Polyps.</li> <li>Explain genetic etiology and molecular pathogenesis of colorectaladenocarcinoma.</li> <li>Describe hereditary Non-Polyposis Colorectal carcinoma.</li> <li>Enumerate staging of colorectal Adenocarcinoma.</li> <li>Identify tumor of colon on gross examination</li> </ul>	C3 C3 C2 C2C3 P3	SGD	MCQs SEQs VIVA
L30	Medicolegal autopsy	Forensic and toxicology	<ul> <li>Describe the contents of Medicolegal/postmortem reports.</li> <li>Describe the requirements of a mortuary.</li> <li>Describe the classification of pattern of injuries in MLC cases.</li> </ul>	C2C2 C2	LGIS	MCQs SEQs VIVA
L31	Anal canal appendix and peritoneum	Pathology	<ul> <li>Describe etio-Pathogenesis and morphology of Tumors of the Anal Canal.</li> <li>Apply morphological diagnosis of acute Appendicitis.</li> <li>Classify tumors of the Appendix on the basis of morphology.</li> </ul>	C2C3 C3	SGD	MCQs SEQs VIVA

			Understand polio virus transmission, poliomyelitis disease and global	C2P3		
			progresstoward polio eradication		LOIG	
L32	Fecoral infections –	Community	Recognize the vaccines available against polio and the risks and the benefits	C2	LGIS	MCQs SEQs
	polio	medicine	of the each			VIVA
			Describe the rationale for introducing IPV into the routine immunizationschedule.		-	
			define Ascities.	C1		
	Approach to a patient		Explain pathophysiology of Ascities.	C2	T CTC	
L33	with ascites and	Medicine	Describe etiology of Ascities.	C3	LGIS	MCQs SEQs
	abdominal distension		Classify different types of Ascitles.	C2		VIVA
			• Able to investigate Ascities.	C1		
			Describe management plan.	C2		
			<ul> <li>Students will be able to</li> </ul>	C2C2C2		
	Approach to a patient		<ul> <li>Describe signs and symptoms of intestinal obstruction.</li> </ul>			
L34	with intestinal	Surgery	<ul> <li>Enlist causes of intestinal obstruction.</li> </ul>		LGIS	MCQs SEQs
	obstruction		<ul> <li>Understand resuscitation of a patient with intestinal obstruction.</li> </ul>			VIVA
	obstruction		<ul> <li>Understand investigations and diagnosis of a patient with intestinal</li> </ul>			
			obstruction.			
			Outline management options in a patient with intestinal obstruction			
S3	Teramatodes liver	Pathology	<ul> <li>Classify the different important types of flukes.</li> </ul>	C3	CBL	PBQS
	and		Enlist diseases caused by each type.	C1		
	lung flukes					
			Describe life cycle of these parasites.	C2C2		
			<ul> <li>Explain transmission, epidemiology and Pathogenesis of diseases caused</li> </ul>			
			bythem.	C2C2		
			• Explain the diagnosis on the basis of clinical features and laboratory findings.			
			Describe treatment and prevention.			
			<ul> <li>Classify anthelmintic therapeutically.</li> </ul>	C1		
L35	Anti helminthes	Pharmacology	<ul> <li>Explain mechanism of action of each group.</li> </ul>	C2	LGIS	MCQs SEQs
	drugs		• Explain their advance effects.	C2		VIVA
			Explain their mode of administration.	C2		
			Classify anthelmintic therapeutically.	C1C2		
L36	Anti helminthes	Pharmacology	<ul> <li>Explain mechanism of action of each group.</li> </ul>	C2C2	LGIS	MCOs SEOs
	drugs		• Explain their advance effects.			VIVA
	_		Explain their mode of administration.			
			Enlist different GI infections caused by bacteria.	C1		
			• Enlist the important bacteria responsible for causing GI infections.	C1		
L37	Microbes causing GI	Pathology	• Explain the clinical features of different GI infections of bacterial etiology.	C2	CBL	PBQS
	infections		<ul> <li>Describe the transmission and pathogenesis.</li> </ul>	C2		
			the trade was not table at the set of the se	<u> </u>		
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			Interpret the lab diagnosis.	C3		
			Describe the treatment and prevention.	<u>C2</u>		
	Fecooral infections		define and clarify diarrhea	C2	LOIG	
L38	typoid and food	Community	• Explain knowledge about burden of diarrheal diseases	C2	LGIS	MCQs SEQs
	poisoning	medicine	<ul> <li>Describe the epidemiological concepts of acute intestinal infectious diseases</li> </ul>	C2		VIVA
			Describe of the W.H.O strategies for control and prevention of these diseases.	C2		
			<ul> <li>Classification of anti-diarrhoeal agents</li> </ul>	C2C2		MCQs SEQs
L39	Antidiarreheal drugs	Pharmacology	<ul> <li>Describe important pharmacological features</li> </ul>	C2	LGIS	VIVA
			Discuss adverse effects and clinical uses			
			<ul> <li>Enumerate Nematodes with disease causing larvae.</li> </ul>	C1		
			<ul> <li>Describe the morphological features.</li> </ul>	C2		
	Nematodes with		• Enlist diseases caused by each type.	C1		
L40	disease causing	pathology	<ul> <li>Describe life cycle of these parasites.</li> </ul>	C2	SGD	MCQs SEQs
	larvae	1	• Explain transmission, epidemiology and Pathogenesis of diseases caused	C2		VIVA
			bythem.			
			Explain the diagnosis on the basis of clinical features and laboratory findings.	C2		
<b>6</b> 4	Antidiarrhoal drugs	Dharmacology	Describe Clinical pharmacology of drugs used in diarrhea		SCD	MCOs SEOs
54	Antiularmeal urugs	Filatiliacology	Describe clinical pharmacology of drugs used in diarmea	C2	500	VIVA
C7	Hydatid disease	Pathology	• Enlist diseases caused by each type.	C1	CBL	MCQs SEQs
			Describe important features of life cycle of these parasites.	C2		VIVA
			• Explain transmission, epidemiology and Pathogenesis of diseases caused	C2		
			bythem.			
			• Explain the diagnosis on the basis of clinical features and laboratory findings.	C2C2		
			Describe treatment and prevention.			
			demonstrate the effects on dose response curve of different doses	C1		
P6	Rabbit ileum	Pharmacology	ofacetylcholine in the presence of attopine		Practical	OSPE
			Demonstrate the surmountable antagonism between acetylcholine and	C2		
	Autopsy		Describe the contents of Medicolegal/postmortem reports.	C2		
	Visits/Postmortem	Forensic	• Describe the requirements of a mortuary.	C2		
P7	andMedicolegal	Medicine	• Describe the classification of pattern of injuries in MLC cases.	C2	Practical	OSPE
	work/Posoarch	Wedlene	• Observe autopsy and Medicolegal case management at DHO. Hospital.		Tactical	USI E
	work		Preparation of MIC/autonsy report			
	WORK			P2		
<b>D</b> 0		Dathalass	Describe importance of stool examination.     Differentiate example a basis of membrales.	C2	Dreatical	OSDE
Рð	Stool examination/	Pathology	Differentiale common parasite ovas on basis of morphology.	02	Fractical	USPE
	Parasitology		• Describe sample collection and transportation.	C2		
	(practical)		identification of common pathogens and parasites & eggs/ ova	P1		

Week 5						
Code No	Торіс	Discipline	At the end of the lecture student should be able to	/P/A	Teaching strategies	Assessment tools
C8	Antihelminth esdrugs	Pharmacolo gy	<ul> <li>Classify anthelmintic therapeutically.</li> <li>Explain mechanism of action of each group.</li> <li>Explain their advance effects.</li> <li>Explain their mode of administration.</li> </ul>	C1 C2 C2 C2	LGIS	MCQs SEQs VIVA
			• Discuss etiology, pathogenesis, laboratory diagnosis of autoimmune Hepatitis.	C2		
L41	Types of hepatitis and metabolic liver diseases	Pathology	<ul> <li>Describe Drug- and Toxin-Induced Liver Injury.</li> <li>Enumerate morphological features of alcoholic Liver Disease Non- alcoholicFatty Liver Disease Disease (NAFLD).</li> <li>Enlist causes and morphological features of metabolic Liver Disease</li> </ul>	C2 C3 C1	LGIS	MCQs SEQs VIVA
			(Hemochromatosis, Wilson Disease, α1-Antitrypsin Deficiency).			
L42	Drugs used in hepatitis B	Pharmacolo gy	<ul> <li>Discuss drug used for treatment of Hepatitis B viral infections</li> <li>Discuss the mechanism of action, uses and adverse effects of interferon</li> <li>Identify the gross images of liver tumor.</li> </ul>	C2 C2 P1	LGIS	MCQs SEQs VIVA
L43	Hepatitis A & E	Pathology	<ul> <li>Enumerate the important properties &amp; Diseases caused by these viruses.</li> <li>Describe the Replicative cycle.</li> <li>Explain the transmission of the diseases caused by these viruses.</li> </ul>	C2 C2 C2	LGIS	MCQs SEQs VIVA
			<ul> <li>Relate the interaction of pathogenesis of viruses &amp; immunity of individuals.</li> <li>Identify clinical findings of the diseases caused by these viruses.</li> <li>List the laboratory identification.</li> <li>Describe the treatment &amp; Prevention.</li> </ul>	C3C1C1 2		
L44	Nematodes: intestinal nematodes	Pathology	<ul> <li>Classify the Nematodes.</li> <li>Classify the Intestinal Nematodes.</li> <li>Describe the common and differentiating features in morphology and life cycle of the Nematodes</li> <li>Enlist diseases caused by each type</li> <li>Describe life cycle of these parasites.</li> <li>Explain transmission, epidemiology and Pathogenesis of diseases caused by them.</li> <li>Explain the diagnosis on the basis of clinical features and laboratory findings.</li> <li>Describe treatment and prevention.</li> </ul>	C2 C2 C2 C1 C1 C2 C2 C2 C2 C2 C2 2	LGIS	MCQs SEQs VIVA

L45	Jaundice and biliary diseases	Pathology	<ul> <li>Discuss pathophysiology of Jaundice, Cholestasis, large Bile Duct Obstruction autoimmune Cholangiopathies.</li> <li>Differentiate between pathological features of Primary Biliary Cirrhosis (PBC) and Primary Sclerosing Cholangitis (PSC).</li> <li>Discuss Structural Anomalies of the Biliary tree, biliary atresia.</li> <li>Explain Portal Vein Obstruction and hepatic vein Thrombosis.</li> <li>Correlate immunological basis with Graft-Versus-Host Disease and Liver Graft Rejection.</li> </ul>	C2 C3 C2 C2 3	LGIS	MCQs SEQs VIVA
L46	Allah or rasool ki muhabbat	Quran			LGIS	MCQs SEQs VIVA
L47	Approach to a patient with gastrointestinal carcinoma	Surgery	<ul> <li>Explain signs and symptoms of cholelithiasis, chronic cholecystitis, acute cholecystitis, cholangitis, pancreatitis and obstructive jaundice.</li> <li>Enlist a D/D for upper abdominal pain.</li> <li>Enlist a D/D for obstructive jaundice.</li> <li>Apply his theoretical knowledge to make a management plan for hepatobiliary diseases.</li> </ul>	C2 C1 3	LGIS	MCQs SEQs VIVA
L48	Minor protozoa toxoplasma and trichomonas	Pathology	<ul> <li>Students will be able to</li> <li>Describe signs and symptoms of gastrointestinal intestinal carcinoma.</li> <li>Understand investigations and diagnosis of a patient with gastrointestinalintestinal carcinoma.</li> <li>Outline management options in a patient with gastrointestinal carcinoma.</li> <li>Define neoadjuvant therapy, adjuvant therapy and upfront surgery.</li> </ul>	2C1C2 C2C2	SGD	MCQs SEQs VIVA
L49	Family Medicine	Acute and chronic hepatitis	<ul> <li>Explain the etiology and clinical features of acute hepatitis.</li> <li>Explain the management strategies of acute hepatitis in family practice</li> <li>Explain the etiology clinical features and complication of chronic hepatitis</li> <li>Explain the management strategies of chronic hepatitis in family practice</li> <li>Describe the red flags in a patient with acute and chronic hepatitis forreferral to specialty care.</li> </ul>	2C2C2 C2	LGIS	MCQs SEQs VIVA
S5	Gall bladder diseases	Pathology	<ul> <li>Discuss morphological features of Congenital Anomalies.</li> <li>Describe etiology and pathogenesis of Cholelithiasis (Gallstones) andcholecystitis.</li> <li>Classify neoplastic lesions of gall bladder.</li> </ul>	C2 C2 2	SGD	MCQs SEQs VIVA
			<ul> <li>Discuss causes, Pathogenesis and morphological features of Cirrhosis andPortal Hypertension.</li> <li>Enumerate causes of chronic hepatitis.</li> </ul>	C2 C2		

L50	LIVER CIRRHOSIS	Pathology	<ul> <li>Interpret morphological diagnosis of cirrhosis by neuroinflammatory gradeand stage.</li> <li>Correlate morphological diagnosis of cirrhosis with clinical outcome ofdisease.</li> <li>correlate the hepatocellular and sinusoidal injury with complications of cirrhosis.</li> </ul>	C3 3C3	LGIS	MCQs SEQs VIVA
L51	Hepatitis B &C	Pathology	<ul> <li>Enumerate the important properties &amp; Diseases caused by these viruses.</li> <li>Describe the Replicative cycle.</li> <li>Explain the transmission of the diseases caused by these viruses.</li> <li>Relate the interaction of pathogenesis of viruses &amp; immunity of individuals.</li> <li>Identify clinical findings of the diseases caused by these viruses.</li> <li>List the laboratory identification.</li> <li>Describe the treatment &amp; Prevention.</li> </ul>	C2 C2 C2 C3 C1 C1 2	LGIS	MCQs SEQs VIVA
L52	Approach to a patient with viral hepatitis and cirrhosis	Medicine	<ul> <li>define acute and chronic viral hepatitis and</li> <li>Different types of viruses causing Hepatitis and their natural course ofdisease.</li> <li>Describe Clinical features and complications of viral hepatitis.</li> <li>Describe Investigations to diagnosis different viral hepatitis and forcomplications.</li> <li>Able to manage acute and chronic viral hepatitis.</li> </ul>	1C2C2 C4	LGIS	MCQs SEQs VIVA
L53	Approach to patientwith Obstructive jaundice	Surgery	<ul> <li>Students will be able to</li> <li>Describe signs and symptoms of obstructive jaundice.</li> <li>Enlist causes of obstructive jaundice</li> </ul>	C2C1 2	LGIS	MCQs SEQs VIVA
			Describe approach to diagnosis of obstructive jaundice.	C2		
L54	Preventive measuresof viral hepatitis	Community medicine	<ul> <li>Describe causes of different types of Hepatitis</li> <li>Elaborate the modes of transmission of different types of Hepatitis</li> <li>Describe the prevention of different types of Hepatitis</li> <li>Design control activities for different types of Hepatitis</li> <li>Guide people about immunization against different types of Hepatitis</li> </ul>	C2 C3 C2 C2 C2 C3	LGIS	MCQs SEQs VIVA
L55	Antiviral drugs (hep C)	Pharmacology	Discuss drug used for treatment of Hepatitis C viral infections     Discuss the mechanism of action, uses and adverse effects of interferon	C2 C2	LGIS	MCQs SEQs VIVA
Р9	Prescription and P writing of peptic ulcer	pharmacology	P prescription and drug writing for peptic ulcer disease	C1C2	Practical	OSPE

			Describe the contents of Medicolegal/postmortem reports.	C2		
	Autopsy visit	Forensicmedicine	• Describe the requirements of a mortuary.	C2		
P10	/Postmortem/		<ul> <li>Describe the classification of pattern of injuries in MLC cases.</li> </ul>	C2	Practical	OSPE
	Medicolegal work		<ul> <li>Observe autopsy and Medicolegal case management at DHQ, Hospital.</li> </ul>	C2		
			Preparation of MLC/autopsy report.	P2		
			<ul> <li>Recall important histomorphology features for diagnosis of fatty</li> </ul>	C2	-	
P11	Fatty change,	Pathology	change,Cirrhosis, CA liver		Practical	OSPE
	Cirrhosis, CA liver		Identify the slides and recognize two points of identification of Fatty change,	C2		
			Cirrhosis, CA liver			

			Week 6			
Code No	Торіс	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching strategies	Assessment tools
			• Discuss etiology, pathogenesis and morphology of Nodular Hyperplasia's,	C2		
			Hepatocellular Adenomas and Hepatoblastoma.			
L56	Neoplastic liver diseases	Pathology	• correlate the etiopathogenesis of HCC with changes in its precursor lesions.	C3 C2	LGIS	MCQs SEQs VIVA
			• Describe the morphology of liver neoplasm.	C2		
			<ul> <li>Describe the lab diagnosis of liver neoplasm.</li> </ul>			
L57	Amoebiasis Ascaris hookworm infestation	Commun ity Medicin e	<ul> <li>Recall the drugs used in worm infestations.</li> <li>Write a suitable prescription for patient with Ascariasis &amp; EnterobiousVermicularis.</li> </ul>		LGIS	MCQs SEQs VIVA
L58	Vitamins and minerals	Community medicine	<ul> <li>explain importance of major minerals.</li> <li>explain importance of trace elements.</li> </ul>	C2 C2	LGIS	MCQs SEQs VIVA
			<ul> <li>State different types of vitamins explain functions of vitamins.</li> </ul>	C2		
			<ul> <li>explain functions of minerals.</li> </ul>	C2		
			<ul> <li>state daily requirement of vitamins.</li> </ul>	C2		
			state daily requirement of minerals .	C1		
			describe deficiency diseases of vitamins and minerals.	C1		
			Describe morphological features of Congenital Anomalies.	C2		
			Discuss etiology, pathogenesis and morphological features of acute	C2		
C10	Pancreatic diseases	Pathology	<ul><li>Pancreatitis and chronic Pancreatitis</li><li>Classify pancreatic Cysts.</li></ul>	C1	LGIS	MCQs SEQs VIVA
			Classify pancreatic benign and malignant tumors.	C1		
			Describe the lab diagnosis of pancreatitis.	C2		
			Describe the types of Alcohol	C2		
			<ul> <li>Describe the clinical presentation of alcohol intoxication both acute and</li> </ul>	C2		
			chronic			
L59	Alcohol	Forensic Medicine	<ul> <li>Describe the clinical tests for examination of an alcoholic.</li> <li>Describe the collection of blood, urine and vomitus and their necessarysampling and referral to Forensic Lab for confirmation of the poisoning.</li> </ul>	C2 C2	LGIS	MCQs SEQs VIVA

			Describe the Medicolegal and forensic importance of alcoholic	C2		
			intoxication.	C2		
			<ul> <li>Describe the management of acute alcohol intoxication in general.</li> </ul>			
			classify malnutrition	C1		
			<ul> <li>explain causes of malnutrition</li> </ul>	C2		
	Malautritian	Commun	<ul> <li>discuss prevention of different types of malnutrition</li> </ul>	C2		MCO
L60	andbalancod	ity	<ul> <li>define nutritional surveillance, food fortification, food adulteration</li> </ul>	C1	LG	
	diot	modicin	discuss balance diet	C2	IS	VIVA
	ulet	nieuicin	<ul> <li>describe energy requirement</li> </ul>	C2		
		e	<ul> <li>discuss concept of empty calories</li> </ul>	C2		
L61	Takabur aur Gharor	Quran Class			LG	MCQs
					IS	SEQs VIVA
			Classify Purgatives.	C1		
1.62	Lovativas	Dhawaaalaay	• Discuss the important pharmacological features of purgatives & Laxatives.	C2	LC	MCQs
L62	Laxatives	Pharmacology	Enumerate uses& adverse effects.	C3	LG	SEQs
			<ul> <li>Use of lactulose in Hepatic Encephalopathy.</li> </ul>	C2	15	VIVA
			Enumerate Tissue Nematodes.	C1		
162	Nematodes:Tiss	Dathalagu	• Describe the morphological features of the tissue nematodes.	C2	LC	MCQs
L03	ue	Pathology	• Enlist diseases caused by each type.	C2	IG	SEQs
	nematodes		Describe life cycle of these parasites.	C2	10	VIVA

			Explain transmission, epidemiology.	C2		
			<ul> <li>and Pathogenesis of diseases caused by them.</li> </ul>	C2		
			<ul> <li>Explain the diagnosis on the basis of clinical features and</li> </ul>	C2		
			laboratoryfindings.			
			<ul> <li>Describe treatment and prevention.</li> </ul>			
			• Enlist Diseases caused by each type with Characteristics.	C1		
56	Teramatodes	Dathology	<ul> <li>Comprehend life cycle, transmission epidemiology&amp; pathogenesis.</li> </ul>	C2	LCIC	MCQs
30	Schistoma	Pathology	<ul> <li>Interpret Laboratory diagnosis.</li> </ul>	C3	LGIS	SEQs
			<ul> <li>Plan treatment and prevention.</li> </ul>	C3		VIVA
1.6	Face Oral Infaction	Community			LCIS	MCQs
	Feco Oral Infection	Medicine			LGIS	SEQs
4						VIVA
	Prescription and P		Recall the drugs used in amoebic dysentery	C1C1		
	writing of Amoebic		Describe suitable drugs for the patient with amoebic			MCOs
P1	dysentery and	pharmacology	dysenteryRecall the drugs used in worm infestations.		LGIS	SEQs
2	worminfestation		Write a suitable prescription for patient with Ascariasis &			VIVA
			EnterobiousVermicularis.			
			Define drug Abuse, drug Addiction and Drug	C2		
			dependence.Enlist the WHO criteria of drug addiction .	C1		
			Briefly state their Medicolegal importance	C2		
			Enumerate different types of dangerous drugs w.r.t their	C3		
	Drug Abuse		affects.Describe the dangerous drug act.	C3		MCOs
C9	and Dangerous	Forensic	Differentiate between drug addiction n drug	C3	LGIS	SEOs
	Drug act	Medicine	habituation. Assess the level of addiction by	P2		VIVA
	Druguet		considering WHO criteria. Identify dangerous drugs and	P3		
			protocol of their handling.	P3		
			Assess and Manage a case of drug abuse by applying the knowledge of			
			drugaddiction, abuse, and WHO criteria.	A2		
			Follow the protocol of handling dangerous drugs	/		
	Laboratory diagnosis		<ul> <li>Interpret lab report of a patient with chronic viral, hepatitis, acute</li> </ul>	C3		MCOs
P1	ofhenatobiliary	Pathology	viralhepatitis.		LGIS	SEOs
3	diseases		Interpret lab report of a patient with jaundice.	C3		VIVA

# **Curriculum (Self Directed Learning) SDL**

	Week-1/2	
	Pharmacology	
To pic	Learning Objectives	Referenc es
ROLE OF SEROTONIN RECEPTORS IN GITMOTILITY	<ul> <li>Revise the knowledge of receptors and neurotransmitters regarding their functional roles</li> </ul>	<ol> <li>Basic and Clinical Pharmacology by Bertram Z. Katzung 15thEdition, Chapter 6, Page 2-6, 15-24</li> <li>Goodman and Gillmans The Pharmacological basics of Therapeutics,13th Edition, Chapter , Pg</li> </ol>
	Pathology	
Oral inflammatory lesions	<ul> <li>Enlist cause of Aphthous Ulcers (Canker Sores)</li> <li>Define pathogenesis of Herpes Simplex Virus Infections of oralcavity</li> <li>Revise Pathogenesis of Oral Candidiasis (Thrush).</li> </ul>	Robbins & Cotran Pathologic Basis OF Disease, 10 <sup>th</sup> Edition, , Pg 552
	Forensic	
	Medicine	
. Pesticides Aluminium phosphide (Alphos poisoning ) •	<ul> <li>Describe the physical properties of Organoposphourscompounds.</li> <li>Describe mechanism of action in humans.</li> <li>Describe the clinical features of Organoposphours compoundspoisoning and its management.</li> <li>Describe the Medicolegal importance of Organoposphours compounds poisoning.</li> <li>Describe the autopsy findings of Organoposphours compoundspoisoning</li> </ul>	Parikh's text book of medical jurisprudence forensic medicine and toxicology,Edition 9 (PAGE NO 649 TO 652 <b>Recommended:</b> Principles of Forensic Medicine & Toxicology byGautamBiswas

	Week-3					
Pharmacology						
To pic	Learning Objectives	Referenc es				
Role of opioids receptors in git motilty	<ul> <li>Classify opioids receptors</li> <li>Enumerate opioidsreceptor functions</li> <li>Discuss the role of opioids in git pyssiology and pathology</li> <li>Enumerate drugs acting through opioid receptors</li> </ul>	Opioid receptors in the gastrointestinal tract <u>Peter Holzer</u> * <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3163293/#:~:text=Opioi</u> <u>d</u> <u>%20receptors%20in%20the%20gastrointestinal%20tract</u>				
Pathology						
Odontogenic cysts and • Tumors	<ul> <li>At the end of SDL students should be able to understand</li> <li>Pathogenesis of Dentigerous cyst</li> <li>Pathogenesis of Odontogenic keratocysts</li> <li>Pathogenesis of Periapical cyst</li> <li>Pathogenesis of Odontogenic tumors</li> <li>Pathogenesis of Ameloblastomas</li> <li>Pathogenesis of Odontoma</li> </ul>	Robins Basic Pathology 10th Edition Page # 557-8				
	Forensic Medicine					
• Analgesic	<ul> <li>Enlist the types of Analgesics used commonly as self harm</li> <li>Briefly describe the clinical presentation of analgesicintoxication</li> <li>State the Medicolegal importance of analgesic intoxication.</li> <li>Explain the management of acute analgesic intoxication ingeneral</li> </ul>	Parikh's text book of medical jurisprudence forensic medicine and toxicology,Edition 9 PAGE NO 689 TO 691 <b>Recommended:</b> Principles of Forensic Medicine & Toxicology byGautamBiswas				

	Week-4	
	Pharmacology	
To picLearning ObjectivesPROBIOTICS AND PREBIOTICSHELPFUL IN GUT HEALTH• Classify opioids receptors • Enumerate opioidsreceptor functions • Discuss the role of opioids in git pyssiology and pathology • Enumerate drugs acting through opioid receptors		Reference         s         https://www.frontiersin.org/articles/10.3389/fimmu.2013.00445/fullT         he role of probiotics and prebiotics in gut immunity         https://www.jmb.or.kr/journal/view.html?uid=5262&vmd=Full Role         of         Probiotics in Human Gut Microbiome-Associated Diseases
	Patholog y	
Esophagitis	<ul> <li>Revision of pathology of Mallory-Weiss tears Chemical andInfectious Esophagitis, Reflux Esophagitis, Eosinophilic Esophagitis Barrett Esophagus</li> </ul>	Robins Basic Pathology 10th Edition Page # 559-562
	Forensic	
	Medicine	
• Alcohol	<ul> <li>Classify the types of Alcohol</li> <li>Describe the clinical presentation of alcohol intoxicationboth acute and chronic</li> <li>Briefly explain the clinical tests for examination and the collection of blood, urine and vomitus and their necessarysampling .</li> <li>State the Medicolegal importance of alcoholic intoxication.</li> </ul>	<b>Essential:</b> Parikhs"text book of forensic and toxicologyPAGE NO 629 TO 642 <b>Recommended:</b> Principles of Forensic Medicine & Toxicology byGautamBiswas

	Week-5					
	Pharmacology					
To pic	Learning Objectives	Referenc es				
Life style modification in ibs	<ul> <li>Define IBS</li> <li>Discuss pathophysiology of IBS</li> <li>Classify drugs useed in IBS</li> <li>Discuss the role of lifestyle modification in IBS</li> </ul>	https://www.mayoclinic.org/medical-professionals/digestive- diseases/news/the-role-of-lifestyle-related-treatments-for- ibs/mac- 20431272#:~:text=Calculators- ,The%20role%20of%20lifestyle%2Drelated%20treatments%20for%20IBS,- March%2028%2C%202017				
Pathology						
Diarrheal disease Jaundice and Cholestasis	<ul> <li>Definie Jaundice and revise LFTs</li> <li>Revise physiology/Production of bilirubin and bile acids</li> <li>Explain Pathogenesis of Gilbert syndrome &amp; Dubin-Johnsonsyndrome</li> </ul>	<ul> <li>Robbins &amp; COTRAN Pathologic Basis OF Disease, 10<sup>th</sup>Edition, Chapter 1, Pg 605/606</li> </ul>				
	Forensic Medicine					
Medicolegal Autopsy-I	<ul> <li>Define medicolegal autopsy</li> <li>Classify autopsy and narrate the objectives of medicolegalautopsy.</li> <li>Briefly state the autopsy protocol and its requirements.</li> <li>Describe the contents of a medicolegal autopsy report.</li> <li>Describe autopsy procedure.</li> </ul>	<b>Essential:</b> Parikhs" text book of forensic and toxicologyPAGE NO 94 TO 112 <b>Recommended:</b> Principles of Forensic Medicine & Toxicology byGautamBiswas				

Time Table 2023

Integrated Modular Curriculum GIT, Hepatobiliary & Parasitology Module - III

3<sup>rd</sup> Year MBBS

Duration Of Module: 05 WEEKS

Coordinator: Dr Aasiya Niazi Co coordinator: Dr Nida Fatima

Reviewed by: Module committee

### Members Of Module Committee

PROF. Muhammad Umar	Chairman	Vice Chanellor RMU
Prof. Dr. Ayesha	Dean Of Basic Sciences \ Convener	Anatomy Department
Prof. Dr. Idrees Anwar	Dean & Member Curriculum Committee	Surgery Department
Dre. Asma Khan	Associate Dean and Implementation In charge 3 <sup>rd</sup> Year Modular Curriculums	Pharmacology Department
Dr. Omaima Asif	Overall Modular Coordinator	Pharmacology Department
Dr. Zunera Hakim	Focal Person	Pharmacology Department
Dr. Fariha Sardar	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. Afifa Kulsoom	Focal Person	Community Medicine
Dr. Asad Shabbir	Focal Person	Pediatrics
Dr. Sadia Khan	Focal Person	Family Medicine

**Prepared By** Curriculum Committee, RMU Documented by: Dr Omaima Asif

**Prepared By Dr. Aasiya Niazi** AP Pathology Department Rawalpindi Medical University, Rawalpindi

#### TIME TABLE 3<sup>rd</sup> YEAR MBBS, GIT, LIVER AND PARASITOLOGY MODULE, 20203 1<sup>st</sup> Week (7&8\April \ 2023)

DATE / DAY							
Monday							
Tuesday	_						
Wednesday			Found	ation modu	le block Exam		
Thursday			I Ound			-	
	08:00-08:45 am	08:45-09:30am	09:30-10:15am	10:15-11:00am	11:00am-12:00pm		
Fridav	Anatomy L1*	Pathology L2*	Pathology C1***	Pharmacology L3*	Gynee \ Obs L4*		
07\04\2023	Revision of Anatomy of GIT Teacher Name: Dr sajjad HussainVenue:Lecture hall 1	Oral cavity x Salivary Oland Pathology Teacher Name: Dr. Mudassira, Dr. Aasiya Venue: Lecture Hall 1& 2	Salivary gland tumor Teacher Name: Dr. Fariha, Dr. Iqbal,Dr. Aisha, Dr. Unaiza Venue: See annexure 1	Anti-emetic Drugs Teacher Name: Dr.Asma,Dr.Attiya Venue: Lecture Hall 1& 2	Hyperemesis Grevedarum Teacher Name: Dr. Ismat BBH,Dr. Nighat BBH Venue: Lecture Hall 1& 2		
	08:00 to 08:50am	08:50-09:40am	09:40-10:30am		10:30am-11:20am	11:20am-12:10pm	12:10pm-01:00pm
Saturday 08\04\2023	Quran class L5*	Surgery L6*	Medicine L7*	No	Pharmacology C2***	Pathology S1**	Pathology L8*
0010712025	Tilawat Quran Teacher Name: Qari Abdul WahidVenue:lecture hall 1	Approach to a patient with dysphagia Teacher Name: Dr Gohar (HFH), Dr Muhammad Iqbal (BBH)	Introduction, symptoms and analysisof GI investigations Teacher Name: Dr. Sadia, Dr. Aqsa	break	Antiemetic drugs Teacher Name: Dr.Rubina, Dr.Haseeba,, Dr.Uzma	Introduction to parasitologyTeachers name: Dr. Musassira, Dr. Tayyaba,	Neoplastic lesions o esophagus
							34   Page

			Venue: Lecture Hall 1& 2	Venue:	Lecture Hall 1&2	Dr.Omaima Venue: See annexure 1	Dr. Aasiya,, Dr. Fatima Zohra Venue: See annexure 1	Teacher Name: : Dr Mudassira, Dr Aasi Venue: Lecture Hal 1& 2
			TIME TABLE 3 <sup>rd</sup> YEAR MBBS, GIT,	, LIVER A	ND PARASITOLOGY MC	DULE, 20203 2 <sup>nd</sup> WEEk 10 to 13 April 2023		
DATE / DAY	08:00 to 10:45am	Clinical Clerkship	10:45am to 11:30am			11:30am to 01:00pm		
			Medicine L9*	Batch	Practical/SGD	Topic of Practical /SGD		
				А	Pharmacology	Introduction to P drugs and prescription writing in hyperemesis gra Name: Dr uzma Venue: Practical lab	vidarum (practical) – P1Teach	er
Monday10-04-23			Approach to a patient with dyspepsia Teacher Name: Dr. Tayyab, Dr. Anum Venue: Lecture hall 1&2	В	Forensic Medicine	Organophosphorus compound-P2Teacher Name: dr shahrukh Venue: Practical lab		
				С	Pathology	Salivary tumor, CA esophagus, peptic ulcer, CA stomach – P3Teac Name: Dr Saeed Venue: Practical lab	her	
			Pathology L10*	Batch	Practical	Topic of Practical/SGD		
				В	Pharmacology	Introduction to P drugs and prescription writing in hyperemesis gra- uzma Venue: Practical lab	vidarum – P1Teacher Name: D	r
Tuesday11-04-23			Types of gastritis & gastropathy Teacher Name: Dr. Aasiya, Dr. MudassiraVenue: Lecture Hall 1& 2	С	Forensic Medicine	Organophosphorus compound- P2 Teacher Name: : dr shahrukhVenue: Practical lab		
				А	Pathology	Salivary tumor, CA esophagus, peptic ulcer, CA stomach – P3Teacher Name: Dr Saeed Venue: Practical lab		
			Pathology L11*	Batch	Practical	Topic of Practical/SGD		
				С	Pharmacology	Introduction to P drugs and prescription writing (practical) in hyper Name: Dr uzma Venue: Practical lab	emesis gravidarum – P1 Teach	er
Wednesday12-04-23			H.pylori gastiritis and peptic ulcer Teacher Name: Prof. Naeem, Dr. Huma, Venue: Lecture Hall 1& 2	А	Forensic Medicine	Organophosphorus compound-P2Teacher Name: : dr shahrukh Venue: Practical lab		
				в	Pathology	Salivary tumor, CA esophagus, peptic ulcer, CA stomach – P3Teac Name: Dr Saeed Venue: Practical lab	her	
			10:45am to 11:30am	11:30ai	m to 12:15pm	12:15pm to 01:00pm		
			Pharmacology L12*	Pathol	ogy L13*	Forensic Madicine L14*		
Thursday13-04-23			Drugs used in peptic ulcer (H2 receptor antagonists) Teacher Name: Dr. Asma khan, Dr. Attiya Munir Venue: Lecture Hall 1 & 2	Intestin Teache Venue:	al cestodes r Name: Dr. Huma , Dr Rabbiya Venue: Lecture Hall 1& 2	Analgesic Teacher Name: Dr. Shahida Dr. Filza Venue: Lecture Hall 1& 2		

#### TIME TABLE 3rd YEAR MBBS, GIT, LIVER AND PARASITOLOGY MODULE, 2022-20203 3<sup>rd</sup> WEEk (25.04.23-29.04.23)

DATE / DAY	8:00 AM -	9:30 AM - 11:00 AM	11:10am – 12:00pm			12:00 PM	- 02:00 PM				
			<u> </u>	Batch	Practical/SGD	Topic of Practical /CBL					
Monday						Holiday					
	1		Pharmacology L15*	Batch	Practical	Topic of Practical					
			Drugs used in pepticulcer	В	Pharmacology	Rabbit ileum– P4 Teacher Name: dr Arsheen Venue: Practical lab					
Tuesday 25-04-23			Teachers: Dr. Asma khan,Dr. Attiya Munir	Dr. C Forensic Medicine Vegetable poisons -C3***Teacher Name: Dr Naila Venue: Practical lab							
			Venue Lecture Hall 1 & 2	А	Pathology	Acute appendicitis, Intestinal TB, Crohn's diseas Abdid Venue: Practical lab	Acute appendicitis, Intestinal TB, Crohn's disease, UC, CA colon – P5Teacher Name: Dr Abdid Venue: Practical lab				
	1		Pharmacology S2**	Batch	Practical	Topic of Practical					
			Drugs used in acid peptic disorders	С	Pharmacology	Rabbit ileum – P4 Teacher Name: dr Arsheen Venue: Practical lab					
Wednesday 26-04-23			Teachers Dr. Rubina, Dr. Haseeba, Dr. Uzma, Dr. Omaima	А	Forensic Medicine	Vegetable poisons –C3***Teacher Name: Dr Naila Venue: Practical lab					
			Venue: See annexure 1	В	Pathology	Acute appendicitis, Intestinal TB, Crohn's diseas Abid Venue: Practical lab	se, UC, CA colon – P5Teacher Name:	Dr			
	1	I	11:10am – 12:00pm	12:00pm - 0	1:00pm	01:00pm – 02:00pm					
		I	Pathology L16*	Community	Medicine L17*	Forensic medicine L18*					
Thursday 27-04-23			Neoplastic lesions of stomach Teachers: Prof. Mobina,Prof. Wafa Venue: Lecture Hall 1 &2	Classification Teacher Nan Gul MeherV Lecture hall	n of food ne: dr Afifa dr enue: Venue: 1&2	Pesticides Teacher Name: Dr. Filza Dr. Shahida Venue: Venue: Lecture hall 1&2					
	08:00am - 08:45a	am	08:45am - 09:30am	09:30an	a – 10:15am	10:15am - 11:00am	<u>11:00am – 12:00pm</u>				
	Quran class L19 <sup>*</sup>	*	Pathology L20*	Patholo	gy C4***	Pharmacology C5***	Pharmacology L21*				
Friday 28-04-23	Taqwa Teacher Name: Q; WahidVenue: Lec	ari Abdul cture hall 1	Small intestinal diseases Teacher: Dr. Tayyaba, Dr. FatimaVenue: Lecture Hall 1& 2	Diarrhea Protozoa Giardia Teacher Dr. Aish Venue:	. Causing I:Entamoeba histiolytica, lamblia Name: Dr. Fariha, Dr. Iqbal, a, Dr. Unaiza See annexure 1	Antiamoebic drugs Teachers: Dr. Rubina, Dr.Haseeba, Dr. Uzma, Dr. Omaima Venue: See annexure 1	Antiamebic drugs Teacher Name: Dr.Zunera HakimDr.Sobia Javaid Venue: Lecture hall 1& 2	32			
	08:00am - 08:45:		08·45am - 09·30am		n 10·30am	10.30 AM - 11.00 am	11.00am - 12.00nm	12.00.nm - 01.00nm	01:00pm - 02:pm		
	Medicine L22*		Surgery L23*	Pharma	icology L24*	10.30 AVI - 11.00 am	Pathology L25*	Pharmacology L26*	Pathology L27*		
Saturday 29-04-23	Approach to a pati Teacher Name: D Venue: Lecture ha	ient with upper GI bleed rr. Javeria, Dr. Misbah. all 1&2	Approach to a patient with acute abdomen Teacher Name: Dr Zafar(DHQ), Dr Ammara (HFH) Venue: Lecture hall 1&2	Prokinet Teachers Venue: I	ics s: Dr. Zunera, Dr. Sobia Lecture Hall 1 & 2	BREAK	Types of colitis and IBD Teacher Name: Prof. Mobina, Prof. Wafa Venue: Lecture hall 1&2	Drugs used in IBD Teacher Name: Dr. Asma khan, Dr. Attiya Munir Venue: Lecture hall 1&2	Tissue cestodes Teacher Name: Dr. Rabbiya, Dr. Huma Venue: Lecture Hal 1& 2		
	<u> </u>							37	/ Page		

### (sports week 2.5.23 to 7.2.23)

Time Table 3<sup>rd</sup> Year MBBS, GIT, Hepatobiliary And Parasitology Module, 20203

(8.5.2023 to 13.5.2023) 4<sup>th</sup> Week

DATE / DAY	8:00 AM – 11:00 AM	9:30 AM – 11:00 AM	11:10am – 12:00pm				12:00 P	M - 02:00 PM	
			Community Medicine L28*	Batch	Practic	cal/SGD	Topic of Practical		
			Major food group	А	Pharma	acology	Rabbit ileum – P6 Teacher Name: Dr Rubina Venue: Practical lab		
Monday 08-05-23			Teachers: dr Afifa dr Gul MeherVenue: Lecture Hall 1 & 2	В	Forensi	ic Medicine	Autopsy Postmortem and medicolegal wo Name: dr gulzaib Venue: Practical lab	rk- P7Teacher	
	_			C Patholog		ogy	Stool examination/ Parasitology (practical Teacher Name: Dr Sara Venue:	l) – P8	
			Pathology L29*	Batch	Practic	cal/SGD	Topic of Practical		
	esday -05-23		Naonlastia lasions of	В	Pharma	acology	Rabbit ileum – P6 Teacher Name: Dr Rubina Venue:		
Tuesday 09-05-23			intestine Teachers: Dr. Tayyaba, Dr Fatima Zohra	С	Forensi	ic Medicine	Autopsy Postmortem and medicolegal wo Name: dr gulzaib Venue: Practical lab	rk- P7Teacher	
			venue: Lecture Hair 1& 2	A Pathology		ogy	Stool examination/ Parasitology (practical) – P8Teacher Name: Dr sara Venue: Practical lab		
			Patholog y C6***	Batch Practical/SGD		cal/SGD	Topic of Practical		
Wednesday10.			Colorectal cancer	C Pharmacology		acology	Rabbit ileum – P6 Teacher Name: Dr Rubina Venue: Practical lab		
05-23			Teacher Name: Dr. Abid Dr. Saeed, Dr. Fatima, Dr. NidaVenue:	А	A Forensic Medicine		Autopsy Postmortem and medicolegal wo Teacher Name: dr gulzaib Venue: Practical lab	rk- P7	
			See annexure 1	В	Patholo	ogy	Stool examination/ Parasitology (practical Name: Dr Sara Venue: Practical lab	l) – P8Teacher	
			11:10am – 12:00pm	12:00pm	<u>1 – 01:00p</u>	om	01:00pm – 02:00pm		
Thursday11-			Forensic medicine L30*	Anali	Patho	blogy L31*	Community.Medicine L32*		
05-23			Teacher Name: Dr. GulzaibDr. Filza Venue: Lecture Hall 1&2	Anal can Teacher I Zohra Venue: L	ai Appenc Name: Dr. .ecture Ha	11x and peritoneum . Tayaba Dr. Fatima all 1& 2	Feco-oral infections polio Teacher Name: Dr Imran, dr Maimona Venue: Lecture Hall 1&2		
	08:00am - 08:45am	1	08:45am – 09:30am			09:30am - 10:15am	10:15am - 11:00am	11:00am – 12:00pm	
Friday 12-	Medicine L33*		Surgery L34*			Pathology S3**	Pharmacology L35*	Pharmacology L36*	
05-23	Approach to a patien abdominal distension NameDr.	nt with ascites and n Teacher	Approach to a patient with intest obstruction, Teacher Name: Dr Huma Sabir,	inal Dr Rahat		Trematodes liver and lung flukes	Antihelminthes drugs Teacher Name: Dr. Asma, Dr.Attiya	Antihelminthic drugs Teacher: Dr. Asma, Dr. Attiya Venue: Lecture hall 1&2	

	MIsbah. N. Dr. Sadia Venue: Lecture Hall1&2	Venue: Lecture Hall 1&2	Teachers: : Dr. Musassira, Dr.	Venue:			
			Tayyaba, Dr. Aasiya,, Dr.	Venue: Lecture Hall 1&2			
			Fatima Zohra				
			Venue See annexure 1				
	08:00am - 08:45am	08:45am – 09:30am	09:30am – 10:30am	10:30 AM – 11:00 am	11:00am – 12:00pm	12:00:pm - 01:00pm	01:00pm – 02:pm
	Pathology L37*	Community medicine L38*	Pharmacology L39*	BREAK	Pathology L40**	Pharmacology S4**	Pathology C7***
Saturday13- 05-23	Microbes causing GI infection TeacherName: Dr. Huma and Dr Rabbiya Venue: Lecture hall 1&2	Feco oral infection :Typhoid and food poisoning Teacher Name: Dr Imran dr Maimona Venue: Lecture hall 1 &2	Antidiarrheal drugs Teacher Name: Dr. Zunera, Dr. Sobia Venue:Lecture hall 1 & 2		Nematodes with disease causing larvae Teacher Name: Dr. Mudassira, , Dr. Aasiya, Venue: Lecture hall 1&2	Antidiarrheal drugs Teacher Name: Dr. Rubina, Dr. Haseeba, Dr. Uzma, Dr. Omaima	Hydatid disease Teacher Name:Dr. Abid Dr. Saeed, Dr. Fatima, Nida Venue: See annexure 1 See
	ODD EVEN				venue. Lecture hair 162	venue.see annexure 1	annexure 1

#### TIME TABLE 3<sup>rd</sup> YEAR MBBS, GIT, LIVER AND PARASITOLOGY MODULE, 2022-20203 (15.5.2023 to 20.5.20323) 5<sup>th</sup> WEEk

DATE / DAY	8:00 AM-11:00 AM	9:30 AM-11:00 AM	11:10am – 12:00pm			12:00 PM - 02:00 PM
			Pharmacology C8***	Batch	Practical	Topic of Practical
			Anthelminthic Drugs Teacher:	А	Pharmacology	Prescription and P writing on peptic ulcer– P9 Teacher Name: Dr zoofishan Venue: Practical lab
Monday15- 05-23			Dr.Arsheen Venue: See annexure 1	В	Forensic Medicine	Autopsy visit /Postmortem/ Medicolegal work – P10 Teacher Name: Dr Raheel Venue: Practical lab
				С	Pathology	Fatty change, Cirrhosis, CA liver – P11 Teacher Name: Dr Amna Venue: Practical lab
			Pathology L41*	Batch	Practical	Topic of Practical
			Types of hepatitis and metabolic liver diseases Teachers:Dr. Mudassira,Dr. Aasiya Lecture Hall 1 & 2	В	Pharmacology	Prescription and P writing on peptic ulcer– – P9 Teacher Name: dr zoofishan Venue: Practical lab
Tuesday16- 05-23				С	Forensic Medicine	Autopsy visit /Postmortem/ Medicolegal work – P10 Teacher Name: Dr Raheel Venue: Practical lab
				А	Pathology	Fatty change, Cirrhosis, CA liver – P11 Teacher Name: Dr Amna Venue: Practical lab
			Pharmacology L42*	Batch	Practical	Topic of Practical
		Drugs used in hepatitis B Teachers: Dr. Zunera, Dr.Sobia Lecture Hall 1 & 2		С	Pharmacology	Prescription and P writing on peptic ulcer- – P9 Teacher Name: Dr zoofishan Venue: Practical lab
Wednesday17- 05-23			Teachers: Dr. Zunera, Dr.Sobia Lecture Hall 1 & 2	А	Forensic Medicine	Autopsy visit /Postmortem/ Medicolegal work – P10 Teacher Name: Dr Raheel Venue: Practical lab
				В	Pathology	Fatty change, Cirrhosis, CA liver – P11 Teacher Name: Dr Amna Venue: Practical lab
Thursday18.			11:10am - 12:00pm	12:00pm –	01:00pm	01:00pm – 02:00pm
05-23			Pathology L43*	Pathology 1	L44*	Pathology L45*
			Hepatitis A &E	Nematodes: Intestinal Nematodes Teachers: Dr.Tayyaba, Dr. Fatima Zohra		Jaundice and biliary diseases Teacher Name: Prof. Mobina, Prof. Wafa

		Teacher Name: Prof. Venue: Le	cture Hall 1& 2	Venue: Lecture Hall 1 & 2			
		Lecture Hall 1&2					
	08:00am - 08:45am	08:45am – 09:30am	09:30am – 10:15am	10:15am - 11:00am	11:00am – 12:00pm		
	Quran L46*	Surgery L47*	Pathology L48*	Pathology S5**	Family Medicine L49*		
Friday 19-05-23	Allah aur rasool ki Muhabbat Teacher Name: Qari Abdul Wahid Venue: Lecture hall 1	Approach to a patient with gastrointestinal carcinoma Teacher Name: Dr Aurangzeb (BBH), Dr Atif (HFH) Venue: Lecture Hall 1& 2	Minor protozoa, toxoplasma & trichomonas Teacher name: , Dr. Tayyaba, , Dr. Fatima Lecture Hall 1 & 2	Gall bladder diseases Teacher: Dr. Mudassira, Dr. Tayyaba, Dr. Aasiya, Dr. Rabbiya Venue: see annexure 1	Acute and chronic Hepatitis Teacher: Dr. Sadia Khan Venue: Lecture Hall 1		
			SEN I	/INAR DAY	-	-	
Satan Jan	08:00am - 08:45am	08:45am – 09:30am	09:30am – 10:30am	10:30 AM – 11:00 am	11:00am – 12:00pm	12:00:pm – 01:00pm	01:00pm – 02:pm
20-05-23	Pathology L50*	Pathology L51*	Medicine L52*	BREAK	Surgery L53*	Community Medicine L54*	Pharmacolog y L5
	<b>Liver cirrhosis</b> Teacher Name: Dr. Mudassira Venue: Auditorium	Hepatitis B and C Teacher Name: Prof. naeem, Dr. Huma Venue: Auditorium	Approach to a patient with viral hepatitis and liver cirrhosis Teacher Name: Dr. Tanveer , dr AqsaVenue: Auditorium		Approach to a patient with obstructive jaundice Teacher Name: Dr Rubina (HFH) &dr Ruqqaiya (BBH) Venue: Auditorium	Preventive measures of viral hepatitis Teacher Name: dr Imran dr Abdul Qadoos Venue: Auditorium	Antiviral drugs focusing hepatitis Teacher Name: Dr. Zunera, Dr. Sobia Venue: Auditorium

TIME TABLE 3<sup>rd</sup> YEAR MBBS, GIT, LIVER AND PARASITOLOGY MODULE,20203 (22.5.2023 to 27.5.20323)

6 <sup>th</sup>	WEEk
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DATE / DAY	8:00 AM – 11:00 AM	9:30 AM - 11:00 AM	11:10am – 12:00pm	n 12:00 PM - 02:00 PM						
			Pathology L56*	Batch	Practical/SGD	Topic of Practical /SGD				
			Neoplastic liver disease Teacher: Dr. Tayyaba, Dr. Fatima Zohra Venue:Lecture Hall 1& 2	А	Pharmacology	P drugs and prescription writing amoebic dysentry and worm infestation(practical) – P12Teacher Name: Dr Zaheer Venue: Practical lab				
Monday 22-05-23				В	Forensic medicine	Drug abuse and dangerous drug act – C9***Teacher Name: Dr shahida Venue: Practical lab				
				С	Pathology	Laboratory diagnosis of hepatobiliary diseases-P13Teacher Name: Dr Unaiza Venue: Practical lab				
			Community medicine L57*	Batch	Practical	Topic of Practical/SGD				
Tuesday			Amaoebiasis Ascaris Hookworm infestation. Teacher Name: r Imran dr Abdul Qadoos Vanuei, acture ball	В	Pharmacology	P drugs and prescription writing amoebic dysentry and worm infestation(practical) – P12Teacher Name: Dr Zaheer Venue: Practical lab				
23-05-23		С		Forensic medicine	Drug abuse and dangerous drug act – – C9***Teacher Name: Dr shahida Venue: Practical lab					
			1&2	А	Pathology	Laboratory diagnosis of hepatobiliary diseases-P13Teacher Name: Dr unaiza Venue: Practical lab				

Wednesday	Community Medicine L58*	Batch	Practical	Topic of Practical/SGD	
Wednesday 24-05-23	Vitamins and Minerals Teacher Name: Dr Gul/meher dr Narjis	С	Pharmacology	P drugs and prescription writing amoebic dysentry and worm infestation(practical) – P12Teacher Name: dr zaheer Venue: Practical lab	
					40   Page

		Venue: Lecture hall 1&2	А	Forensic medicine	Drug abuse and dangerous drug act – - Teacher Name: Dr shahida Venue: Practical lab	- C9***	
			В	Pathology	Laboratory diagnosis of hepatobiliary Teacher Name: Dr Unaiza Venue: Practical lab	diseases-P13	
		11:10am – 12:00pm	12:00pm	– 01:00pm	01:00pm – 02:00pm		
		Pathology C10***		Forensic medicine L59*	Community medicine L60*		
Thursday		Acute pancreatitis			Malnutrition and balanced diet		
25-05-23		Teacher Dr. Fariha, Dr.	Alcohol		Teachers: Dr Gul/meher dr Narjis		
		Iqbal, Dr. Aisha, Dr.	Teacher N	Jame: Dr. Filza Dr. Gulzaib	Venue:		
		Unaiza NameVenue:	Venue: L	ecture hall 1&2	Lecture Hall 1 & 2		
		See Annexure 1				<u> </u>	
	08:00am - 08:45am	08:45am – 09:30am		09:30am – 10:15am	10:15am - 11:00am	11:00am – 12:00pm	
	Quran L61*	Pharmacology L62*		Pathology L63*	Pathology S6**	Community medicine L64*	
Friday 26-05-23	Quran class Teacher Name: Qari Abdul Wahid Venue: Lecture hall 1	Laxatives Teacher Name: Dr. Zune Sobia Venue: Lecture hall 1&2	era, Dr. 2	Tissue Nematodes Teacher Name: Dr. Mudassira, Dr. Aasiya Venue: Lecture hall 1&2	Teramtodes Schistosoma Teachers: : Dr. Musassira, Dr. Tayyaba, Dr. Aasiya,, Dr. Fatima Zohra Venue Venue: See annexure	Fecooral infection diarrheal diseases Teacher Name: Dr Imran dr Abdul Qadoos Venue: Lecture hall 1&2	
Saturday		08:00am - 10:00 am			10:00am - 12:00 pm	12:00am – 02:00pm	
27-05-23		SDL Pathology			SDL pharmacology	SDL forensic medicine	

41 | P a g e

SR No.	Disciplines	LGIS	SGD	CBL	SDL	Hours
		64	6	10		
1.	Pathology	22	4	5	4	35
2.	Pharmacology	12	02	03	4	21
3.	Forensic Medicine	4	0	2( 4hour)	4	12
4.	Community Medicine	09	0	0	0	9
5.	Surgery	05	0	0		5
6.	Medicine	05	0	0		5
7.	Gynaeology	01				1
8.	Family medicine	01				1
9.	Quran	04				4
10.	Anatomy	01				1
	Total Hours = 94					

#### Practical and Clinical Clerkship Hours

Disciplines	Practical Hours	Disciplines	Clerkship Hours
Pathology	10 (3x2x5=30hrs)	Surgery	2.5x4x5=50 hours
Pharmacology	10 (3x2x5=30hrs)	Medicine	2.5x4x5=50 hours
Forensic Medicine	6 (3x2x3=18hrs)	Sub-specialty	2.5x4x5=50 hours

\* Forensic medicine CBL are of 2 hour.

≻ LGIS \*

➤ SGD \*\*

➢ CBL \*\*\*

➢ SDL \*\*\*\*

✤ For CBL/SGDs whole class will be divided into 04 batches

Batch: A = Lecture Hall 01

Batch: C = Lecture Hall 06

Batch: B = Lecture Hall 02 Batch: D = Pharmacy Lab

The batch distribution and venues for whole year are fixed with no change except for extraordinary situations.

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.

Rawalpindi Medical University Rawalpindi

## Section IV-

## **Assessment Policies**

#### Contents

- Assessment plan
- Types of Assessment:
- Modular Examinations
- Block Examination
- Table 4: Assessment Frequency & Time in GI Module

### Section IV: 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  $(2/3^{rd})$  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 Examinations

Theory Paper

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

On completion of a block which consists of two modules, there is a block examination 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 GI and parasitology Module

Block		Module – 1	Type of Assessments	Total Assessmen	ts Time		No. of Asses	sments
	Sr #	GI and parasitology Module Components		Assessment Time	Summative Assessment Time	Formative Assessment Time		
	1	Mid Module Examinations LMS based (Pharmacology, Pathology, Forensic Medicine, Medicine, Surgery, community medicine gynaecology, Family Medicine, )	Summative	30 Minutes		30 Minutes	1 Formative	5 Summative
ock-II	2	Topics of SDL Examination on MS Team	Formative	10 Minutes (Every Friday)				
Blc	3	End Module Examinations (SEQ & MCQs Based)	Summative	6 Hours	7 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
	1.
Pathology/Microbiology	<ol> <li>TEXT BOOKS         <ol> <li>Robbins &amp; Cotran, Pathologic Basis of Disease, 10<sup>th</sup> edition.</li> <li>Rapid Review Pathology, 5<sup>th</sup> edition by Edward F. Goljan MD.</li> <li>http://library.med.utah.edu/WebPath/webpath.html</li> </ol> </li> </ol>
Pharmacology	<ul> <li>TEXT BOOKS</li> <li>1. Basic and Clinical Pharmacology by Bertram Z. Katzung 15th Edition, Chapter 6, Page 2-6, 15-24</li> <li>2. Goodman and Gillmans The Pharmacological basics of Therapeutics, 13th Edition, Chapter , Pg</li> </ul>
Forensic Medicine	TEXT BOOKS 1. Parikh Text Book of Medical Jurisprudence Forensic Medicine & Toxicology Edition 9
Medicine	TEXT BOOKS Davidsons Textbook of Medicine
Surgery	TEXT BOOKS Balley & Love textbook of surgery
Research	Digital library

## SECTION VI GI MODULE ASSESMENT PLAN

DATE / DAY	ASSESMENT PLAN	TOTAL MARKS	ASSESMENT MODE	CONTENT
Thursday 11 05-2023	Mid module assesment	20	LMS- 20 mcq	<ul> <li>15mcq-(pathology, pharmacology and forensic 5xeach)</li> <li>3 mcq - community medicine</li> <li>2 mcq- surgery and medicine 1xeach</li> </ul>
27.4.23 11.5.23 18.5.23 25.5.23	Weekly assesementson SDL topics	15 15 15 15	15 mcq 15 mcq 15 mcq 15 mcq	<ul> <li>-(pathology, pharmacology and forensic 5xeach)</li> <li>-(pathology, pharmacology and forensic 5xeach)</li> </ul>
Monday 29-05-2023	End module theoryexam (9 am to 2pm)	160	Pharmacology (9 to 10:30 am) Forensic medicine,( 10: 45 am to 12 :15pm) Pathology (12:15 pm to 2pm)	Pathology- 60 marks Pharmacology-50 Forensic medicine-50 (for mcq/seq distribution see table)
30.05.23 31.05.23 1.06.2023	Viva (12pm-2pm)	90	viva of batches in respective department	Pathology- 40 marks Pharmacology-30 marks Forensic medicine -10 marks

50 | P a g e

## Table of Specification (TOS) For GI End Module Examination for 3rd Year MBBS

Sr. #	DisciplineNo. of MCQsNo. of MCQs according to cognitive domainNo. of (%)		No. of MCQs according to cognitive domain		No. of MCQsNo. of MCQs according to cognitive domain(%)			No. of S (%)	SEQs ) Marks		No. of SEC according	Qs to nain	Viva voce	OSPE Marks	Total Marks
		(/0)				items	1.1.1.1.5	002	,						
			C1	C2	C3			C1	C2	C3					
1.	Pharmacology	15	2	9	4	7	35	2	4	1	30	0	80		
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	0	100		

## Annexure I

(Sample MCQ & SEQ papers with analysis)

Sample Of MCQs Paper

TRUTA	RAWALPINDI MEDICAL UNIVERSITY	
RULE	DEPARTMENT OF PATHOLOGY	ROLL NO.
M	RMU & Allied Hospitals	and the sea of the sea
	SEND-UP EXAMINATION 2022	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	3 <sup>rd</sup> Year MBBS	
Date:	MCOS PAPER	Total Marks: 55
nime:;	BLOCK-I	Time Allowed: 60min
<ol> <li>A 29-year man comes applied due to fracture the diameter of the lef observation?</li> <li>A plasia</li> <li>Atrophy</li> </ol>	to a resident surgeon for removal of plaster cast. The patient e of his left femoral bone 8 weeks ago. After removal of the ca t calf has decreased in size as compared to the right one. Wh	states that the plaster was ast the resident notices that nat is the cause of this
C. Dystrophy		
D. Dysplasia		
E. Hypoplasia		
CONE OZ CELEDEAN ADAPT	ATIONS	
exudate. Which one of A. Acute inflamm B. Granuloma fou C. Chronic inflam D. Tissue necrosi E. Fibrosis and re VERTICAL INTEGRATION SU	f the following best describes the process? tation imation s spair JRGERY C2 INFLAMMATION	
<ol> <li>A 34 years man presmonths. After investig cell types involved in t         <ul> <li>Asophils and</li> <li>Macrophages.</li> <li>Eosinophils an</li> <li>Neutrophils an</li> <li>Basophils and</li> </ul> </li> <li>CORE INFLAMMATION C2</li> </ol>	ented with complains of productive cough, low grade fe tation he has been diagnosed as having pulmonary tuber his inflammatory disease? Macrophages and Lymphocytes d neutrophils id lymphocytes neutrophils	ever and weight loss for last culosis. What are the two ma becapy alleviates her pain m
<ol> <li>A 35-year woman take through reduction in th A. Complement C B. Histamine C. Leukotriene E4 D. Nitric oxide</li> </ol>	es acetylsalicylic acid (aspirin) for arthritis. The aspirin tr he synthesis of which of the following mediators? Iq	lerapy alleviates nel politi in
E. Prostaglandins	I PHARMACOLOGY C1 INFLAMMATION	
HORIZONTAL INTEGRATION	PHARWACOLOGI CI III S AMA	<b>C</b> 1
low in 124	2	Questil

52 | P a g e

**Detailed Analysis Of Sample Of MCQs Pape** 

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	Percentag
I, 3, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 19, 26, 27,           Core         28, 29, 30, 32, 33, 34, 36, 37, 39, 40, 41, 42, 43,           46, 47, 48, 49, 51, 53			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%
rof. Mobina Ahsan D	TSTUID22 odhy Assistant	t Director	Halvel Igler

Tair Vice Chancellon 9 Rawalpindi Medical University Rawalpindi

**OPPO A54** · Olove ya 2023/02/18 10:44

## Sample Paper of SEQ

· (RYU)	RAWALPINDI MEDICAL UNIVERSITY DEPARTMENT OF PATHOLOGY	ROLL NO.
Haema	tology Immunology & Research Module Asses	sment
a su arth Navambar 2022	3 <sup>rd</sup> Year MBBS	Total Marks: 35
Time Allowed: 45min	SEQS PAPER	Time: 12:00noon
Q1. A 3 years boy presents consanguineous marriage. frontal bossing and hepato	s with failure to thrive, repeated infections, lethargy and pall His elder sister is on regular transfusion. Physical examinati splenomegaly. His CBC reveals Hb3.4 g/dL, MCV 52 fL, MCH 1	or. Mother gives history of on of the boy shows Pallor, L8 pg with normal WBC and
a) What is the most like	kely diagnosis?	01
b) What further tests	you would like to perform to confirm diagnosis?	02
c) What advice you we	ould give to the parents of this child?	
he has experienced 10 lb w the costal margin, the rest 10 <sup>9</sup> /L) and an elevated lact blood with biomodel peak o a) What is the most p b) Briefly discuss the u c) Enumerate the bha	veight loss over that period. On physical examination, the sp t of his examination is normal. Laboratory testing is remain the dehydrogenase level. A complete spectrum of myeloid of neutrophils and myelocytes. There is also increased numb robable diagnosis? underlying genetic mutation. ses of this disease.	rkable for leukocytosis (85 cells is seen in the peripher er of basophils. 2, 1
cy chanciate the pila	and the second flow	was evaluated for a bleed
Q3. A 30 years female wit	th history of easy bruising and increased menstrual flow	was evaluated for a biced
disorder. She was diagnose	d with immune thrombocytopenic purpura (TP).	2
a) Discuss Peripheral f	film and Bone marrow examination mongs.	
infections. Physical examina WBC 174 x 10 <sup>9</sup> /L and platele a) Briefly compare the	et count is 24 x 10 <sup>9</sup> /L. Pathologist reports 90% blast cells o e morphology of lymphoblast and myeloblast? I ctain pelps to differentiate between lymphoblast and my	n peripheral film. yeloblast?
c) Give any two cytoge	enetic abnormalities seen in Acute myeloid leukemia.	
Q5. A renal transplant r	ecipient experiences gradual rise of creatinine in He states that he was alright and all his lab results were	10-month time period o normal for few months af
transplant but then his cond	lition deteriorated slowly.	
a) Which type of graft	rejection is this?	
b) Classify different typ	pes of grafts on the basis of type of donor.	
c) Differentiate betwee	en direct and indirect grant antigen recognition	
Q6. A physician is suspectin physician has asked them t	ng Hepatitis B in a patient in the ward. The laboratory to perform ELISA for confirmation as it is based on	/ performs a rapid kit test specific antigen antibody
technique.	the descentions	
a) Enlist 4 the different	t types of antigen antibody reactions	
b) Enumerate 3 types of	of ELISA with the underlying principle in each	
Q7. A 45 years female pre	sented with painless diffuse enlargement of thyroid	d gland. Her thyroid fund tibodies.
shows decreased T3 and T4	levels and she is positive for circulating and hyroidan	
a) What is your most li	kelydiagnosis?	
PPOb/A Endmerate Organ ka	ecific autoimmunediseases	
023/02/1/8nat 0:349nune tol	erance?	
## **Detailed Analysis Of SEQs Paper**

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

 5a and 7a
 5
 5
 C3 42% mohu ASSISTANT DIRECTOR PROF. MOBINA AHSAN DODHY Department of Medical Education, RMU Chairperson, Department of Pathology, RMU VICE CHARCELLOR RAWALPINDI MEDICAL UNIVERSITY

55 | P a g e

### **ANNEXURE II**

				-	MEDICIN	E					SURG	FRV + TR	ALINAA	11.5	
Dates HFH Unit-1 HFH Unit-11			BBH Unit-1 BBH Unit-11 DHQ		HFH Unit	t-1 HF	H Unit-11	BBH Ur	it-1 BRI	d Linit II	DUIG				
<u>S.P.W</u> <u>S.P.V</u>	08-02-2023 To 30-04-2023	Al		A2	A3		A4	A5	B5		B4	B3		B2	BI
<u>s.v</u>	01-05-2023 To 06-08-2022	CI		C2	С3		C4	C5	A5		A4	A3		A2	AI
07-0	8-2023 To 0-2023	B1		B2	B3		B4	B5	C5		C4	C3		C2	CI
	_					1	MISCELI	ANEOUS	1						
	8-2-23 To 19-2-23	20-2-23 To 5-3-23	6-3-23 To 19-3-23	<u>5.P.W</u> 20-3-23 To 9-4-23	<u>S.P.V</u> 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	5.V 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	2-10-2 To 15-10-2
Patholog	v Cl	C2	C3	C4	C5	B1	B2	B3	B4	B5	Al	A2	A3	A4	A5
Daughlate		Cl	C2	C3	C4	B5	B1	B2	B3	B4	A5	Al	A2	A3	A4
Padiolog	y C4	C5	Cl	C2	C3	B4	B5	B1	B2	B3	A4	A5	Al	A2	A3
Chill I al		C4	C5	CI	C2	В3	B4	B5	B1	B2	A3	A4	A5	Al	A2
F.R	C2	C3	C4	C5	C1	B2	B3	B4	B5	B1	A2	A3	A4	A5	Υ.ΑΙ
*	Tentative He	lidays		-		10 03 3033							C -	TG	0
	Sport Sprin Summ	week (S.P.W) Vocations (S.P. Vocations (S.P.	V) V)	12-03-2023 24-04-2023 03-07-2023	то то то	19-03-2023 30-04-2023 30-07-2023					A	Activat	Rawalpind	Achanoel i Medical U	for Iniversit

56 | P a g e



3<sup>rd</sup> Year MBBS

Study Guide

Integrated Modular Curriculum

Microbes and Anti-Microbials Module - IV 2023

## Table of Contents

Module Team	2
University Moto, Vision, Values & Goals	
Module – Microbes and Anti-Microbial Module	4
Section I –	5
Terms & Abbreviations	5
Table1	6
Domains of learning according to Blooms Taxonomy	б
Teaching and Learning Methodologies / Strategies	7
Large Group Interactive Session (LGIS)	7
Figure 1. Prof Umar's Model of Integrated Lecture	7
Small Group Discussion (SGD)	
Self-Directed Learning (SDL)	9
Case Based Learning (CBL)	9
Section II	
Learning Objectives, Teaching Strategies & Assessments	9
Learning Objectives	
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Reference Books	
Section III	56

## Microbes & Anti-Microbials Module Team

Module Name	:	Microbes and Antimicrobial Module
Duration of module	:	07 Weeks
Coordinator	:	Dr. Syeda Fatima Sughra Rizvi
Co-coordinator	:	Dr. Faiza Zafar
Review by	:	Module Committee

Module Committee					Module T	ask Force Team
1.	Vice Chancellor RMU	Prof. Dr. Muhammad Umar		1.	Coordinator	DrSyeda Fatima Sughra Rizvi
						(Senior Demonstrator of
						Pathology)
2.	Director DME	Prof. Dr. Rai Muhammad Asghar		2.	DME Focal Person	Dr. MaryumBatool
3.	Convener Curriculum	Prof. Dr. NaeemAkhter		3.	Co-coordinator	Dr. Faiza Zafar
						(Demonstrator of Pathology)
4.	Dean Basic Sciences	Prof. Dr. Ayesha Yousaf				
5.	Additional Director DME	Prof. Dr. Ifra Saeed				
6.	Chairperson Pharmacology &	Dr. Asma Khan				·
	Implementation Incharge 3 <sup>rd</sup> year MBBS					
7.	Chairperson Pathology	Prof. Dr. Mobina Dodhy				
				1.	Director DME	Prof. Dr. Rai Muhammad Asghar
8.	Chairperson Forensic Medicine	Dr Filza		2.	Add. Director DME	Prof. Dr. Ifra Saeed
9.	Focal Person Pharmacology	Dr Sobia		3.	Assistant Director DME	Dr Omaima Asif
10.	Focal Person Pathology	Dr Fareeha Afzal		4.	Module planner &	Dr. Omaima Asif
					Implementation coordinator	
11.	Focal Person Forensic Medicine	Dr. Gulzeb		5.	Editor	Ahmed Rafay
12.	Focal Person Medicine	Dr. Saima Ambreen				
13.	Focal Person of Gynaecology	Dr. Sobia Nawaz				
14.	Focal Person Community Medicine	Dr. Afifa Kulsoom				
15.	Focal Person Quran Translation	Mufti abdul Wahid				
	Lectures					
16.	Focal Person Family Medicine	DrSadia Khan	]			
17.	Focal Person Bioethics Department	Prof. Dr. Akram Randhawa	]			
18.	Focal Person Surgery	DrHuma Sabir	1			

### 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.

## Module – IV

## Microbes and Anti-Microbial Module

Introduction: This module provides integration of core concepts that underlie the basic science/pathology of Microbial diseases 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 Microbes and Anti-Microbial module is designed to impart basic knowledge about Pharmacology, Pathology, Forensic Medicine, Community Medicine, Pediatrics, family medicine, Gynecology, Psychiatry, Medicine& Surgery. This knowledge will serve as a 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 7 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)

### Tables & Figures

- Table1. Domains of learning according to Blooms Taxonomy
- Figure 1. Prof Umar's Model of Integrated Lecture
- Table2. Standardization of teaching content in Small Group Discussions
- Table 3. Steps of taking Small Group Discussions

## Table1.

## Domains of learning according to Blooms Taxonomy

Sr. #	Abbrevi ation	Domains of learning
	С	<b>Cognitive Domain:</b> knowledge and mental skills.
	C1	Remembering
	C2	Understanding
1.	C3	Applying
	C4	Analyzing
	C5	Evaluating
	C6	Creating
	Р	Psychomotor Domain: motor skills.
	P1	Imitation
2	P2	Manipulation
Ζ.	P3	Precision
	P4	Articulation
	P5	Naturalization
	А	Affective Domain: feelings, values, dispositions, attitudes, etc.
	A1	Receive
3.	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 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%

### Steps of taking Small Group Discussions

Table 3

Step 1	Sharing of Learning objectives by using	First 5
	students Study guides	minutes
Step 2	Asking students pre-planned questions from	5minutes
	previous teaching session to develop co-	
	relation (these questions will be standardized)	
Step 3	Students divided into groups of three and	5minute
	allocation of learning objectives	S
Step 4	ACTIVITY: Students will discuss the	15
	learning objectives among themselves	minutes
Step 5	Each group of students will present its	20 min
	learning objectives	
Step 6	Discussion of learning content in the main	30min
	group	
Step 7	Clarification of concept by the facilitator by	15 min
	asking structured questions from learning	
	content	
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	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 (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

- 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
  - Bioethics
  - Family Medicine

Learning Objectives										
Week 1										
Code	Topic	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching	Assessment tools				
No					strategy					
L1	Revisit Lecture,	Biochemistry	Krebs cycle, pyruvic acid cycle, bacterial metabolism	C2	LGIS	MCQs				
SDL	Introduction to Microbiology	Pathology	Classify he microorganisms i. e bacteria, viruses, parasites & fungi with various examples Explain clinical significance of microorganisms, Differentiate between virus and bacteria Enumerate the differences between eukaryotic and prokaryotic cells	C3 C2 C3 C2	SDL	MCQs, SEQs, OSPE, viva				
L2	Structure of Bacterial cell wall	Pathology	Differentiate between structure of gram positive and gram negative bacterial cell wall Correlate structural components of bacteria with their pathogenicity Define plasmid, transposon, mesosome, glycocalyx. – C1	C3 C3 C1	LGIS	MCQs, SEQs, OSPE, Viva				
L3	Medical Errors	Medical ethics	Understand Medical Errors • Explain the background of medical errors • Elaborate why medicine susceptible to error • Delineate the reasons of reluctance to report • Classify the medical errors	C2 C2 C2 C2	LGIS	MCQs				
L4	Intro to chemotherapy	Pharmacology	Classify anti-bacterial drugs based on mechanism of Action, anti-microbial spectrum & type of anti-microbial activity Explain bacteriostatic & bactericidal activity of antibacterial drugs with examples Describe Dose-dependent & time-dependent killing based on MIC C2 Explain post-antibiotic effect with examples C2 Describe briefly the steps and factors affecting selection of an antimicrobial for different types of therapy Enumerate the problems associated with anti-microbial use Briefly discuss anti-microbial resistance and its mechanism	C1 C2 C2 C2 C2 C2 C1 C2	LGIS	C2 MCQs&SEQ				
L5	Bacterial Metabolism and growth curve	Pathology	Define each phase of growth cycle Differentiate between aerobic and anaerobic growth Explain fermentation of sugars Discuss iron metabolism	C1 C3 C2 C2	LGIS	MCQs, SEQs,OSPE				

			1 Define solid waste.	C1		
			Demonstrate sources of waste.	C3		
			Explain ways of collection of waste.	C2		
			Describe methods of disposal of waste	C2		
		1	Describe health hazards of improper disposal.	C2		
Τ¢		Community Medicine	Describe sanitation barrier.	C2	1 010	
L6	Disposal of Waste		Elaborate methods of excreta disposal.	C3	LGIS	MCQ/SEQ
		1	Define septic tank and its working.	C1		
		1	Describe its maintenance.	C2		
		1	Explain ways for disposal of sewage	C2		
		1	Describe health hazards of improper sewage treatment.	C2		
		1	Enlist modern ways of sewage disposal	C1		
	Introduction basic		•Discuss clinical Assessment of patients with infectious disease.	C2,A3		
	sumptoms analysis and	Madiaina	•Describe presenting problems in infectious disease in relation to different	C2		
L7	symptoms analysis and	Medicine	symptoms.	_	LCIS	SEOS MCO. OSDE
	investigations	1	•Discuss microbial investigations of infectious diseases	C2-C3	LGIS	SEQS, MCQS, USPE
			Discuss merosial myosugarons of meetous discuses.	02 05		
		1	-Enlist and common surgical pathogens	C1		
τo	Microbiology of Surgical	Samaana	-Define wound infection. C1	C1	LCIC	MCO- SEO-
Lð	infection	Surgery	-Describe decisive period and role prophylactic antibiotic in this period.	C3	LGIS	MCQS, SEQS
		1	-Describe sources of wound infection and risk factors of wound infection.	C2		
			Define different types of mutations C1	C1		
		1	Describe bacterial components for genetic transformation C2	C2		
	Bacterial Genetics	Pathology	Discuss high frequency recombination - C2	C1		
L9			Define fertility plasmid and sex pilus	C2	LGIS	MCQs, SEQs,OSPE
		1	Discuss transduction	$C^2$		
		1	Explain transformation –	02		
			Define different terminologies - C1	C1		
		1	Explain modes of transmission and adherence and entry in host cell $-C^2$	$C^2$		
		1	Explain modes of transmission and autorenee and entry in rost cent. C2	C2		
	Pathogenesis of infectious	Pathology	Differentiate between exotoxin and endotoxin - C2	C2		
L10	agents in microbiology	1 autology	Explain Koch's postulates - C2	$C^2$	LGIS	MCQs, SEQs,OSPE
	agents in incrobiology	1	Identify different lab test. C1			
		1	Describe principle of different lab tests_ C2	C1		
		1	Interpret various lab tests for different diseases _C3			
	Denielling 1		Enumerate groups of Cell Wall Inhibitors C1	C1		
	Penicillins I	1	Classify Penicillin C1			
T 11	(Classification and	Pharmacology	Describe mechanism of action of Penicillin C2	$C^2$		
LII	Pharmacokinetics)		Describe anti-hactorial spectrum of Penicillin C2	$C^2$		
			Describe anti-bacterial spectrum of rememmin C2	C2		
				<u></u>		
1.10		Medicine	•Define P.U.O. CI	CI		
L12	Fever of unknown origin		•Enumerate causes/etiology of P.U.O.	C2,A3	LGIS	SEOS, MCOs, OSPE
		ļ	Describe investigations and management plan of P.U.O. C2-C3	C2,C3		
	Procentation of surgical	1	-Describe surgical site infection and its types.	C2		
	infactions	1	-Describe management of SSI.	C3		
I 12	meetions	Surgary	-Briefly Describe management of local infections like thrombophlebitis, C3			MCQs
L13		Surgery	lymphangitis, abscess.		LUIS	SEQ
		1	-Describe management of systemic infections SIRS, septicemia in surgical	C3		
			patient. C3			

			-Briefly describe requirement of Surgery in patients with HIV, COVID and precautions needed. C 3	C3		
L14	Penicillins ll (Pharmacodynamics with interactions)	Pharmacology	Enumerate uses & adverse effects of Penicillins C1 Describe mechanisms of resistance to Penicillins C2	C1 C2	LGIS	C2 MCQs & SEQ
L15	Laboratory diagnosis in microbiology	Pathology	Explain different types of sample processing techniques,- C2 Describe serological methods used for diagnosis of infectious diseases, - C2 Discuss nucleic acid based methods for infectious disease diagnosis - C2	C2 C2 C2		MCQs, SEQs, OSPE
L16	Vancomycin	Pharmacology	Describe mechanism of action and clinical uses of Vancomycin Enumerate adverse effects of vancomycin Explain in detail Red Man Syndrome and its management	C2 C2 C2	LGIS	C2 MCQs/SEQs
L17	Ethical Consideration of infectious diseases	Family Medicine			LGIS	MCQs, SEQs
SDL	Normal flora and classification of bacteria	Pathology	Classify gram positive and gram negative groups of bacteria – C3 Enumerate important flora of various biomes in human body - C1 Describe relationship between normal flora and host C2	C3 C1 C2	SDL	MCQs, SEQs,OSPE
P1	P- Drug prescription	Pharmacology	P drug & prescription writing for various types of superficial skin infections			C3 OSPE
P2	Autopsy Visit/Postmortem &Medicolegal work/Research	Forensic Medicine	-Enumerate the contents of Medico-legal/postmortem reports. -State the requirements of a mortuary. -Classify the pattern of injuries in MLC case. The student will be keen enough to highlight and express his/her obligations towards cases of Medicolegal injuries and deaths -Preparation of MLC/autopsy report. -Observe autopsy and Medico-legal case management at DHQ, Hospital	C2 C2 C1	Autopsy visit	,MCQS,VIVA
Р3	Microscope	Pathology	-Identify different parts of Microscope.– -set up different focusing of microscope -Use microscope correctly in diagnosing morphology and identification of microorganism	C1 \C3 P4	Use Microscope without hesitance. A2,	MCQs, OSPE

	Week 2							
Code No	Торіс	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching Strategy	Assessment tool		
L18	Anti-Microbial drugs resistance	Pathology	<ul> <li>-Describe the mechanism of action of nucleic acid inhibitors and cell membrane inhibitors,</li> <li>-Discuss in detail different mechanisms of antimicrobial resistance, - -Explain different methods of antimicrobial sensitivity testing, - Enumerate different bacterial vaccines -</li> </ul>	C2 C2 C2 C1	LGIS	MCQs, SEQs,OSPE		
L19	Medicolegal Autopsy	Forensic Medicine	Describe the preservation of viscera and other articles during an autopsy. Define negative and obscure autopsy and write its causes. Describe the procedure of exhumation and its Forensic Importance. Briefly explain Assessment of mutilated and decomposed bodies. Define Postmortem artifacts and its type w.r.t their medico-legal importance.	C2 C1 C2 C2 C2 C2	LGIS	MCQs,SEQs,OSPE		
L 20	Sterilization and disinfection	Pathology	-Define Chemical disinfectants, - -Categorize chemical disinfectants Explain physical methods of disinfection and sterilization -	C1 C2 C2	LGIS	MCQs, SEQs,OSPE		
L21	Staphylococci 1 (transmission, pathogenesis, Signs, symptoms)	Pathology	-Explain Important properties, epidemiology - -Describe transmission, pathogenesis, Signs, symptoms, laboratory diagnosis and treatment of Staphylococcus aureus, Staphylococcus epidermidis and Staphylococcus saprophyticus -	C1 C2 C2	LGIS	MCQs, SEQs,OSPE		
L22	Importance of sterilization and disinfection in microbiology	Pathology	-Explain their mechanism of action Differentiate between Sterilization and disinfection Differentiate among different methods of sterilization and disinfection	C2 C3 C3	LGIS	MCQs, SEQs,OSPE		
L23	Critical Surgical infections and their treatment	Surgery	describe management of gas gangrene, necrotizing fasciitis.	C3	LGIS	MCQ,VIVA, OSPE		
L24	Inorganic irritants Metallic Poisons (Arsenic)	Forensic Medicine	-Classify the types of Inorganic Irritants (Arsenic). Describe mechanism of action of in Inorganic irritants and clinical features of a poisoning with Arsenic Mention the fatal dose, management, medico-legal importance of each type of inorganic poisoning. Briefly explain the autopsy findings of a victim of inorganic metallic poisoning.	C1 C2 C2 C2	LGIS	MCQs, SEQs		
L25	Cephalosporins	Pharmacology	-Classify Cephalosporins -Describe mechanism of action of Cephalosporins -Discuss anti-bacterial spectrum of different generations of Cephalosporins -Discuss uses and adverse effect of Cephalosporins based on their spectrum	C1 C2 C2 C2	LGIS	C2 MCQs&SEQ		
SGD	Clostridia (All 4 types)	Pathology	-Enumerate different types of gram positive spore forming rods, - -Discuss different types of Clostridia in detail along with their laboratory diagnosis -	C1 C2	Demonstrate affective interpersonal and communicatio n skills A3	OSPE,MCQS		

Integrated Modular Curriculum

L26	Staphylococci ll ( important properties, Classification on the basis of Laboratory diagnosis	Pathology	-Enumerate different types of staphylococci - - Differentiate important properties and diseases of all staphylococci, -Classify staphylococci on the basis of Laboratory diagnosis	C1 C2 C2	LGIS	MCQs, SEQs,OSPE
L 27	Miscellaneous cell wall synthesis Inhibitors	Pharmacology	Describe mechanism of action of various cell wall synthesis inhibitors -Describe clinical uses and adverse effects of miscellaneous cell wall synthesis inhibitors	C2 C2	LGIS	C2 MCQs/SEQs
L28	Neonatal Tetanus	Peads	•Define Neonatal tetanus     •Describe clinical features     •Discuss Differential diagnosis     •Discuss treatment and management plan     •Discuss Role of immunoglobulins     •Discuss about maternal and neonatal immunization for tetanus     •Enlist preventive measures	C1 C1 C2 C2 C2 C2 C2 C2 C2 C2	LGIS	MCQs, OSPE
L29	Prevention of surgical infection	Surgery	Understand importance of aseptic technique in surgery for prevention of surgical infection. -Understand role of pre –operative patient optimization and preparation in prevention of surgical infection. -Describe role of prophylactic antibiotics.	C2 C2 C3	LGIS	MCQs, SEQ,Viva
L30	Streptococci	Pathology	<ul> <li>-Enumerate different types of streptococci according to their groups.</li> <li>-Explain important diseases and laboratory diagnosis of β-hemolytic streptococcus.</li> <li>-Explain important diseases and laboratory diagnosis of Streptococcus viridians</li> <li>-Discuss different properties and diseases caused by strep. Pneumonia</li> <li>-Discuss diseases and laboratory diagnosis of enterococci and streptococcus pneumoniae</li> </ul>	C1 C2 C2 C2 C2 C2	LGIS	MCQs, SEQs,OSPE
L31	Gram Negative cocci Neisseria	Pathology	-Enumerate different types of gram negative cocci, - -Discuss different diseases and its complications -Explain laboratory diagnosis of Neisseria meningitidis and Neisseria gonorrhoeae-	C1 C2 C2	LGIS	MCQs, SEQs,OSPE
L32	Diphtheria, Pertusis,Chickenpox	Peads	•Define the disease •Describe clinical features •Discuss Differential diagnosis •Identify complications •Manage disease and its complications •Discuss about immunization against diphtheria/pertussis/chicken pox •Enlist preventive measures	C1 C1 C2 C2 C2 C2 C2 C2 C2	LGIS	MCQS
SGD/C BL	Penicillin (Clinical Pharmacology)	Pharmacology	-Use of different types of Penicillin in MRSA	C2,C3	CBL	MCQ/PBQ
P4	P drug & Prescription writing(Tonsillitis & Upper respiratory infections	Pharmacology	<ul> <li>P drug &amp; prescription writing for tonsilitis</li> <li>P drug &amp; prescription writing for upper respiratory tract infections</li> </ul>		Practical	C3 OSPE
P5	Inorganic irritants Metallic Poisons	Forensic Medicine and Toxicology	The student will be able to manage case of a (Mercury, Copper& Zinc) poisoning			

		r				
	(Mercury, Copper&		.Identify specimen of Inorganic irritants Metallic Poisons (Mercury,			
	Zinc)		Copper& Zinc)			
			•Classify the types of Inorganic metallic Irritants (Mercury, Copper& Zinc)	C1		
			•Describe mechanism of action of in Inorganic irritants and clinical features		.CBL/SGD	
			of a poisoning with (Mercury, Copper& Zinc)	C2		OSPE
			•Mention the fatal dose, management, medico-legal importance of each type			
			of inorganic poisoning.	C2		
			•Briefly explain the autopsy findings of a victim of inorganic metallic			
			poisoning(Mercury, Copper& Zinc)	C2		
			Identify the structure of bacteria on morphological basis -	Focus		
				the slide	Demonstrate	
				on	Demonstrate	
				microsco	positive	
Dí				pe P3	attitude	
P6	Bacterial Morphology	Pathology		Identify	towards safe	OSPE
				structure	handling of	
				of	laboratory	
				bacteria	specimens A3	

	Week 3								
Code No	Торіс	Discipline	Knowledge	Skill	Attitude	MOA			
L33	Listeria, Corynebacterium Diphtheria, Bacillus	Pathology	-Explain pathogenesis and laboratory diagnosis of Corynebacterium diphtheriae, - Describe Listeriosis and its laboratory diagnosis.– Discuss in detail types of anthrax, - Explain laboratory diagnosis of Bacillus cereus.	C2 C2 C2 C2 C2	LGIS	MCQs, SEQs,OSPE			
L34	Introduction to Enterobacteriaceae and E. coli, Klebsiella l	Pathology	<ul> <li>-Describe Important properties of Enterobacteriaceae and E. coli, Klebsiella.,</li> <li>-Describe transmission, pathogenesis, signs and symptoms, laboratory diagnosis of Enterobacteriaceae</li> </ul>	C2 C2	LGIS	MCQs, SEQs,OSPE			
L35	Introduction to Enterobacteriaceae and E. coli, Klebsiella ll	Pathology	-Describe different strains of E. coli, - -Discuss interpretation of TSI, - -Explain laboratory diagnosis and treatment of E. coli infection -	C1 C2 C2	LGIS	MCQs, SEQs,OSPE			
L36	Shigella, Vibrio <i>Cholerae</i>	Pathology	<ul> <li>-Describe Important properties, epidemiology. of Vibrio cholerae and Shigella</li> <li>-Describe transmission, pathogenesis, signs and symptoms, laboratory diagnosis and treatment of Shigella and Vibrio Cholerae.</li> <li>-Enumerate different types of vibrio.–</li> <li>-Discuss pathogenesis of cholera and shigellosis.</li> <li>-Identify diagnostic tests available for vibrio cholera and its treatment</li> </ul>	C2 C2 C1 C2 C3	LGIS	MCQs, SEQs,OSPE			
L37	Tetracyclines	Pharmacology	<ul> <li>-Enumerate groups of Protein synthesis inhibitors</li> <li>-Classify tetracyclines</li> <li>-Describe the mechanism of action of Tetracyclines</li> <li>-Describe the anti-bacterial spectrum of Tetracyclines</li> <li>-Enumerate uses and adverse effects of Tetracyclines</li> </ul>	C1 C2 C2 C1	LGIS	C2 MCQs/SEQs			
L38	Salmonella Pathogenicity and properties	Pathology	-Discuss Important properties & epidemiology. - Explain transmission, pathogenesis, signs and symptoms -Identify laboratory diagnosis and treatment of Salmonella	C2 C2 C2	LGIS	MCQs, SEQs,OSPE			
Seminar L39	Salmonella classification and lab diagnosis	Pathology	Discuss classification of salmonella, -Explain important properties and pathogenesis of Salmonella - C2 -Discuss chronological order of diagnostic tests for typhoid fever - C2.	C2 C2 C2	LGIS	MCQs, SEQs,OSPE			
L40	Enteric Fever/	Medicine	Describe pathophysiology of Typhoid fever. Recognize signs and symptoms of Typhoid fever. Discuss investigations, management and prevention of Typhoid Fever.	C2 C2 C3	LGIS	MCQs, SEQs, OSPE			
L41	Enteric Fever/ Acute Diarrhoea	Peads	<ul> <li>Define Enteric fever</li> <li>Discuss etiology</li> <li>Describe epidemiology and pathogenesis</li> <li>Discuss incubation period and its clinical features according to the age</li> <li>Plan pertinent investigations, interpret and take appropriate action</li> <li>Enumerate differential diagnosis</li> <li>Enlist steps of management</li> <li>Identify complications and know treatment accordingly</li> <li>Discuss Preventive measures</li> </ul>	C1 C2 C2 C2 C3 C2 C2 C2 C2	LGIS	MCQs, SEQs			

L42	Quinolones/ Fluoroquinolones	Pharmacology	Classify fluoroquinolones Describe mechanism of action of Fluoroquinolones Discuss spectrum of Fluoroquinolones Discuss uses of Fluoroquinolones based upon their Spectrum Discuss adverse effects & contraindications of Fluoroquinolones in pregnancy and in children	C1 C2 C2 C2 C2	LGIS	C2 MCQs/SEQs
L43	Brucellosis	Medicine	•Recognize epidemiology of infection.     •Describe clinical findings of brucellosis.     •Describe investigations, differential diagnosis, complications and treatment     of brucellosis.	C1 C2,A3 C2	LGIS	SEQS, MCQs, OSPE
L44	An approach to patient with fever	Family Medicine	Explain the rationale and management of fever.		LGIS	MCQs, SEQs
L45	Gram Negative rods related to respiratory tract (Important properties &epidemiology, pathogenesis, laboratory diagnosis)	Pathology	Describe Important properties &epidemiology of Gram Negative rods related to RTI. -Discuss transmission, pathogenesis, signs and symptoms, laboratory diagnosis of Haemophillus. -Discuss important properties -Discuss pathogenesis, laboratory diagnosis of bacteria of respiratory tract. Explain pathogenesis of Bordetella, - Discuss legionnaire's disease and important properties of organism	C2 C2 C2 C2 C2 C2 C2 C2 C2	LGIS	MCQs, SEQs,OSPE
SGD	Helicobacter and Campylobacter	Pathology	-Discuss related diseases of Helicobacter and Campylobacter , Discuss pathogenesis and laboratory diagnosis of Campylobacter and Helicobacter ,	C2 C2	SGD	MCQs, SEQs,OSPE
CBL	Gram Negative Rods Related to Zoonotic diseases	Pathology	-Discuss pathogenesis and laboratory diagnosis of brucella, -Discuss important properties -Discuss pathogenesis and laboratory diagnosis of Yersinia pestis -Explain pathogenesis and laboratory diagnosis of infections caused by Francisella and Pasteurella,	C2 C2 C2 C2 C2	LGIS	MCQs, SEQs,OSPE
L 46	Inorganic irritants Metallic Poisons (Lead)	Forensic Medicine& Toxicology	•Classify the types of Inorganic Irritants (Lead).     •Describe mechanism of action of in Inorganic irritants and clinical features of a poisoning with lead.     •Mention the fatal dose, management, medicolegal importance of each type of inorganic poisoning.     •Briefly explain the autopsy findings of a victim of inorganic metallic poisoning	C1 C2 C2 C2	LGIS	MCQs, SEQs,OSPE
SDL	Actinomycosis, Mycoplasma	Pathology	Differentiate between Actinomyces and nocardia, - Explain laboratory diagnosis of actinomyces and nocardia, - Discuss important features, laboratory diagnosis and treatment of atypical pneumonia caused by Mycoplasma pneumoniae -	C2 C2 C2	SDL	MCQs, SEQs, Viva, OSPE
P7	P drug & Prescription writing (UTIs)	Pharmacology	P drug & prescription writing for UTIs in children and adults			C3 OSPE
P8	Phosphorus Iodine	Forensic medicine & Toxicology	-Classify the types of Inorganic non-metallic Irritants (Phosphorus & Iodine) -Describe mechanism of action of in Inorganic irritants and clinical features of a poisoning with (Phosphorus & Iodine) -Mention the fatal dose, management, medico-legal importance of each type of inorganic poisoning.	C1 C2 C2	CBL/SGD	MCQs, Viva

			<ul> <li>Briefly explain the autopsy findings of a victim of inorganic metallic poisoning(Mercury, Copper&amp; Zinc)</li> <li>Identify specimen of Inorganic irritants Metallic Poisons (Phosphorus &amp; Iodine )</li> <li>The student will be able to establish a case of Phosphorus and copper poisoning and perform duty as CMO.</li> </ul>	C2		
Р9	Culture media ,Gram Staining	Pathology	<ul> <li>Identify bacteria on the basis of staining properties.–</li> <li>-Describe the usage of culture media for different microorganism         <ul> <li>Perform Gram Staining</li> <li>Identify different culture media on the basis of differential , selective and enriched properties</li> </ul> </li> </ul>	C1 C2 P3 P3	Value the importance of adhering to the SOPs while ordering tests for bacterial culture A2	OSPE,VIVA

	Week 4							
Code No	Торіс	Discipline	Knowledge	C/P/A	Teaching Strategy	Assessment tool		
CBL	Tetracyclines (Clinical Pharmacology)	Pharmacology	Use of Tetracycline in a specific clinical scenario	C2, C3	CBL	C2 MCQs/SEQs		
	Sulphonomidos	Dhammaaalaay	-Describe the mechanism of action of Cotrimoxazole	C2				
L47	&Trimethoprim	Pharmacology	-Describe spectrum, uses and adverse effects of Cotrimoxazole	C2	LGIS	C2 MCQs/SEQs		
	& Triniculoprini		-Describe the spectrum of Co-trimoxazole	C2				
			-Classify Aminoglycoside	C1				
		Pharmacology	Examine Pharmacokinetics of Aminoglycosides	C2				
L48	Aminoglycosides	Thanhacology	Describe spectrum of Aminoglycosides	C2	LGIS	C2 MCQs/SEQs		
			-Describe Clinical uses of Aminoglycosides	C2				
			-Describe adverse effects and contraindication Aminoglycosides	C2				
L49	Antimicrobial treatment in	Surgery	-Understand principles of antimicrobial treatment in surgical infections.	C2	LGIS	,MCQs, SEQs		
	surgical infections	6,5	-Describe rational empirical antibiotics use according to flora.	C3				
			Describe the microbial classification implicated in Food poisoning					
		Foransia Madiaina	Describe the symptoms of food poisoning					
L50	food poisoning	rotensic medicilie	Describe the symptoms of food poisoning	$C_2$	LGIS	MCQs, SEQs, VIVA		
			suspected food poisoning	$C_2$				
			Describe the medicologial importance of Food poisoning	$C^2$				
	Aminoglycosides	Pharmacology	•Use of Aminoglycosides in specific clinical scenario	C2.C3		C3		
CBL	Clinical Pharmacology	1 mainta to togy		02,00	CBL	PBQ		
I 5 1		D-411	-Enlist types of Rickettsia, Chlamydia	C2		,		
LOI	Rickettsia, Chlamydia	Pathology	Describe Pathogenesis, Clinical features, treatment of diseases caused by	C2		MCQs, OSPE, Viva		
			Rickettsia, Chlamydia					
			Perform the Pharmaco vigilance in clinical setting with special focus on	C2		Assignment based		
			performing Pharmaco vigilance and filling following forms	C2		assessment on		
			a. Error reporting form	C2		performing the		
CBL	Medical Errors	Medical Ethics	b. Error analysis form		CBL	Pharmaco vigilance of		
			c. WHO guidelines for surgical procedure safety	C2		assigned ward under		
			d. Guidelines for prevention of medication error	C2		aggregate Marks (		
		D 1 1	e. Guidelines for prevention of diagnostic error	<b>G2</b>		Internal Assessment		
SDL	Minor Bacterial Pathogens	Pathology	Discuss diseases caused by different minor bacterial pathogens.–	C2	SDL	MCQ, Viva		
	P drug & Prescription	Practical	P drug & prescription writing for various types of pneumonias					
P10	writing	Pharmacology				C3		
110	(Pnemonia)	Thanhacology				OSPE		
	(Themoniu)							
	Economic		-Classify the types of Snakes and state their mechanism of action w.r.t their	C1				
	entomology		types. Priofly describe the clinical factures of Spoles was accomics of P	C				
D11	Spake	Forensic Medicine	-Differing describe the chinical features of Shake, wasp, scorpion and Bees	02	Dractical	OSDE		
Г11			State their Medicolegal importance and autoney findings of a victim of	C	FIACUCAI	USPE		
	• Dees		their poisoning	0.2				
	• wasp venom		Identify specimen of different snakes					
P12	Biochemical Test.	Pathology	-Explain Principles of Catalase. Coagulase. Urease. oxidase. Indole test.	-Perform	Value the			

Catalase, Coagulase,	citrate -		different	importance of	
Urease, oxidase, indole	- Describe interpre	etation of these tests -	types of	adhering to	
test, citrate	_		catalase	the SOPs	
			and	while	
		C	Coagulase	ordering tests	
		t	test.– C3	for bacterial	
			-Perform	culture and	
			urease,	identification	
			Oxidase,	A2	
			and		
			citrate		
			test C3		

	Week 5								
Code No	Торіс	Discipline	Knowledge	C/P/A	Teaching Strategy	Assessment tool			
CBL	Spirochetes	Pathology	Explain different stages of syphilis, Describe different serological techniques used for diagnosis of syphilis, Discuss treatment and prevention of syphilis, Explain Lyme's Disease, Explain transmission of Leptospira	C2 C2 C2 C2 C2 C2 C2	CBL	MCQs, SEQs, OSPE			
L52	Macrolides	Pharmacology	Enumerate Macrolides Discuss mechanism of action of Macrolides Discuss spectrum of antibacterial activity of Macrolides Discuss adverse effects of macrolides	C1 C2 C2 C2 C2	LGIS	C2,MCQs/SEQs			
L53	Streptogramin &oxazolidinediones	Pharmacology	-Enumerate Streptogramin and oxazolidinediones C1 Describe mechanism of action of Streptogramin and Oxazolidinediones Discuss antibacterial spectrum along with adverse effects of streptogramin and oxazolidinediones	C1 C2 C2	LGIS	C2 MCQs/SEQs			
L54	Influenza	Medicine	Recall epidemiology of influenza. Describe clinical findings. Describe abnormal lab investigations. Recognize complications of influenza. Describe management/treatment of infection	C2,A3 C2 A3 C2 A3 C2 A3 C2 A3	LGIS	SEQS, MCQs, OSPE			
CBL	Diarrheal Viruses	Pathology	Explain the important properties (C2) •Describe Replicative cycle (C2) •Explain the transmission and pathogenesis of the diseases caused by these viruses (C2) •Explain the interaction of pathogenesis of viruses & immunity of individuals (C2) •Explain clinical findings and its laboratory identification (C2) •Describe the treatment & Prevention (C1-2)	C2 C2 C2 C2 C2 C2 C2 C2 C2 C2 C2 C2 C2 C	CBL	MCQs, SEQs			
L55	Clindamycin, Chloramphenicol	Pharmacology	Describe mechanism of action of clindamycin and chloramphenicol C2 Discuss antibacterial activity of clindamycin and chloramphenicol Discuss adverse effects of both agents	C2 C2 C2		C2 MCQs/SEQs			
L56	Measles / Mumps / Rubella	Pathology	Explain the important properties (C2) •Describe Replicative cycle (C2) •Explain the transmission and pathogenesis of the diseases caused by these viruses (C2) •Explain the interaction of pathogenesis of viruses & immunity of individuals (C2) •Explain clinical findings and its laboratory identification (C2) •Describe the treatment & Prevention (C2)	C2 C2 C2 C2 C2 C2 C2 C2 C2	LGIS	MCQs, SEQs, OSPE			
L57	TaleemwaTaalum	Quran class			LGIS				
L58	Antiviral agents I Classification	Pharmacology	Classify anti-viral drugs based on the viral disease Classify anti-viral drugs based on mechanism of action of drugs	C1 C2	LGIS	C2 MCQs/SEQs			
L59	Polio, Rabies Virus	Medicine	<ul> <li>Recall epidemiology of infection. C1</li> <li>Describe clinical findings of infections. C2</li> <li>Describe investigations, differential diagnosis, complications and management plan for infections. C2</li> <li>Recognize preventive aspects of infection. C1</li> </ul>	C1 A3 C2 A3 C2A3 C2A3	LGIS	SEQS, MCQs, OSPE			
1.60	Housing	Community Medicine	-Describe criteria for healthful housing	C2	LGIS	MCO/SEO			

			Describe the housing standards	C2		
			Explain effects of housing on health	C2		
			Define overcrowding	C1		
			Enlist indicators of housing	C1		
L61	Acute Diarrhea	Peads	•Define Diarrhea	C1	LGIS	MCQs,Viva
	In Children		<ul> <li>Enlist common etiological organisms</li> </ul>	C2		
			•Differentiate clinically between different etiological organisms, especially,	C2		
			Shigella, Vibrio Cholera Entamoeba Histolytica, and Giardia Lamblia.	C2		
			<ul> <li>Assess the signs of dehydration and classify dehydration</li> </ul>	C2		
			•Plan pertinent investigations, interpret and take appropriate action	C2		
			<ul> <li>Identify complications</li> </ul>	C		
			<ul> <li>Treat dehydration and its complications</li> </ul>			
			•Rationalize the use of drugs in diarrhea			
L62	Meteorological	Community Medicine	-Describe heat stress along with its indices	C2	LGIS	MCQs,SEQs
	Environment		-Summarize the effects of heat stress & cold stress along with its prevention	C2		
			-Discuss the elements of meteorology.	<b>C</b> 2		
			-Demonstrate the acute mountain sickness.	C2		
			-Explain high altitude pulmonary edema.			
			-Describe the Calsson disease.			
CBI	Harpes Viruses HSV	Pathology	•Explain the important properties of Hernes virus (C2)	C2	CBI	
CDL	helpes vituses, his v	T attiology	•Describe Replicative cycle (C2)	C2	CDL	MCQ8, SEQ8,05FE
			•Explain the transmission and pathogenesis of the diseases caused by these	$C^{2}$		
			viruses (C2)	02		
			•Explain the interaction of pathogenesis of viruses with immunity of	C2		
			individuals (C2)	C2		
			•Explain clinical findings and its laboratory identification (C2)			
			•Describe the treatment & Prevention (C2)	C2		
L63	VericellaZooster Virus,	Pathology	-Explain the transmission and pathogenesis C2-	C2	LGIS	MCQs,SEQs,Viva
	Cytomegalovirus		Relate the interaction of nathogenesis of viruses with immunity of individual	C3		
			C <sup>2</sup>			
			CJ	C2		
			-Explain clinical lindings, Lab diagnosis C2.	C2		
			-Describe treatment and prevention.			
			-discuss the reactivation of disease. C2	C2		
L64	Antiviral agents II	Pharmacology	-Outline the salient pharmacokinetic & pharmacodynamic features of	C2	LGIS	C2 MCQs/SEQs
	Herpes simplex/Herpes		antiviral drugs used to treat HSV, VZV, CMV and influenza C2			
1.67	Zoster			C2 + 2	LOIG	GEOG MCO OGEE
L65	HIV and	Medicine	Describe natural history and classification of HIV.	C2,A3	LGIS	SEQS, MCQs, OSPE
	Immunodeficiency		Describe clinical Assessment of patient with HIV infection.	C2,A3		
			Discuss presenting problems in HIV infection	C3,A3		
CBL	Poliomyelitis	Pathology	Explain the important properties (C2)	C2	CBL	MCQs, SEQs, OSPE,
			•Describe Replicative cycle (C2)	C2	Value the	Viva
			•Explain the transmission and pathogenesis of the diseases caused by these	C2	importance of	
			viruses (C2)		polio	
			•Explain the interaction of pathogenesis of viruses & immunity of	C2	eradication	
			individuals (C2)	<b>C</b> 2	program in	
			•Explain clinical findings and its laboratory identification (C2)	C2	the global	
			•Describe the treatment & Prevention (C1-2)	C2	burden of the	

					diseases A2	
SDL	Introduction to Medical	Pathology	•Describe structure of viruses(C2)	C2	SDL	MCQs
	Virology		•Compare viruses, other cells, Prions and Conventional viruses (C3)	C3		
			•Explain viral growth curve (C2)	C2		
			•Define Genetics & Genetic Therapy (C1)	C1		
			•classify Medically important viruses (C3)	C3		
			•Explain Antiviral drugs and their mechanism of action (C2)	C2		
			-Discuss Pathogenesis of viral diseases (C2)	C2		
P13	P drug & Prescription writing Systemic viral infections)	Pharmacology	P drug & prescription writing for viral infections			C3 OSPE
P14	Systemic vital infections)					
P15	ELISA, PCR, ITC	Pathology	-Explain Mechanism, principle and interpretation of ELISA - C22	Perform The test in laborator y step wise –		OSPE

	Week 6							
Code No	Торіс	Discipline	Knowledge	C/P/A	Teaching Strategy	Assessment tool		
L66	Respiratory Viruses	Pathology	<ul> <li>Explain the important properties of respiratory viruses (C2)</li> <li>•Describe Replicative cycle (C2)</li> <li>•Explain the transmission and pathogenesis of the diseases caused by these viruses (C2)</li> <li>•Explain the interaction of pathogenesis of viruses &amp; immunity of individuals (C3)</li> <li>•Explain clinical findings and its laboratory identification (C2)</li> <li>•Describe the treatment &amp; Prevention (C2)</li> </ul>	C2 C2 C2 C3 C2 C3 C2 C2	LGIS	SEQS, MCQs, OSPE		
L 67	HIV/ diseases , AIDS	Pathology	Explain the important properties (C2) •Describe Replicative cycle (C2) •Explain the transmission and pathogenesis of the diseases caused by these viruses (C2) •Explain the interaction of pathogenesis of viruses & immunity of individuals (C2) •Explain clinical findings and its laboratory identification (C2) •Describe the treatment & Prevention (C1-2)	C2 C2 C2 C2 C2 C2 C2 C2	LGIS	MCQs, SEQs, OSPE, Viva		
L68	Antiviral agents III (AIDS)	Pharmacology	Define HAART Describe the mechanism of action and adverse effects of major drug groups used in AIDS C2	C2	LGIS	C2 MCQs/SEQs		
L69	Miscellaneous , Congenital, Zoonotic, Arboviruses	Pathology	Explain the important properties (C2) •Describe Replicative cycle (C2) •Explain the transmission and pathogenesis of the diseases caused by these viruses (C2) •Explain the interaction of pathogenesis of viruses & immunity of individuals (C2) •Explain clinical findings and its laboratory identification (C2) •Describe the treatment & Prevention (C1-2)	C2 C2 C2 C2 C2 C2 C2 C2 C1,C2	LGIS	SEQS, MCQs, OSPE		
L70	Measles / Mumps / Rubella	Peads	•Define the disease     •Describe clinical features     •Discuss Differential diagnosis     •Identify complications     •Manage disease and its complications     •Discuss immunization against measles/Mumps/Rubella     •Enlist preventive measures	C1 C2 C2 C2 C2 C2 C2 C3 C2	LGIS	MCQ,SEQs,OSPE		
CBL	Antiviral agents Clinical Pharmacology)	Pharmacology	-Discuss use of anti-viral agent in a specific scenario	C2	CBL	C3,PBQ		
L71	Acute Stress Reaction and Adjustment Disorder	Psychiatry	Define stress reaction, stress disorder and adjustment disorders according to ICD-11 diagnostic criteria (C1) Enlist the etiological and epidemiological factors causations of disease (C1) Enumerate relevant investigations for diagnosis of acute stress reaction. (C2) Discuss the relevant investigations and differential diagnosis of stress related disorder and its brief management plan (C3)	C1,A2 C1 C2 C3	LGIS	MCQ		
L72	Generalized Anxiety Disorder	Psychiatry	Define Generalized Anxiety Disorder according to ICD-11 diagnostic criteria (C1) Enlist the etiological and epidemiological factors in the causations of disease	C1,A2	LGIS	MCQ		

					1	
			(C1) Enumerate relevant investigations for diagnosis of Generalized Anxiety	C2		
			Disorder (C2) Discuss the relevant investigations and differential diagnosis Generalized	C3		
			Anxiety disorder and its brief management plan (C3)			
L73	Jahalat	Quran Class				
L74	Light ,Noise and radiation	Community Medicine	Demonstrate the concept of natural &artificial lighting Explain the effects of noise exposure Describe approaches for the control of noise pollution Explain sources of noise. Describe heat stress indices.	C2 C2 C2 C2 C2 C2	LGIS	MCQ/SEQ
			Identify heat hyperpyrexia and heat exhaustion.	CI		
			Demonstrate preventive measures for heat.	C2		
L75	Sexually transmitedinfections	Family Medicine	classify STDs Describe the management approach to a patient with STD in family practice Identify at risk patients and offer them screening Describe prevention of STDs	C1 C2 C2 C2	LGIS	MCQs, SEQs
L76	Systemic Mycosis	Pathology	<ul> <li>Identify the morphology of fungi (C1)</li> <li>Describe the important features of systemic fungal diseases (C1)</li> <li>Describe laboratory diagnosis of systemic fungi (C1)</li> </ul>	C1 C1 C1	LGIS	MCQ,SEQ,OSPE
<mark>L77</mark>	Antifungal agents I (Classifications &Amphotericin B)	Pharmacology	-Enumerate various antifungal agents -Describe mechanism of action and antimicrobial spectrum of amphotericin -Discuss pharmacokinetics and unwanted effects of Amphotericin B	C1 C2 C2	LGIS	C2 MCQs/SEQs
CBL	Cutaneous and subcutaneous Mycosis	Pathology	<ul> <li>identify of most common fungal pathogens associated with cutaneous and sub cutaneous mycoses (C1)</li> <li>Compare the major characteristics of specific fungal diseases affecting the skin (C2)</li> </ul>	C1 C2	CBL	MCQS, SEQs, OSPE
CBL	Antifungal Agents (Clinical Pharmacology)	Pharmacology	-Use of anti-fungal agents in a specific clinical scenario		CBL	C3 PBQ
L78	Infections in pregnancy	Gynae/OB	Classify infections in pregnancy Enlist the organism of infection Identify lab diagnosis and treatment	C2 C2 C2	LGIS	MCQs, SEQs
SDL	Introduction to Basic Mycology	Pathology	<ul> <li>List General characteristics of fungi (C1)</li> <li>Classify medically important fungi (C2)</li> <li>Describe Host response to fungal infections (C2)</li> <li>Classify spectrum of fungal diseases (C1)</li> <li>Describe Laboratory diagnosis (C2)</li> <li>Describe Importance of direct microscopic techniques in fungal diagnosis (C1)</li> <li>Describe Anti-fungal agents (C1-2)</li> </ul>	C1 C2 C2 C1 C2 C1 C1 C1,C2	SDL	MCQS,SEQs,
P16	P drug & Prescription writing Systemic fungal infections)	Pharmacology	-P drug & prescription writing for fungal infections			C3 OSPE
P17	CORROSIVES (sulph uric acid, Nitric acid, Hydrochloric acid	Forensic Medicine	Identify specimen of CORROSIVES – Classify Corrosives and state its mechanism of actions. •Briefly explain the clinical effects of corrosives on human body.	C1 C2 C2	SGDS \ CBL	MCQs, VIVA

	carbolic and oxalic acid)		-State the fatal dose and management of corrosives burns.	C1		
			-Define Vitreolage			
			-Briefly describe the medico-legal importance of throwing of corrosives and	C2		
			their autopsy findings.			
			-The student will be able to manage case of a CORROSIVES burns			
			-	Perform	Demonstrate	OSPE
				different	safe handling	
				lab test	of lab	
D10	Lab Diagnosis of fungal	Pathology		for	equipment	
P18	infection			identifica	and follow	
				tion of	SOPs A3	
				fungus in		
				labP3		

			Week 7			
L 79	Antifungal agents II	Pharmacology	<ul> <li>describe mechanism of action of Azoles, Echinocandinsandother antifungal drugs</li> <li>Discuss clinical uses and adverse effects of various antifungal drugs</li> </ul>	C2 C2	LGIS	MCQ,SEQs
CBL	Candida	Pathology	<ul> <li>-Explain Important properties of Candida C1</li> <li>-Describe its reproduction C1, C2</li> <li>-Explain transmission, Pathogenesis and diseases caused by this organism C2</li> <li>-Relate the interaction of pathogenesis of this organism with immunity of individuals.C2</li> <li>-Explain clinical findings and its laboratory identification C1</li> <li>- Describe treatment and prevention of Candida C2</li> </ul>	.C1 C1,C2 C2 C2 C1 C2	Demonstrate the critical thinking attitude needed for applying basic knowledge to a clinical situationA2	MCQs, SEQs, OSPE, Viva
L80	Anticancer agents I (Classifications & basic rules for cancer regimens)	Pharmacology	<ul> <li>Classify anti-cancer drugs</li> <li>Explain the term cell-cycle specific and cell cycle non-specific</li> <li>Enumerate cell-cycle specific and cell cycle non-specific drugs</li> </ul>	C1 C2 C1	LGIS	C2 MCQs/SEQs
L81	Somniferous Poisons	Forensic Medicine	<ul> <li>Classify Somniferous Poisons commonly implicated in poisoning.</li> <li>State its active principle and derivatives of opium.</li> <li>Describe the clinical presentation of opium and morphine poisoning w.r.t its stages of intoxication. Briefly describe the management of Somniferous Poisons with special emphasis on decontamination, removal of ingested and absorbed poison.</li> <li>Briefly explain autopsy findings of a victim of Somniferous Poisoning</li> <li>State the Medicolegal importance of Somniferous Poisons</li> </ul>	C1 C1 C2 C2 C2	LGIS	MCQs, SEQs, OSPE
CBL	Opportunistic Mycosis	Pathology	<ul> <li>Identify the morphology of fungi (C1)</li> <li>Describe the important features of opportunistic fungal diseases (C1)</li> <li>Explain co-morbidities (C2)</li> <li>Describe laboratory diagnosis (C2)</li> </ul>	C1 C1 C2 C2	CBL	MCQs, SEQs, OSPE
Semin ar day L 82	Dengue fever ,Pathological aspects and Lab Diagnosis LGIS	Pathology	-Discuss the Pathogenesis of dengue fever C2 Describe its life cycle, sign, symptoms, lab diagnosis of dengue fever C2 -Describe prevention and treatment C2	C2 C2 C2 C2	LGIS	MCQs, SEQs, VivaS
L83	Dengue fever, Sign symptoms and Treatment	Medicine	<ul> <li>Describe pathophysiology of dengue infection. C1</li> <li>Recognize signs and symptoms of dengue fever.</li> <li>Differentiate between DF, DHF, and DSS on basis of symptoms, signs and lab parameters.</li> <li>Discuss investigations and management of dengue fever. C2-C3</li> </ul>	C2- C3,A3 C2,C3,A 3 C2,C3,A 3 C2,C3,A 3	LGIS	MCQ, SEQs,OSPE
L84	Pediatric presentation of Dengue fever	Peads	<ul> <li>Define of Dengue Fever, Dengue Hemorrhagic Fever and Dengue Shock Syndrome</li> <li>Discuss clinical features and identify warning signs</li> <li>Plan pertinent investigations, interpret and to take appropriate action</li> <li>Do appropriate monitoring</li> </ul>	C2 C2 C2 C2 C2	LGIS	MCQs, OSPE

			•Discuss Management	C2		
			•Advise preventive measures	_		
L85	Preventive measures and	DID	-Explain preventive measures of dengue fever.	C2	LGIS	MCQ,SEQs
	spread of dengue fever	Dr.Mujeeb ,Dr.				
L86	Anticancer agents II	Pharmacology	Describe the log kill hypothesis	C2	LGIS	C2 MCQs/SEQs
	(Cell cycle specific		Describe advantages of combination anticancer therapy Describe adverse	C2		
	agents)		effects common to anti-cancer drugs(shared toxicities)	C2		
L87	Forensic Psychiatry	Forensic Medicine	Distinguish between true and feigned insanity.	C2	LGIS	MCO, Viva
	5 5		Advise on procedure of restraint of the mentally ill.	C3		<u> </u>
			List limitations to civil and criminal responsibilities of mentally ill.	C3		
L88	Anticancer agents III	Pharmacology	Describe mechanism of action, uses and adverse effects of alkylating agents	C2	LGIS	C2 MCOs/SEOs
200	(Cell cycle nonspecific	1 martine or ogy	C2 Describe mechanism of action, uses and adverse effects of anti-	C2	2010	
	agents)		metabolites Methotrevate Eluorouracil and Mercantonurine	$C^2$		
	ugents)		-Describe mechanism of action uses and adverse effects of Vinca alkaloids	C2		
			Describe mechanism of action, clinical indication and adverse effects of	02		
			Anti-cancer antibiotics			
			Describe use of hormonal agents in cancer chemotherany Describe clinical	C2		
			uses & adverse affects of hydroxyurea & asparaginase common to anti	$C_2$		
			uses & auverse effects of hydroxyurea & asparaginase common to anti-	C2		
			cancer urugs(snared toxicities)			
CPI	Anticoncor agonta	Dharmaaalagu	Use of combination regimens with advantages & disadvantages	C2 C2	CPI	
CDL	(Clinical Dharmanala av)	Filamacology	-Ose of combination regimens with advantages & disadvantages	C2,C5	CDL	C3 MCQS/FBQ
1.00	(Chilical Pharmacology)	Debassianal Saismana	Define Specific which and a superhabits according to ICD 11 diamontic	<u>C2</u>	LCIC	MCO- SEO
L89	Specific Phobias and	Benavioral Sciences	Define Specific phobias and agoraphobia according to ICD-11 diagnostic	C2	LGIS	MCQs, SEQ,
	Agoraphobia		criteria	<b>G2</b>		
			Enlist the etiological and epidemiological factors in causation of disease	C2		
			Enumerate relevant investigations for diagnosis of specific phobias and	C3		
			agoraphobia.			
			Discuss the relevant investigations and differential diagnosis specific	(C3)		
			phobias and agoraphobia related disorder and its brief management plan			
L90	Post-Traumatic Stress	Psychiatry	Define Post-Traumatic Stress Disorder disorders according to ICD-11	C1,A2	LGIS	MCQ
	Disorder		diagnostic criteria (C1)			
			Enlist the etiological and epidemiological factors causations of disease (C1)	C1, A2		
			Enumerate relevant investigations for diagnosis of acute stress reaction. (C2)	C2, A2		
			Discuss the relevant investigations and differential diagnosis of Post-			
			Traumatic Stress Disorder and its brief management plan (C3)	C3, A2		
P 19	P drug & Prescription	Pharmacology	<ul> <li>P drug &amp; prescription writing for STDs</li> </ul>			C3
	writing					OSPE
	(STDs)					
P20	Autopsy	Forensic Medicine	Describe the contents of Medicolegal/postmortem reports.	Preparati	The student	
	Visits/Postmortem &		Describe the requirements of a mortuary.	on of	will be keen	
	Medicolegal		Describe the classification of pattern of injuries in MLC cases.	MLC/aut	enough to	
	Work/Research		Observe autopsy and Medicolegal case management at DHQ, Hospital.	opsy	highlight and	
				report.	express	
				1	his/her	
					obligations	
					towards cases	
					of	
					Medicolegal	
					injuries and	

					deaths	
P21	Lab Diagnosis of fungal	Pathology	-IDENTIFY different types of fungus	P3	Demonstrate	OSPE
	infection		- Perform different lab test for identification of fungus in lab		safe handling	
					of lab	
					equipment	
					and follow	
					SOPs A3	

L75	Sexually	Family Medicine	classify STDs	C1	LGIS	MCQs, SEQs
	transmitedinfections		Describe the management approach to a patient with STD in family	C2		
			practice	C2		
			Identify at risk patients and offer them screening	C2		
			Describe prevention of STDs			

## Bioethics:

L3 Medical Errors Medical ethics Understand Medical Errors C2 LGIS <ul> <li>Explain the background of medical errors C2</li> <li>Elaborate why medicine susceptible to error C2</li> <li>Delineate the reasons of reluctance to report C2</li> <li>Classify the medical errors</li> </ul>	MCQs
Classify the metical errors	

### **Reference Books**

#### Pharmacology:

- 1. Katzong's Basic and Clinical Pharmacology, 13<sup>th</sup> edition
- 2. Essentials of Medical Pharmacology(KDTripathi), 7<sup>th</sup> edition
- 3. Liponcotty Illustrated Review, 7<sup>th</sup> edition
- 4. Katzong's and Trevor's Pharmacology, 12<sup>th</sup> edition

#### Forensic medicine:

#### Text book

Parikh's Textbook of Medical Jurisprudence, Forensic Medicine & Toxicology

#### Reference Books

- 1. Principles & Practice of Forensic Medicine by Nasib R Awan
- 2. Principles of Forensic Medicine & Toxicology by Rajesh Bardale

#### Pathology:

Warren and Levinson Review of medical Microbiology and Immunology 14<sup>th</sup> Edition Jawetz Melnick & Adelbergs Medical Microbiology 28 Edition

Medicine:

Davidson Textbook of Medicine

Surgery:

Balley & Love Textbook of Surgery

Medical Ethics:

Medical Errors: The Scope of the Problem. Fact sheet, Publication No. AHRQ 00-P037. Agency for Healthcare Research and Quality, Rockville, MD.

http://www.ahrq.gov/qual/errba

http://nbcpakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 195)

NBC Guidelines for Healthcare Professionals\* Interaction with Pharmaceutical Trade and Industry

http://nbcpakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 276)

nbcpakistan.org.pk/assets/ppi\_guidelines\_may\_2011-1-final-copy-on-PHRC-wbesite.pdf Open source document

http://karachibioethicsgroup.org/PDFs/Karachi\_Bioethics\_Group\_Ethical\_Guidelines.pdf Karachi Bioethics Group Institutional Ethical Guidelines for Physician Pharmaceutical Industry Interaction

Medical Ethics:

http://nbcpakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 194)

Time Table 2023

## Integrated Modular Curriculum

Microbes & Anti Microbials Module -VI

Duration Of Module:O7 WeeksModule Coordinators:Dr. Syeda Fatima Sughra RizviModule Co-Coordinator:Dr.Faiza Zafar

Module Committee					
Vice Chancellor RMU	Prof. Dr. Muhammad Umar				
Director DME	Prof. Dr. Rai Muhammad Asghar				
Convener Curriculum	Prof. Dr. Naeem Akhter				
Dean Basic Sciences	Prof. Dr. Ayesha Yousaf				
Additional Director DME	Prof. Dr. Ifra Saeed				
Chairperson Pharmacology & Implementation Incharge 3 <sup>rd</sup> year MBBS	Dr. Asma Khan				
Chairperson Pathology	Prof. Dr. Mobina Dodhy				
Chairperson Forensic Medicine	Dr Filza				
Focal Person Pharmacology	Dr Sobia				
Focal Person Pathology	Dr Fareeha Afzal				
Focal Person Forensic Medicine	Dr. Gulzeb				
Focal Person Medicine	Dr. Saima Ambreen				
Focal Person of Gynecology	Dr. Sobia Nawaz				
Focal Person Community Medicine	Dr. Afifa Kulsoom				
Focal Person Quran Translation Lectures	Mufti Abdul Wahid				
Focal Person Family Medicine	Dr Sadia Khan				
Focal Person Bioethics Department	Prof. Dr. Akram Randhawa				
Focal Person Surgery	Dr Huma Sabir				

Reviewed by: Module committee Approved by: Curriculum Committee RMU

Prepared By: Dr. Syeda Fatima Sughra Rizvi Pathology Department,
DATE / DAV			11.20, 12.00			12:00 DM 02:0	)0 PM		
DATE/DAY	4		<u>11:30 -12:00</u> Dis shows intern L 1	D ( 1	D' ' I'	12:00 PM - 02:0			
			Biochemistry L1	Batch	Discipline	Topic of Practical			
				А	Pharmacology P-1				
Monday 5-6-23			Revisit Lecture	В	Forensic Medicine	End module Theory Example	End module Theory Exam/ viva		
				С	Pathology P-3				
	-		Pathology L2*	Batch	Discipline	Topic of Practical			
Tuesday			Structure of Bacterial Cell wall	В	Pharmacology P-1				
6-6-23			Name:Dr.TayyabaAli,Dr.Muddas	С	Forensic Medicine P-2	End module Exam/ viva			
	8:00 AM Clinica	11: 30 AM al Clerkship	Venue: LH1,LH 2	А	Pathology P-3				
1			Medical Ethics L3	Batch	Discipline	Topic of Practical			
Wednesday				С	Pharmacology P-1				
7-6-23			Medical Errors	А	Forensic Medicine P-2	End module Exam/ viva			
				В	Pathology P-3				
			Pharmacology L-4*	Pathology L5*			Community medicine L-	6	
Thursday			Introduction to Chemotherapy		12:00 PM - 01:0	0 PM 01:00 PM - 02:00 PM		M - 02:00 PM	
8-6-23			Dr.Asma Khan, Dr.AttiyaMunir	Bacterial Dr. Eariba	Metabolism and growth c	urve Teachers name: Disposal of Waste: Dr Khaula Dr. Imran			
			LH1, LHII	Dr.Farma	i,, Dr. Syeda Fatilla Kizvi		Teacher Name		
				Venue:L	H1.LH 2		Venue: LH2, LH1		
	08:00am - 08:45am	08:45am - 09:30am	09:30am – 10:15am	10	:15am - 11:00am	11:00am - 12:00pm	, , , , , , , , , , , , , , , , , , ,		
	MedicineL-7	SurgeryL-8	Pathology L-9	Pathology	y L -10	Pharmacology L-11			
Friday 9-6-23	Introduction and basic symptoms analysis and investigations Teacher Name: Prof. M. Khurram/Dr. NidaAnjamVenue: LH1,LH2	Microbiology of Surgical infection Teacher Name:DrAurangzaib, Dr.Atif Venue: LH 2,LHI	Bacterial Genetics Teacher Name: Dr.Fariha,, Dr. Syeda Fatima Rizvi Venue: LH1,LH 2	Pathogen agents in Dr.Tayya Venue: I	esis of infectious microbiology Name: baAli,Dr.Rabiya Khalid .H1, LH2	Penicillin l Classification and pharmacokinetics Dr.ZuneraHakim,Dr.S obiajavaid LHI,LHII			
	08:00am - 08:45am	08:45am – 09:30am	09:30am – 10:30am	10:3	30 AM – 11:00 am	11:00am – 12:00pm	12:00:pm – 01:00pm	01:00pm – 02:pm	
Saturday	Medicine L-12	Surgery L-13	Pharmacology L-14		BREAK	Pathology L-15	Pharmacology L16	Family Medicine L-17	
10-6-23	Fever of unknown origin Teacher Name: :Prof. M. khurram/Dr. NidaAnjam Venue: LH1.LH2	Presentation of surgical infectionsTeacherName:Dr. HumaSabir,Dr.RahatS Venue: LH2,LHI	Penicillin ll Pharmacodynamics with interaction Dr.ZuneraHakim,Dr.Sobiajavaid LHI,LHII			Laboratory diagnosis in microbiology Teacher Name: Venue: Dr.Fariha,, Dr. Syeda Fatima Rizvi LH 1.LH 2	Vancomycin Dr.ZuneraHakim,D r.Sobiajavaid LHI,LHII	Ethical Consideration of infectious diseases Name: Dr. Sadia Venue: LH 2	

#### Time Table 3<sup>rd</sup> YearMBBS – Microbes And Anti Microbial Module 2023 (1<sup>st</sup>Week)

Time Table 3 <sup>rd</sup>	Year MBBS	-Microbes Ai	nd Anti Micro	bial Module	2023
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(2<sup>nd</sup>Week)

DATE / DAY	8:00 AM	11:00 AM	11:00 am – 12:00pm				12:00 PM	√ − 02:00 PM			
	Clinical Cler	rkship	Pathology L-18*	Batch	Discipline		Topic of Practical				
Monday 12-6-23			Anti-microbial drugs resistance Teacher Name: Prof.NaeemAkhtar, DrMuddasarrah Venue iLH 1, LH 2	A B	Pharmacology Forensic Medicine	P-4 P-5	1-P drug & prescription wi 2-P drug & Prescription wi Teacher Name: 1Dr.Uzma. Venue: Lecture Hall: 06, E Autopsy Visits (Practical) 1-Microscope 2-Bacterial 1	prescription writing for various types of superficial skin infections Prescription writing(Tonsillitis & Upper respiratory infections) ame: 1Dr.Uzma,Dr.umaima,Dr.RubinaDr.Haseeba cture Hall: 06, Experimental Lab isits (Practical) DrNaila Venue: Lecture Hall: 04 Forensic Lab one 2 Bactarial Morphology			
			,	С	Pathology	P-6	Teacher Name: 1-Dr.Unaiz	za 2-Dr.Nida			
							Venue: Pathology Lab, NT	B			
			Forensic Medicine L-19*	Batch	Discipline		Topic of Practical	Teacher Name:	1 skin infactions		
Tuesday 13-6-23	Fuesday 13-6-23		(Exhumation & postmortem artifacts)	В	Pharmacology	P-4	2-P drug & Prescription w 2-P drug & Prescription w Teacher Name: Dr.Uzma,I Venue:Lecture Hall: 06 Ex	ting tor various types of superficial skin infections ting (Tonsillitis & Upper respiratory infections) r.umaima,Dr.rubinaDr.Haseeba perimental Lab			
	Batch : A S	Surgery	Venue:LH 1, LH 2	С	Forensic Medicine	P-5	Autopsy Visits (Practical)	DrNaila Venue: Lecture Hall: 04 F	orensic Lab		
	Batch : B Sub	Specialty		А	Pathology	P-6	1-Microscope 2-Bacterial I Teacher Name: 1-Dr.Unaiz Venue: Pathology Lab, NT	Morphology za 2-Dr.Nida 'B			
	Daten . C M	leuleme	Pathology L-20*	Batch	Discipline		Topic of Practical	Teacher Name:			
Wednesday 14-6-23	(Refer to annexure 2) dnesday 5-23		Sterilization and disinfection 1	С	Pharmacology	P-4	1-P drug & prescription wi 2-P drug & Prescription wi Teacher Name: Dr.Uzma,I Venue:Lecture Hall: 06 Ex	vriting for various types of superficial skin infections writing (Tonsillitis & Upper respiratory infections) ,Dr.umaima,Dr.rubinaDr.Haseeba Experimental Lab			
1.025			Rafi,Dr.Mehreen	А	Forensic Medicine	P-5	Autopsy Visits (Practical)	DrNaila Venue: Lecture Hall: 04 F	orensic Lab		
			Venue: LH 1, LH 2	В	Pathology	P-6	1-Microscope 2-Bacterial I Teacher Name: 1-Dr.Unaiz Venue: Pathology Lab, NT	Name: 1-Dr.Unaiza 2-Dr.Nida Pathology Lab, NTB			
			Pathology L-21*		Pathology L-	22		SurgeryL-23			
Thursday 15-6-23			LH1Staphylococci 1 Teacher Name: : Prof.Mobina ,Dr. Fatima tuz Zahra Venue:LH1,LH2	Sterilizat Venue: I	12:00 PM – 01:00 PM Sterilization and disinfection2 Name: Sara Rafi,Dr.Mehreen Venue: LH 1, LH 2			01:00 PM Critical Surgical infections and th Iqbal , Dr. Zafar Venue: LH2,	eir treatment Teacher Name:Dr.		
	08:00am - 08:45am	08:45am - 09:30am	09:30am – 10:15am	10:	15am - 11:00am		11:00am - 12:00pm				
	Forensic Medicine L-24*	Pharmacology L25	Pathology SGD	Patholog	y L- 26	Pha	armacology L27				
Friday 16-6-23	Inorganic irritants Metallic Poisons (Arsenic) Teacher Name: DrShahida DrRomana LH2, LH1	Cephalosporins Dr. Sobia , Dr.Zunaira LH1,LH11	Clostridia (All 4 types) Teacher Name: Dr.MuddasarrahDr.Fatima Rizvi, Dr.Fariha Sardar ,Dr.MehreenDr.Amna Venue: LH1,LH2,LH6,Pharma Lab	Staphylo Teacher ,Dr.Fatir Venue:L	Staphylococci 2 Teacher Name: Prof.Mobina Jpr.Fatima Tuz Zahra Venue:LH1,LH		scellaneous Cell wall ibitors Zunera,Dr.Sobia 1,L LHII				
	08:00am - 08:45am	08:45am - 09:30am	09:30am – 10:30am	10:3	0 AM – 11:00 am		11:00am – 12:00pm	12:00:pm - 01:00pm	01:00pm – 02:pm		
Saturday 17-6-23	Peads L-28 Neonatal Tetanus Teacher Name: Dr.muhammadHafiz,Dr.NoshinaRi az Venue:: LH2, LH1	Surgery L-29 Prevention of surgical infection Teacher Name: Dr.AbdulQadir, Dr.Sarmad Venue: LH 2, LH I	Pathology L 30 Streptococci Name:Prof.Mobina ,Fatima Tuz Zahra Venue: LH 1, LH 2				hology L-31* am Negative cocci seria acher me:Dr.Mehreen,Dr.Sara fi Venue: LH1, LH2,	Peads L-32 Diphtheria, Pertusis,Chickenpox Teacher Name: Dr.asmatperveen,Dr.Afrah Tariq Venue: LH2,LHI	Pharmacology C***/SGD Pencillin (clinical Pharmacology) Dr.ARsheenDr.Uzma,r.Umaima Venue: LH1,LH2,LH6,Pharma Lab		
	Rawalpindi Medical University Rawalpind         Time Table 3 <sup>rd</sup> Year MBBS – Microbes And Anti Microbial Module 2023         (3 <sup>rd</sup> Week)										

DATE / DAY	8:00 AM 11:00 AM	11:00 am – 12:00pm			12:00 PM - 02:00 PM			
Monday	Clinical Clerkship	Pathology L-33*	Batch	Discipline	Topic of Practical			
19-6-23		Listeria, Corynebacterium	А	Pharmacology P-7	P drug & Prescription writing	Teacher Name Dr.Uzma,Dr.umaima,	Venue:Lecture Hall: 06 Experimental Lab	

Integrated Modular Curriculum

#### Microbes and Antimicrobial Module

			Diphtheria	ı, Bacillus				(UTIs)	Dr.rubinaDr.Haseeba	
	Batch : A	Surgery	Teacher N Wafaue: I	ame: Prof.Mobina ,Prof .H1,LH 2	В	Forensic Me P-8	dicine	Inorganic irritants Metallic Poisons (Mercury, Copper& Zinc)SGDS \ CBI	DrShahida	Venue: Lecture Hall: 04 Forensic Lab
	Batch : B	Sub Speciality			С	Pathology P-9		Culture media	Teacher Name: Dr.IqbalHaider	Venue: Pathology Lab, NTB
			Pathology	/ L-34	Batch	Disci	pline	Topic of Practical	·	
Tuesday	Batch : C	Medicine	Introduction and E. col	on to Enterobacteriacae i, Klebsiella 1	В	Pharmacolog P-7	gy	P drug & Prescription writing (UTIs)	Teacher Name: Dr.Uzma,Dr.umaima, Dr.rubinaDr.Haseeba	Venue:Lecture Hall: 06 Experimental Lab
20-6-23	(Refer to a	annexure 2)	DrFatima	a Tuz Zahra	С	Forensic Me P-8	dicine	Inorganic irritants Metallic Poisons (Mercury, Copper& Zinc)SGDS \ CBI	DrShahida	Venue: Lecture Hall: 04 Forensic Lab
			Venue: LH	H1, LH2,	А	Pathology P-9		Culture media,	Teacher Name:Dr.IqbalHaider	Venue: Pathology Lab, NTB
			Pathology	L-35	Batch	Disci	pline	Topic of Practical		
Wednesday		Introduction to Enterobacteriaca		on to Enterobacteriacae	С	Pharmacology P-7		P drug & Prescription writing(UTIs)	Teacher Name: Dr.Uzma,Dr.umaima, Dr.rubinaDr.Haseeba	Venue:Lecture Hall: 06 Experimental Lab
21-0-23	21-6-23		Teacher Name: Name: Dr.Amna Noor,, DrFatima ZahraVenue:		А	Forensic Me P-8	dicine	Inorganic irritants Metallic Poisons (Mercury, Copper& Zinc)SGDS \ CBI	DrShahida	Venue: Lecture Hall: 04 Forensic Lab
			LIII, LII2	,	В	Pathology P-9		Culture media,	Teacher Name: Dr.IqbalHaider	Venue: Pathology Lab, NTB
			Pathology	L-36	Pharma	cology L37			Pathology	r L-38
			Shigella, V	Shigella Vibrio Cholerae 12:00 PM - 01:00 PM				01:00 PN	I – 02:00 PM	
Thursday 22-6-23			Teacher N Dr.Tayyał Khalid Venue: Lł	'ame: Name: ba Ali, ,Dr.Rabiya 11,LH2,	Tetracycline Teacher Name: Dr.Asma khan Dr.AttiyaMunir Venue: LH2, LH1				Salmonella 1 Teacher Name: Name: Prof.NaeemAkhtar,Dr.Muddasarrah Zahid Venue: LH1, LH2,	
Friday	08:00am – 9:00 am Pathology L39*	9:00am – 10:00am Medicine	e L40*	10:00am – 11:00am Pe	eads L 41		11:00am - L 42	12:00am Pharmacology		
Seminar day Typhoid 23-6-23	Salmonella infection Prof.NaeemAkhtar , Dr.Muddasarrah Zahid LHI, LHII	Enteric Fever Prof.Khurum,Dr.NidaAnjumL	.H1, LH11	Enteric Fever/Acute Di Hasham,Dr.Muneeba Io	arrhoeaDr. qbal LHl,	Amal LHII,	Quinol Dr.As	ones/Floroquinolones ma Khan , Dr.Attiya LHI, LHII		
	08:00am - 08:45am	08:45am - 09:30am	09:3	30am – 10:30am	10:3	30 AM - 11:00	am	11:00am - 12:00pm	12:00:pm - 01:00pm	01:00pm - 02:pm
	Medicine L-43	Family MedicineL-44	Pathology	L-45				Pathology S-**	Pathology CBL-	Forensic Medicine L-46
Saturday 24-6-23	Brucellosis Teacher Name: Prof.khurum, Dr.Nida, Venue: LH1, LH2,	An approach to patient with fever Teacher Name: Dr. Venue: LH1, LH2,	Gram neg respiratory Teacher N Dr.Rabiya Venue: LH	ative rods related to / tract ame: Dr.Tayyaba Ali, Khalid 11, LH2,		BREAK		Helicobacter and Compylobacter Teacher Name:Dr.MuddasarrahDr.Fati ma Zahra, Dr.Tayyaba ,Dr.Rabiya Khalid Venue: LH1, LH2, LH 6, Phama Lab	Gram Negative Rods Related to Zoonotic diseases Teacher Name: Dr. SyedaAyesha,Dr.Unaiza, Dr.Faiza ,Dr.Haider. Venue:LH1, LH2,	Inorganic irritants Metallic Poisons Lead Teacher Name: : DrRaheel DrShahrukh Venue: LH 2, LH1

## Time Table 3<sup>rd</sup> yearMBBS –Microbes And Anti Microbial Module 2023

Rawalpindi Medical University Rawalpindi (4<sup>th</sup>Week)

DATE / DAY	8:00 AM 11:00 AM	11:00am – 12:00pm	12:00 PM - 02:00 PM		
	Clinical Clerkship	Pharmacology C*	Batch	Discipline	Topic of Practical
Monday	Batch : A Surgery	Tetracycline Dr.Robina, Dr.Haseeba, Dr.Uzma,Dr.Arsheen	А	Pharmacology P-10	P drug & Prescription writing (Pnemonia) Teacher Name:Dr.Uzma,Dr.umaima,Dr.rubinaDr.Haseeba Venue: Lecture Hall: 06 Experimental Lab
24-7-23	Batch : B Sub Speciality	Venue: LH1,LH2,LH6,Pharma Lab	в	Forensic Medicine P-11	Non-Metallic Poisons (Phosphorus& Iodine )SGDS \ CBL Teacher name :Dr.Raheel Venue: Lecture Hall: 04Forensic Lab
			С	Pathology 12	Gram Staining,ZNStaing Dr.Saeed

Pharmacology L47     Batch     Discipline     Topic of Practical     T       (Refer to annexure 2)     Sulphonamides, Tripithoprim Dr. Asma Khan, DrAttiyaMunir     B     Pharmacology     P-10     Pharmacology     Pharmacology     PL	Teacher Name a.Dr.umaima,Dr.rubinaDr.Hasee		
Sulphonamides, Tripithoprim     P drug & Prescription writing       Dr. Asma Khan, DrAttiyaMunir     B     Pharmacology     P-10     (Pnemonia) Teacher Name Dr. Uzma, J	a,Dr.umaima,Dr.rubinaDr.Hasee		
Traseday Venue: Lecture Hail: 06 Experimental	tal Lab	eba	
25-7-23 Non-Metallic Poisons (Phosphorus & I Teacher name :Dr.Raheel Venue: Lecture Hall: 04Forensic Lab	k Iodine )SGDS \ CBL		
A Pathology 12 Gram Staining,ZNStaing Dr.Saeed Venue: Pathology Lab, NTB			
Pharmacology L-48** Batch Discipline Topic of Practical T	Teacher Name		
Aminoglycosides     P drug & Prescription writing       Teacher Name: Dr.Asma Khan     C     Pharmacology     P-10     (Pnemonia) Teacher Name:Dr.Uzma,I       ,Dr.AttiyaMunir,     Venue: Lecture Hall: 06 Experimental	a,Dr.umaima,Dr.rubinaDr.Hasee tal Lab	eba	
Wednesday     Venue: LH2, LH1     Non-Metallic Poisons (Phosphorus&       26-7-23     A     Forensic Medicine     P-11       Teacher name :Dr.Raheel     Venue: Lecture Hall: 04Forensic Lab	& Iodine )SGDS \ CBL		
B Pathology 12 Gram Staining,ZNStaing Dr.Saeed Venue: Pathology Lab, NTB			
Pharmacology CBL         12:00am - 1:00pm         1:00-2:00 pm			
Thursday Pathology L-51 Surgery L-49*			
27-7-23 Aminoglycoside Dr.Robina, Dr.Haseeba, Dr.Uzma,Dr.umaima LHI,LHII,LH 6,Pharma lab Antimicrobial treatment in surgical in Teacher Name:,Dr.Amna Noor,Dr.Mehreen Venue: LH1, LH2	Antimicrobial treatment in surgical infections Teacher Name: Dr.Robina Shahzad ,Dr.Samra S Venue: LH2, LH1		
Friday     Youm E Ashur (9th Muharam ul Haram)       28-7-23     28-7-23			
Saturday 29-7-23 Youm E Ashur (10 <sup>th</sup> Muharam ul Haram)			

Rawalpindi Medical University Rawalpindi

## Time Table 3<sup>rd</sup>Year MBBS – Microbes And Anti Microbial Module 2023

$\sqrt{-th}$	<b>XX7</b> 1 \
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DATE / DAY	8:00 AM 11:00 AM	11:00 am – 12:00pm			12:00 PM - 02:00 PM	[	
	Clinical Clerkship	Pathology CBL	Batch	Discipline	Topic of Practical	Teacher Name	Venue
Monday		Spirochetes	А	Pharmacology -P13	P drug & Prescription writing (Herpes infections)	Dr.Uzma,Dr.umaima, Dr.rubinaDr.Haseeba	Venue: Lecture Hall: 06 Experimental Lab
31-7-23	Batch : A Surgery Batch : B Sub Speciality	Spirochetes Teacher Name: Dr.Abid,Dr.Saeed,Dr.Mahjabee n,Dr.Nida Venue: LH1, LH2, Pharmacology L-52	В	Forensic Medicine P-14	CORROSIVES (sulphuric acid, Nitric acid, Hydrochloric acid carbolic and oxalic acid )SGDS \ CBL	DrShahrukh	Venue:LH04 Forensic lab
	Batch : C Medicine		С	Pathology P-12	Biochemical Test, Catalase, Coagulase, Urease, oxidase, indole test, citrate	Teacher Name: Dr.Faiza Zafar	Venue: Pathology Lab, NTB
	(Refer to appearing $2$ )	Pharmacology L-52	Batch	Discipline	Topic of Practical	Teacher Name	Venue
Tuesday 1-8-23		Macrolides Dr.Zunera, Dr.Sobia LHI,LHII	В	Pharmacology P-13	P drug & Prescription writing (Herpes infections)	Teacher Name Dr.Uzma,Dr.umaima, Dr.rubinaDr.Haseeba	Venue: Lecture Hall: 06 Experimental Lab

				С	Forensic Medicine P-14	CORROSIVES (sulphuric acid, Nitric acid, Hydrochloric acid carbolic and oxalic acid )SGDS \ CBL	DrShahrukh	Venue:LH04 Forensic lab	
				А	Pathology P-12	Biochemical Test, Catalase, Coagulase, Urease, oxidase, indole test, citrate	Teacher Name: Dr.Faiza Zafar	Venue: Pathology Lab, NTB	
			Pharmacology L-53	Batch	Discipline	Topic of Practical	Teacher Name	Venue	
Wednesday 2-8-23			Pharmacology L-54	С	Pharmacology P-13	P drug & Prescription writing (Herpes infections)	Teacher Name: Dr.Uzma,Dr.umaima, Dr.rubinaDr.Haseeba	Venue: Lecture Hall: 06 Experimental Lab	
	And oxazolidindiones Dr.Zunaira, Dr.Sobia	А	Forensic Medicine P-14	CORROSIVES (sulphuric acid, Nitric acid, Hydrochloric acid carbolic and oxalic acid )SGDS \ CBL	DrShahrukh	Venue:LH04 Forensic lab			
			Venue. Errz, Errr	В	Pathology P-12	Biochemical Test, Catalase, Coagulase, Urease, oxidase, indole test, citrate	Teacher Name: Dr.Faiza Zafar	Venue: Pathology Lab, NTB	
			Medicine L-54	Pathology	CB L-		Pharmacology L-55		
			Influenza		12:0	0 PM - 01:00 PM	01:00 PM -	02:00 PM	
Thursday 3-8-23			Influenza Teacher Name: Dr. Prof.khurum, Dr.Nida, Venue: LH1, LH2		l Viruses lame: Dr.Faiza,Dr.H H1, LH2,	Haider, Dr.AyeshaDr.Unaiza	Clindamycine , Chlorumphenicol Dr.Asma Khan, Dr.AttiyaMunir LHI,LHII		
	08:00am - 08:45am	08:45am - 09:30am	09:30am - 10:15am	10:	15am - 11:00am	11:00am - 12:00pm			
	Peads L-56	Quran Class L-57	Pharmacology L-58	1	Medicine L-59	Community Medicine -L-60			
Friday 4-8-23	Measles / Mumps / Rubella Teacher Name: Venue: LH2, LH1	Taleem-wa-Taalum Venue:- Lecture Hall 1 Teacher : Qari Abdul Wahid	Antiviral drugs 1 Teacher Name: DrAsma Khan "Dr.AttiyaMunirVenue: LH1, LH11	Polio Viru Teacher N Dr.Nida, ,	is lame: Prof.khurum, Venue: LH1, LH2	Housing Teacher Name: Dr.Narjis Dr. Imrana Venue: LH2, LH1			
	08:00am - 08:45am	08:45am – 09:30am	09:30am - 10:30am	10:3	0 AM – 11:00 am	11:00am – 12:00pm	12:00:pm - 01:00pm	01:00pm - 02:pm	
	Peads L-61	Community medicine L-62	Pathology CBL		DDEAN	Pathology L-63	Pharmacology L 64	Medicine L-65	
Saturday 5-8-23	Acute Diarrhoea Teacher Name: Dr.Syra Liaqat,Dr.Huma Asghar Venue: LH2, LH1	Meteorological Environment Teacher Name: Prof .Arshad ,Dr.GulMahar Venue: LH2, LH1	Herpes Viruses, HSV Teacher Name: Dr.Saeed, Dr.Nida,,Dr.Mahjabeen Dr.Abid : Venue: LH1, LH2, Pharma Lab. Lab 6			Vericella Zooster Virus, Cytomegalovirus Teacher Name: Dr Wafa Omer Dr.Rabiya khalid Venue: LH1, LH2	Antivial drug ll Dr.Asma Khan, Dr.AttiyaMunir LHI.LHII	HIV and Immunodeficiency Teacher Name: Prof.khurum, Dr.Nida, Venue: LH1, LH11	

Rawalpindi Medical University Rawalpindi

	Time Table 3 <sup>rd</sup> Year	mbbs –Microbes And Anti M	Aicrobi	al Module –	2023 (6 <sup>th</sup> Wee	<mark>k)</mark>	
DATE / DAY	8:00 AM 11:00 AM	11:00 am - 12:00pm			12:00 PM -	02:00 PM	
	Clinical Clerkship	Pathology L-66	Batch	Discipline	Topic of Practical		
Monday		Respiratory Viruses	А	Pharmacology P-16	P drug & Prescription writing Systemic fungal infections)	Teacher Name Dr.Uzma,Dr.umaima,Dr.ru binaDr.Haseeba	Venue: Lecture Hall: 06 Experimental Lab
7-8-23		Teacher Name:,Dr.Fatima Rizvi , Dr.Fariha Sardar Venue: LH1, LH2	В	Forensic Medicine P-17	DELERIANTS (dhatura ,cannabis & cocaine)(Practical)	Teacher Name: .Dr.Gulzaib	Venue: Forensic lab
			С	Pathology P-15	ELISA, PCR, ITC	Veek) M – 02:00 PM Teacher Name Dr. Uzma,Dr.umaima,Dr.ru binaDr.Haseeba Teacher Name: .Dr.Gulzaib Dr.Sara Rafi Teacher Name Dr.Uzma,Dr.umaima,Dr.ru binaDr.Haseeba Teacher Name: .Dr.Gulzaib Dr.Sara Rafi Teacher Name: .Dr.Gulzaib Dr.Sara Rafi Teacher Name Teacher Name .Dr.Gulzaib Dr.Sara Rafi Teacher Name .Dr.Gulzaib Dr.Sara Rafi Teacher Name .Dr.Sara Rafi .Dr.Sara	Venue: Pathology Lab, NTB
	Batch : A Surgery	Pathology L 67	Batch	Discipline	Topic of Practical	Teacher Name	
Tuesday	Batch : B Sub Speciality Batch : C Medicine (Refer to annexure 2)	HIV/ diseases , AIDS, Teacher Name: Prof.Naeem,Prof Wafa Omer	В	Pharmacology P-16	P drug & Prescription writing Systemic fungal infections)	Teacher Name Dr.Uzma,Dr.umaima,Dr.ru binaDr.Haseeba	Venue: Lecture Hall: 06 Experimental Lab
8-8-23		Venue: LH1, LH2,	С	Forensic Medicine P-17	DELERIANTS (dhatura ,cannabis & cocaine)(Practical)	Teacher Name: .Dr.Gulzaib	Venue: Forensic lab
			А	Pathology P-15	ELISA, PCR, ITC	Dr.Sara Rafi	Venue: Pathology Lab, NTB
Wednesday		Pharmacology L 68	Batch	Discipline	Topic of Practical	Teacher Name	
9-8-23		Anti viraldugslll (AIDS)	С	Pharmacology	P drug & Prescription writing	Teacher Name	Venue: Lecture Hall: 06

			Teacher Name: DrAsma Khan "Dr.AttiyaMunirVenue: LH1,		P-16	Systemic fungal infections)	:Dr.Uzma,Dr.umaima,Dr.r ubinaDr.Haseeba	Experimental Lab	
			LHII	А	Forensic Medicine P-17	DELERIANTS (dhatura ,cannabis & cocaine)(Practical)	Teacher Name: .Dr.Gulzaib	Venue: Forensic lab	
				В	Pathology P-15	ELISA, PCR, ITC	Dr.Sara Rafi	Venue: Pathology Lab, NTB	
			Pathology L-69	Patholog	y L-70		Pharmacology C BL		
			Miscellaneous, Congenital,		12:00 PM	– 01:00 PM	01:00 PM -	02:00 PM	
Thursday			Zoonotic, Arboviruses	Measles	/ Mumps / Rubella		Antivral (Clinical Pharmacolo	gy	
10-8-23			Teacher Name:	Teacher	Name:,		Dr.Rubina,Dr.Haseeba	Dr.Rubina,Dr.Haseeba	
		Prof NaeemAkhtarDr Sara Rafi	Dr.Fatim	a Rizvi , Dr.Fariha S	ardar	Dr.Uzma Umar			
			Venue: LH1, LH2,	Venue: I	LH1, LH2,		Dr.OmaimaAsif		
	08:00am - 08:45am	08:45am – 09:30am	09:30am – 10:15am	10:	15am - 11:00am	11:00am – 12:00pm			
	Behavioural Sciences L-71	Behavioural Sciences L 72	Quran Class L 73	Community Medicine L-74		Pathology CBL-			
Friday	Acute Stress Reaction and	Generalized Anxiety Disorder	Jahalat	Light ,Noise and radiation		Polio, Rabies Virus			
11 0 25	Name:Dr sadia vasir	Dr Ourstul Ain Dr Zona Tahir		Maimaana		Dr. Avesha Dr. unaiza			
	Dr AzeemRao Venue: LH2	Venue: LH2_LH1	Venue: Lecture Hall 1	Dr Abd	ilaOadoos	Venue:			
	LH1	, ender 2012, 2011	Teacher : Qari Abdul Wahid	Venue: I	.H2, LH1	LH1,LH2,LH6,Pharma Lab			
	08:00am - 08:45am	08:45am - 09:30am	09:30am - 10:30am	10:3	) AM – 11:00 am	11:00am - 12:00pm	12:00:pm - 01:00pm	01:00pm - 02:pm	
	Family medicine L-75	Pathology L-76	Pharmacology L77		DDEAK	Pathology CBL-	PharmacologyCB L	Gynae OB L-78	
Saturday 12-8-23	Sexually transmitedinfections Dr.Sadia Venue: LH2	Systemic Mycosis Teacher Name: DrSara Dr.Mehreen Venue: LH1, LH2,	Antifungal drugs 1 Teacher Name: DrAsma ,Dr.Attiya Venue: Lecture Hall: LH2,			Cutaneous and subcutaneous Mycosis Teacher Name: Dr.Faiza ,Dr.Haider, Dr,AyeshaDr.Unaiza Venne: LH1_LH2	Antifungal Agents (Clinical Pharmacology)Dr.Rubina,Dr. HaseebaDr.Uzma Umar Dr.OmaimaAsif Venue: LH1 LH2 LH6 Pharma Lab	Infections in pregnancy Dr.Sobia Nawaz	

Rawalpindi Medical University Rawalpindi

	Tim	e Table 3 <sup>rd</sup> Year MBI	BS-Microbes And Anti	Microl	bial Module	– 2023 (7 <sup>th</sup> W	<mark>/eek)</mark>	
DATE / DAY	8:00 AM	11:00 AM	11:00 am – 12:00pm			12:00 PM	( - 02:00 PM	
	Clinical C	lerkship		Batch	Discipline	Topic of Practical		
Monday 14-8-23			14 <sup>th</sup> August Indep	pende	ence Day			
			Pharmacology L79	Batch	Discipline	Topic of Practical	Teacher Name	
Tuesday 15-8-23			Antifungal II (Drugs for Systemic fungal infection,andonycomycosis) Dr.ASMA,Dr.Attiya LHI,LHII	Whole class	Pathology P-18	Lab Diagnosis of fungal infection	Dr. Abid Hassan	Venue: CPC hall NTB if available/ LHI,LH2
	Dotob - A	Company	Pathology CBL	Batch	Discipline	Topic of Practical	Teacher Name	
	Batch : A Batch : B Su	Candida Teacher Name:Dr.Abid, , Dr.Saeed Dr.Nida ,Dr.Mahjabeen	Whole class In two shifts	Pharmacology P-16	P drug & Prescription writing (STDs)	Dr.Uzma,Dr.umaima,Dr.rubina Dr.Haseeba	Venue: Lecture Hall: LH1,LH2	
Wednesday 16-8-23	(Refer to an	Venue: LH1, LH2, LH 6, Phama Lab	Whole class in 2 shifts	Forensic Medicine P-17	ANIMAL POISONS Management of Snake ,Wasp, Bees Scorpion Bite	Teacher Name: Dr.Naila	Venue: LH1,LH2	
			Pharmacology L 80	Forensic	Medicine L 81		Pathology CBL	
			Anticancer 1 (Classification and		12:00 PM	- 01:00 PM	01:00 PM - 02:00 PM	
Thursday 17-8-23				Somnife Teacher	rous Poisons Name: DrGulzaibE	DrFilza Venue: LH2,	Oppertunistic Mycosis Dr.Abid,D Dr.Mahjabeen LHI,LHII	r.Saeed,Dr.Nida,
		09:00am – 10:00 am	10:00am – 11:00am	11:	00am - 12:00pm			
Friday	Pathology 82	Medicine L 83	Peads L 84	DID LG	IS 85			
Seminar Dengue 18-8-23	Pathological aspects and Lab Diagnosis of Dengue Fever Dr.Tayyaba ,Dr.Rabbiya khalid LHI,LHII	Pathological aspects and Lab     Dengue fever ,       Diagnosis of Dengue Fever     Prof.Khurum, Dr.Nida       Dr.Tayyaba ,Dr.Rabbiya khalid     LHI,LHII		Preventive measures and spread of dengue fever,Dr.Mujeeb , LHI,LHII				
	08:00am - 08:45am	08:45am - 09:30am	09:30am - 10:30am	10:3	0 AM - 11:00 am	11:00am - 12:00pm	12:00:pm - 01:00pm	01:00pm - 02:pm
Saturday 19-8-23	Pharmacology L86 Anticancer II (cell cycle specific agents) Dr.Zunera, Dr.Sobia LHI,LHII	Forensic medicine L87 Forensic Psychiatry Teacher Name: DrFilza DrGulzaib Venue: LH2, LH1	Pharmacology L 88 Anti-Cancer III (cell cycle non- specific agents) Dr.Zunera, Dr.Sobia LHI,LHII	BREAK		Forensic Medicine L-89 Food poisoning Teacher Name: DrShahrukhDrRaheel Venue: LH2,	Behavioural Sciences L-90 Specific Phobias and Agoraphobia Teacher Name: Dr. MehmoodAli,Dr.Mehboob Ali Shah Venue: Lecture Hall: LH1	Behavioural Sciences L-91 Post-Traumatic Stress Disorder Teacher Name: Dr Zaidan idrees Dr.ZarnainUmer Venue: LH2 LH1

Rawalpindi Medical University Rawalpindi

	Time Table 3 <sup>rd</sup> Year MBBS–Microbes And Anti Microbial Module – 2023(8 <sup>th</sup> Week)											
DATE / DAY	8:00 AM 11:00 AM 1	1:00am - 11:450am 11:45 PM - 12:30 PM 12:	30 -1:15 PM 1:50 PM - 02:00 PM									
21-8-23		Assessment										
Tuesday 22-8-23		Assessment										
Wednesday 23-8-23		Assessment										
Thursday 24-8-23		Assessment										
Friday Seminar Dengue 25-8-23		Assessment										
Saturday 26-8-23		New Module										

SR	Disciplines	LGIS	SGD	CBL	SDL	Hours
No.						
1.	Pharmacology	21	03	03	05	32
2.	Pathology	27	02	08	06	43
3.	Forensic Medicine	06	0	0	06	12
4.	Community Medicine	04	0	0	0	04
5.	Surgery	05	0	0	0	05
6.	-Medicine	08	0	0	0	09
	-Department of Infectious					
	diseases (DID)	01				
7.	Peads	05	0	0	0	05
8.	Behavioral Sciences	05	0	0	0	05
9.	Quran Class	02	0	0	0	02
10.	Family Medicine	03	0	0	0	03
11.	Medical Ethics	01	0	02	0	03
	Total Hours $= 123$					

#### Teaching Hours

#### Practical and Clinical Clerkship hours

Disciplines	Practical hours	Disciplines	Clerkship hours
Pharmacology	2x6 = 12 hrs	Surgery	2.5 x 4 x6= 60 hrs
Pathology	2x6 = 12hrs	Medicine	2.5 x 4 x6= 60 hrs
Forensic Medicine	2x6 = 12 hrs	Sub Specialty	2.5 x 4 x6= 60hrs

 $\blacktriangleright$  LGIS (L) \*

➢ SGD (S) \*\*

➢ CBL (C) \*\*\*

> SDL (SL) \*\*\*\*

✤ For CBL/SGDs, whole class will be divided into 04 batches

Batch: A = Lecture hall 1(starting from clinical batch A1 to A4)

Batch: B = Lecture Hall 02 (starting from clinical batch A5, B1,B2,B3)

Batch: C = Lecture Hall 06 (starting from clinical batch B4, B5, C1,C2)

Batch: D = Pharma Lab (starting from clinical batch C3,C4)

&C5)

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

# Lectures & Practical distribution of All subjects

Subject	No of lectures	Lecturer	No of lectures	No. Of lectures per facilitator
		Dr. Asma Khan Head of Department	11	LGIS
Pharmacology	21	(Associate professor)		
		Dr.Attiya Munir Assistant Professor (9LGIS)	11	LGIS
		Dr.Sobia Assistant Professor (10 LGIS)	10	LGIS
		Dr.Zunera Hakim Assistant Professor (10 LGIS)	10	LGIS
Forensic Medicine	06	Dr Romana Head of Department	02	LGIS
		DrFilza Assistant Professor	02	LGIS
		Dr Shahida Senior Demonstrator	02	LGIS
		DrGulzaib Senior Demonstrator	02	LGIS
		Dr.Raheel Senior Demonstrator	02	LGIS
		Dr.Shahrukh Senior Demonstrator	02	LGIS
Forensic Medicine	06	Dr.Naila	02 (Practical )	-
Practical		Dr.Shahida	01(Practical)	-
		Dr.Raheel	01(Practical)	-
		Dr.Shahrukh	01(Practical)	-
		DrGulzaib	01(Practical)	-
Pathology		Prof.Mobina Dodhy (Professor)	03	03 LGIS
		Prof. Naeem Akhtar (Professor)	05	05LGIS
		Prof. Wafa Omer (Professor)	03	03 LGIS
		Dr. Mudassira Zahid (Associate Professor)	06	06 LGIS
		Dr. Fatima tuz Zohra (Assistant Professor)	06	05 LGIS, 01 SGD
		Dr. Tayyaba Ali (Assistant Professor)	06	05 LGIS, 01 SGD
		Dr. Rabiya Khalid (Assistant Professor)	06	05 LGIS, 01 SGD
		Dr. Fariha Sardar (Demonstrator)	07	05 LGIS, 01 SGD, 01 SDL
		Dr. Syeda Fatima Rizvi (Demonstrator)	07	05 LGIS, 01 SGD, 01 SDL
		Dr. Mehreen Fatima (Demonstrator)	07	05 LGIS, 01 SGD, 01 SDL
		Dr. Sarah Rafi (Demonstrator)	05	04 LGIS, 01 SGD

				03 LGIS, 01SGD.01SDL
		Dr. Amna Noor (Demonstrator)	05	
Pathology Practical	06	Dr.Saeed (Sn.Demonstrator)	01	
		Dr. Faiza (Sn.Demonstrator)	01	
		Dr. Iqbal Haider (Sn.Demonstrator)	01	
		Dr.Mahjabeen (Demonstartor)	01	Practical
		Dr.Nida (Demonstartor)	01	
		Dr.Abid (Sn.Demonstrator)	01	
		Dr. Unaiza(Demonstartor)	01	
Surgery	05	Dr.Aurangzaib (Senior Registrar)	01	
		Dr.Atif (Assistant Professor)	01	
		Dr.Huma sabir Khan (Assistant Professor)	01	
		Dr.Rahat (Assistant Professor)	01	
		Dr.Iqbal (Assistant Professor)	01	
		Dr.Zafar (Assistant Professor)	01	LCIS
		Dr.Abdul Qadir (Senior Registrar)	01	LGIS
		Dr.Sarmad (Assistant Professor)	01	
		Dr.Rubina Shahzad (Senior Registrar)	01	
		Dr.Samra (Senior Registrar)	01	
		Dr.Umer (Senior Registrar)	01	
		Dr.Tooba (Senior Registrar)	01	
Peads	05	Dr.M Hafeez (Senior Registrar)	01	
	00	Dr.Noshina Riaz (Senior Registrar)	01	
		Dr.Naila Ahsan (Senior Registrar)	01	
		Dr.Qudsia Riaz (Senior Registrar)	01	
		Dr.Amal Hasham (Senior Registrar)	01	
		Dr.Muneeba Iqbal (Senior Registrar)	01	LOIG
		Dr.Qurat ul Ain(Senior Registrar)	01	LGIS
		Dr. Ayesha Tariq (Senior Registrar)	01	
		Dr.Syrah Liaqat (Senior Registrar)	01	
		Dr.Huma Asghar (Senior Registrar)	01	
		Dr.Nida Mumtaz(Senior Registrar)	01	
		Dr.Jawaria Zia (Senior Registrar)	01	7
Medicine	09	Prof.Khurum (Professor)	09	LGIS
		Dr.Nida (Assistant Professor)	09	LGIS

DID	01	Prof Mujeeb (Head of DID)	01	LGIS
Behavioral		Dr.Sadia Yasir (Assistant Professor)	01	
Sciences		Dr.AzeemRao (Assistant Professor)	01	
		Dr.ZonaTahir (Senior Registrar)	01	
	05	Dr.Qurat ul Ain (Assistant Professor)	02	LCIS
		Dr.Mehmood Ali khan (Assistant Professor)	02	LOIS
		Dr.Mehboob Ali Shah (Consultant)	01	
		Dr.Zaidan Idrees (Senior Registrar)	01	
		Dr.Zarnain Umer		
Family Medicine	03	Dr.Sadia HOD	03	LGIS
Medical Ethics	03		03	2 LGIS, 1 CBL
Quran Class	03	Qari Abdul Wahid (HOD)	03	LGIS

## Section IV-Assessment Policies

Contents

- Assessment plan
- > Types of Assessment:
- > Modular Assessments
- Block Assessment
- > Table 4: Assessment Frequency & Time in Microbes and Anti-Microbial Module

## Section IV:

#### **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  $(2/3^{rd})$  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.

## Assessment

#### 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.

## Assessment Plan For Each Block

Module 1 Total Marks 155

Theory 60 Viva-Practical : 95

Module 2 Total Marks 155

Theory 60 Viva Pactical : 95

		The	eory			Viva F	Practical		Internal assessment			
	Mod	lule 1	Module	2/Block	Module 1		Module 2/Block		Theory	Practical		
	60		6	60 40		80			45	45		
Pathology	MCQ	SEQ	MCQ	SEQ	Viva	C	OSPE 45	Viva & Copy 35	Module Exams	OSPE	Viva	Lab Rota tion
	25	35	25	35	40	AV 4x5 =20 LAB 4x5=20 OB St 3=15		30+ 5+ book =40	<b>7.5</b> X6 =45	<b>8</b> X3=24	<b>3</b> X6 =18	3
Total Marks		12	20			135 90				)		

#### Internal assessment

For	module 1	Theory	7.5 marks
		Viva	3 marks
For module 2		Theory	7.5 marks
		Viva	3 marks
		OSPE	8 marks
Total Intern Ass marks for Block			29 marks
Lab r	otation		3 marks (to be added at end of year)

			Module 1				Module 2					Block			
		T	heory	Practic	al Viva	The	eory		Practic	al Viva		1	Theory	VivaPı	actical
Roll No	Name Of Student	Marks Theory (60)	Intern Assess Theory (7.5)	Marks Viva (40)	Intern Assess Viva (3)	Marks Theory (60)	Intern Assess Theory (7.5)	Marks Viva (35)	Intern Assess Viva (3)	Marks OSPE (45)	Intern Assess OSPE (8)	Total Marks Theory (120)	Internal Assessment Theory (Add all Int Ass Marks of Theory )	Total Marks VivaPractical (120)	Internal Assessment VivaPractical (Add all Int Ass Marks of Practical viva)

## Assessment Frequency & Time in Microbes and Anti-Microbial Module

Block		Module – 1	Type of Assessments	Total Assess	ments Time		No. of Assessments	
	Sr #	Microbes and Anti-Microbial Module Module Components		Assessment Time	Summative Assessment Time	Formative Assessment Time		
	1	Mid Module Assessments LMS based (Pharmacology, Pathology, Forensic Medicine, Medicine, Surgery, community medicine,Peads,Family Medicine, )	Summative	30 Minutes		30 Minutes		
Π-	2	Topics of SDL Assessment on MS Team	Formative	10 Minutes (Every Thursday)		l Formative	5 Summative	
Bloch	3	End Module Assessments (SAQ & MCQs Based)	Summative	6 Hours	7 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				

Date / day	Assesment plan	Total marks	Assesment mode	Content	
Thursday 26-7-23	Mid module assesment	20	LMS- 20 mcq	15mcq-(pathology, pharmacology and forensic 5xeach) 3 mcq –Peads 1 community medicine 1 mcq- surgery and 3 MCQ medicine	
8-6-23 15-6-23 22-6-23 26-7-23 3-8-23 10-8-23	Weekly assesements on SDL topics	15 15 15 15 15 15	15 mcq 15 mcq 15 mcq 15 mcq 15 mcq 15 mcq	-(pathology, pharmacology and forensic 5xeach) every week each	
Tuesday S 22-8-23	End module theory exam (9 am to 2pm)	Pathology:60 Marks ForensicMedicine: 40 Marks Pharmacology:50	Forensic medicine (9 to 10:30 am) Pathology,( 10: 45 am to 12 :15pm) Pharmacology (12:15 pm to 2pm)	Pathology- 60 marks Pharmacology-50 Forensic medicine-40 (for mcq/seq distribution see table)	
Thursday 24-8-23	Audiovisual OSPE	Pathology:20Marks ForensicMedicine:15 Marks Pharmacology:25	Whole class in 4-5 divided batches	Pathology:20 marks Pharmacology: 25 Marks Forensic Medicine:15 marks	
23-8-23 24-8-23 25-8-23	Lab OSPE	Pathology:35 Marks Forensic Medicine: 15 Marks Pharmacology 30 marks	Integrated Lab OSPE of batches in respective departments	Pathology:35 Marks ForensicMedicine: 15 Marks Pharmacology 30 marks	
23-8-23 24-8-23 25-8-23	Viva (12pm-2pm)	Pathology: 40 Marks Forensic Medicine: 25 Marks Pharmacology 15 marks	viva of batches in respective department	Pathology- 40 marks Pharmacology-15 marks Forensic medicine -25 marks	

#### Microbes and Anti-Microbial Module Assessment Plan

## Table of Specification (TOS) For Microbes and Anti-microbial module end block Assessment for 3rd Year MBBS

Sr. #	Discipline	No. of MCQs (%)	No. of M to cog	ICQs accontraction in the second s	ording nain	No. of SEQs (%) No. Marks of		No. of SEQs according to cognitive domain		Viva voce	OSPE Marks	Total Marks	
			C1	C2	C3	items		C1	C2	C3			
1.	Pharmacology	15	2	9	4	7	35	2	4	1	15	55	120
2.	Forensic Medicine	15	4	9	3	5	25	2	2	1	25	30	95
3.	Pathology	25	2	5	3	7	35	2	4	1	40	55	155
	Total												370

# Section III

(Sample MCQ & SEQ papers with analysis)



3<sup>rd</sup> Year MBBS

Study Guide

Integrated Modular Curriculum

Hematology and Immunology Module- V 2023

ruble of contents	Table	of	Contents
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University Moto, Vision, Values & Goals	3
Module –	4
Hematology and Immunology Module	4
Section I –	5
Terms & Abbreviations	5
Teaching and Learning Methodologies / Strategies	7
Large Group Interactive Session (LGIS)	7
Figure 1. Prof Umar's Model of Integrated Lecture	7
Small Group Discussion (SGD)	8
Self-Directed Learning (SDL)	9
Case Based Learning (CBL)	9
Section II	10
Learning Objectives, Teaching Strategies & Assessments	10
Learning Objectives	11
Week 1 and 1 day	11
Week 2	14
Week 3	17
Week 4	19
Week 5	21
Assessment Policies	
Assessment plan	
Types of Assessment:	
Learning Resources	
Table of Specification (TOS) For CVS & Resp Module Assessment for Third Year MBBS Modules during running academic session:	
Annexure I	
(Sample MCQ & SEQ papers with analysis)	
Annexure II	48

## Hematology And Immunology Module Team

Module Name	:	Hematology and Immunology Module
Duration of module	:	05 Weeks and 4 days
Coordinator	:	Dr. Fatima-tuz-Zahra
Co-coordinator		:Dr. Abid
Reviewby	:	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				
4.	Dean Basic Sciences	Prof. Dr. Ayesha Yousaf				
5.	Additional Director DME	Prof. Dr. Ifra Saeed				
6.	Chairperson Pharmacology & Implementation Incharge 3 <sup>rd</sup> year MBBS	Dr. Asma Khan				
7.	Chairperson Pathology	Prof. Dr. Mobina Dodhy				
8.	Chairperson Forensic Medicine	Dr Filza				
9.	Focal Person Pharmacology	Dr Attiya				
10.	Focal Person Pathology	Dr Fareeha Sardar				
11.	Focal Person Forensic Medicine	Dr. Gulzeb				
12.	Focal Person Medicine	Dr. Saima Ambreen				
13.	Focal Person of Gynaecology	Dr. Sobia Nawaz				
14.	Focal Person Community Medicine	Dr. Afifa Kulsoom				
15.	Focal Person Quran Translation Lectures	Mufti Abdul Wahid				
16.	Focal Person Family Medicine	Dr Sadia Khan				
17.	Focal Person Bioethics Department	Prof. Dr. Akram Randhawa				
18.	Focal Person Surgery	Dr Huma Sabir				

	Module T	ask Force Team					
1	Coordinator	Dr Fatima-tuz-Zahra					
		(Assistant Professor of Pathology)					
2.	DME Focal Person	Dr. Maryum Batool					
2	Co. acondinator	Dr. Abid					
э.	Co-coordinator	(Demonstrator of Pathology)					
	DME Implem	entation Team					
1.	Director DME	Prof. Dr. Rai Muhammad Asghar					
2.	Add. Director DME	Prof. Dr. Asma Khan					
3.	Assistant Director DME	Dr Omaima Asif					
4	Module planner &	Dr. Omeime Acif					
4.	Implementation coordinator	Dr. Omanna Asn					
5.	Editor	Mr Ahmed Rafay, Dr Omaima Asif					

#### **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 underpinningthe practice of medicine.
- Develop and polish the skills required for providing medical services at all levels of the Health care deliverysystem.
- Help you attain and maintain the highest possible levels of ethical and professional conduct in your futurelife.
- Kindle a spirit of inquiry and acquisition of knowledge to help you attain personal and professional growth & excellence.

#### **RMU Motto**



#### Module -

#### Hematology and Immunology Module

Introduction: Hematology and Immunology module provides integration of core concepts that underlie the basic science/pathology of hematological diseases 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 Hematology and Immunology module is designed to impart basic knowledge about Pharmacology, Pathology, Forensic Medicine, Community Medicine, Pediatrics, family medicine, Gynaecology, Psychiatry & Medicine . This knowledge will serve as a 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 5 weeks & 4 days 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)

#### Tables & Figures

- Table1. Domains of learning according to Blooms Taxonomy
- Figure 1. Prof Umar's Model of Integrated Lecture
- Table2. Standardization of teaching content in Small Group Discussions
- Table 3. Steps of taking Small Group Discussions

Sr. #	Abbreviation	Domains of learning
	С	Cognitive Domain: knowledge and mental skills.
	C1	Remembering
1.	C2	Understanding
	C3	Applying
	C4	Analyzing
	C5	Evaluating
	C6	Creating
	Р	Psychomotor Domain: motor skills.
	P1	Imitation
2	P2	Manipulation
2.	P3	Precision
	P4	Articulation
	P5	Naturalization
	А	Affective Domain: feelings, values, dispositions, attitudes, etc
	A1	Receive
3.	A2	Respond
5.	A3	Value
	A4	Organize
	A5	Internalize

## Table1. Domains of learning according to Blooms Taxonomy

#### 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 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%

# Table 3Steps of taking Small Group Discussions

Step 1	Sharing of Learning objectives by using	First 5
	students Study guides	minutes
Step 2	Asking students pre-planned questions from	5minutes
	previous teaching session to develop co-	
	relation (these questions will be	
~ ~ ~	standardized)	
Step 3	Students divided into groups of three and	5minutes
Store 4	allocation of learning objectives	15
Step 4	ACTIVITY: Students will discuss the	15 minutes
Stop 5	Fach group of students will present its	20 min
Step 5	learning objectives	20 11111
Step 6	Discussion of learning content in the main	30min
1	group	
Step 7	Clarification of concept by the facilitator by	15 min
	asking structured questions from learning	
	content	
Step 8	Questions on core concepts	
Step 9	Questions on horizontal integration	
Step	Questions on vertical integration	
Step	Ouestions on related research article	
11		
Step	Questions on related ethics content	
12	~	
Step	Students Assessment on online MS teams (5	5 min
13 Stop	MCQS)	5 min
14	facilitator	5 11111
Step	Students feedback on the SGD and entry into	5 min
15	log book	
Step	Ending remarks	
10		

#### 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
  - Paediatrics

# Learning Objectives

	Week 1 and 1 day								
Code No	Торіс	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching strategy	Assessment tools			
L1	FIREARM I	Forensic	Define firearm injuries and describe the classification of firearms and ballistics. Describe the structure of a ammunition of a firearm/bullet. Briefly describe the structure of a firearm along with its mechanism of action.	C1 C2 C2	LGIS	MCQs, SEQs, OSPE,viva			
L2	Prescription writing& Common errors in prescription writing	Medical ethics	Identify the essential components of a prescription Identify common errors in prescription writing and their reasons Correlate the importance of prescription elements in minimizing prescription errors Describe the role of prescription audit in evaluating the pattern and errors in hospitals Demonstrate an ability to write a correct hand-written prescription Define polypharmacy Rationalize the use of polypharmacy in different conditions Discuss the consequences of polypharmacy	C1 C1 C3 C2 C1 C1 C3 C2	LGIS	MCQs			
L3	Pharmacovigilance & role of CTU in drug development	Medical ethics	Define pharmacovigilance Identify the purpose of pharmacovigilance Discuss the adverse effect reporting process for health care professionals Enlist the tools that can be used for ADR reporting in Pakistan Recognize the role of DRAP in identification and reporting of ADR Describe the role of CTU in drug development process	C1 C1 C2 C1 C2 C2 C2	LGIS	MCQs, SEQs,OSPE,Viva			
S1	Haemopoietic growth factors	Pharmacology	Tabulate the "Haematopoietic Growth Factor" Describe mechanism of action, uses & adverse effects of Epoietin Describe mechanism of action, uses & adverse effects of G-CSF analogs	C1 C2 C2	SGD	MCQ/SEQ			
L4	Introduction to Haematolgy and classification of Anemia	Pathology	Explain functional capabilities of hematopoietic stem cells Describe the maturation sequence in the development of RBCs, WBCs and platelets and the key growth factor affecting them Define anemia and classify anemia according to morphological and etiological causes Explain iron metabolism. Describe pathogenesis of iron deficiency aneamia Differentiate Diagnoses of Microcytic Hypochromic Anemia	C1 C2 C2 C1 C2 C1 C2 C1 C2 C3	LGIS	MCQs, SEQs,OSPE			
L5	Obsessive Compulsive Disorder (OCD)	Behavioral Sciences	Define OCD according to ICD-11 diagnostic criteria Enlist the etiological and epidemiological factors causations of disease Enumerate relevant investigations for diagnosis of OCD Discuss the relevant investigations and differential diagnosis of OCD and its brief management plan	C1, C1, C2 C3	LGIS	MCQ/SEQ			
L6	Megaloblatic Anemia	Pathology	Define pancytopenia and its causes, Classify macrocytic anemia according to etiological causes Explain B12 metabolism. Describe pathogenesis of Megaloblastic aneamia Lab Diagnosis of megaloblastic Anemia	C1 C2 C1 C2	LGIS	SEQS, MCQs, OSPE			
L7	Iron deficiency Anemia	Paediatrics	Discuss causes of Iron deficiency	C1	LGIS	MCQs,SEQs			
			Discuss Clinical Features and investigations						
-----	---	--------------------------	---	----------------------------	------	------------------			
			Make plan of Treatment	C2					
L8	Introduction To Immunology and Cellular Basis of Immune Response	Pathology /immunology	Discuss main functions of immune system. Differentiate between innate & acquired immunityDifferentiate between cell mediated and antibody mediated immunity. Discuss types of active & passive immunity. Discuss origin, development & differentiation of cell lineages.	C2 C2 C2 C2 C2	LGIS	MCQs, SEQs,OSPE			
	1		Discuss activation & inhibition of T cells.	C2 C2					
L9	FIREARM-II	Forensic medicine	Describe the terminal ballistics effects on the body of a victim in case of various types of firearms and ranges Define various terms related with firearms, smooth bored weapons and riffled firearm	C2 C1	LGIS	MCQs, SEQs,OSPE			
L10	Hemolytic Anemia classification & acquired hemolytic anemias	Pathology /Heme	Describe general features of haemolytic anaemia Classify hemolytic anemia Describe the pathogenesis and morphological findings in hemolytic anemia Enlist lab diagnosis of hemolytic anemia	C2 C3 C2 C2	LGIS	SEQS, MCQs, OSPE			
C1	MEGALOBLASTIC ANEMIA	Pathology /Heme	Enlist types of macrocytic anaemias Explain vitamin B12 and folate metabolism. Enumerate causes of vitamin B12 and folate deficiency. Identify clinical features of megaloblastic anemia Describe the lab diagnosis of megaloblastic anemia	C1 C2 C1 C3 C3	CBL	Cl			
L11	HEMATINICS	Pharmacology	Describe pharmacokinetics of Iron, Vitamin B12 and Folic Acid Explain the indications of iron, folic acid& Vitamin B12 for treatment of anemia.	C2 C2	LGIS	MCQs SEQ			
L12	FIREARM-III	Forensic medicine	Describe the special findings to be noted in a victim of smooth bore firearm w.r.t distance and direction. Briefly explain the autopsy findings in firearm victims. State the method of collection and disposal of firearm entities	C2 C2 C2	LGIS				
L13	RBC Membranopathies & enzymopathies	Pathology/heme	correlate mode of inheritance, pathogenesis and lab diagnosis of hereditary spherocytosis. correlate the Inheritance pattern, pathogenesis and lab diagnosis of heamolysis due to G6PD deficiency. Describe the genetic basis, pathogenesis and lab diagnosis of heamolysis due to sickle cell anemia Classify and describe pathogenesis and lab diagnosis of warm and cold antibodies immune haemolyticanaemias	C3 C3 C2 C3	LGIS	MCQs&SEQ			
L14		Quran studies							
C 2	Hematinics	Pharmacology	Describe iron toxicity and its mechanism	C2	CBL	MCQs, SEQs,OSPE			
L15	Lipid lowering drugs I	Pharmacology	Classify anti hyper-lipidemic drugs Explain the mechanism of action of HMG-CoA reductase inhibitors in the treatment of hypercholesterolemia	C1 C3					
L16	Antigen antibodry reaction	Pathology /immunology	Discuss the serological test used in diagnosis of infectious diseases Discuss the serological test used in diagnosis of autoimmune diseases Discuss the basis of Rh incompatibility	C2 C2 C2	LGIS	MCQs/SEQs			
L17	Lipid lowering drugs II	Pharmacology	acology Discuss MOA, pharmacological effects, therapeutic uses &adverse effects of nicotinic acid, fibrates and bile acid binding resins		LGIS	MCQs, SEQs			

			Enlist & discuss the combinations therapies used in different conditions of hyperlipidemias	C2		
S- 2	2 Antibody and compliment system		Discuss antibody structure & classes. Discuss variations of antibodies; isotypes, allotypes & idiotypes. Discuss genes of antibodies. Discuss antibody class switching. Outline pathways, activation and regulation of complement system. Identify inherited and acquired deficiency of complement component		SGD	MCQs, SEQs,OSPE
L18	Pathogenesis and lab diagnosis of thalassemia	Pathology/heme	Define and classify various types of Thalassemia. Correlate the genetic basis/ Inheritance pattern and pathogenesis of Thalassemia. Describe the lab diagnosis of thalassemia	C3 C3 C2	LGIS	MCQs, SEQs,OSPE
C3	Lipid lowering drugs iii	Pharmacology	Discuss MOA, pharmacological effects, therapeutic uses &adverse effects of nicotinic acid, fibrates and bile acid binding resins Enlist & discuss the combinations therapies used in different conditions of hyperlipidemias		CBL	MCQs, SEQs,OSPE
P1	Prescription and p drugs of iron deficiency anemia	Pharmacology	Prescription and p drugs of iron deficiency anemia		The student will be able to write treatment of iron deficiency anemia	lip OSPE
Р2	firearm injuries	Forensic Medicine	Identify different types of firearm weapons and their parts including cartridge and bullet. Identify and differentiate between entry and exit wounds of firearm injury. dentify `different characteristics of firearm injuries both in living and dead		The student will be able to manage a case of firearm injury.A3	MCQS,VIVA,OSPE
Р3	RBC Morphology	Pathology	Enlist the changes in shape and size of RBCS in the peripheral blood films in different cases of anemias.		Identify the peripheral smear findings in different types of anemia A3	MCQs, OSPE

			Week 2			
Code No	Торіс	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching Strategy	Assessment tool
L20	Approach and workup of anemia	Pathology	Define Anemia Classify Anemia (microcytic, macrocytic, normocytic) Describe clinical presentation of different types of anemia= Discuss Investigation plan according to the type of anemia Discuss management of anemia according to the type	C1 C2 C2 C2 C2 C3	LGIS	MCQs, SEQs,OSPE
L21	Thalassemia	Paediatrics	Define Thalassemia Identify the types and pathophysiology Describe the clinical features Discuss the management of Thalassemia and its complications	C2 C1 C2 C2 C2 C2	LGIS	MCQs,SEQs,OSPE
L 22	MHC and Transplantation	Pathology /immunology	Discuss origin, type, structure & biological importance of MHC proteins Explain mechanisms of tissue transplant rejection. Explain graft versus host reaction and its types. The input of test used in blood group and HLA typing of Describe different methods of reducing rejection of transplanted tissues	C1 C2 C2 C3 C3	LGIS	MCQs, SEQs,OSPE
L23	Firearm – IV	Forensic Medicine	Describe the special findings to be noted in a victim of rifled w.r.t distance and direction. Briefly explain the autopsy findings in firearm victims. State the method of collection and disposal of firearm entities		LGIS	MCQs, SEQs,OSPE
S-3	Aplastic Anemia	Pathology	Enlist causes of pancytopenia Describe the pathogenesis and lab diagnosis of aplastic anaemia Outline types of bone marrow transplant its procedure and complications.		SGD	MCQ,VIVA, OSPE
L24	Aplastic Anemia	Paediatrics	- Define Aplastic anemia Enlist the etiology and types Describe the pathophysiology and clinical features Make differential diagnosis Enumerate complications Manage according to the causes	C1 C2 C2	LGIS	MCQs, SEQs,OSPE
L25	Blast Injuries	Forensic Medicine	Define blast Injuries and classify its types. Briefly describe the autopsy finding in different types of blast injuries. State the medico-legal importance of blast injuries	C1 C2 C2	LGIS	MCQs, SEQs,OSPE
CBL 3	Hypersensitivity Reaction I and II	Pathology /immunology	- Define hypersensitivity. Define type- 1 immediate hypersensitivity. Discuss mediators involved and their effects. Define type- II hypersensitivity. Discuss different antibody -dependent mechanisms with examples. Discuss clinical manifestations of hypersensitivity Correlate clinical presentation of hypersensitivity diseases with underlying pathogenetic mechanisms		CBL	MCQs&SEQ
CBL 4	Image: Construction of the section of the sectin of the section of the section of the section of the se		C1 C2 C2 C2 C2 C3	CBL	MCQs, SEQs,OSPE	

			pathogenic mechanisms			
L26		QURAN STUDIES				
L27	Management Of Hypersensitivity Reactions	Medicine	Explain pathogenesis of Hypersensitivity reaction. Classify Hypersensitivity reactions. Describe general approach to the allergic patient in view of clinical assessment, investigation and management. Enlist cause of anaphylaxis, Describe approach to patient in view of clinical assessment, investigation and management. Recognize other common allergic conditions like angioedema, specific allergens and c1 inhibitor deficiency.	C2 C2 C2 C1 C1	LGIS	MCQs, SEQs
L 28	Mechanical injuries – I (Abrasion & Bruise	Forensic Medicine	Define mechanical injury and describe the classification of mechanical injuries Briefly describe the mechanism of production of a mechanical injury. Explain the different types of Abrasions and Bruise\ contusion. Briefly state the method of duration or age estimation of an injury with respect to type of injury. Describe the medicolegal importance of age estimation of an injury	C1 C2 C2 C3 C2	LGIS	MCQs/SEQs
L 29	Anemia in Pregnancy	Obstetrics and gynaecology	Define anemia in pregnancy Enlist causes of anemia Describe pathophysiology of anemia Enlist effects of anemia on mother and fetus Classify anemia in pregnancy Enlist basic and advanced investigations Differentiate types of anemia Select the appropriate treatment plan Formulate the management plan		LGIS	OSPE,MCQS
SGD 4	Immune Tolerance And Autoimmunity.	Pathology /immunology	Explain basis of immunologic tolerance. Describe mechanisms of autoimmunity Describe general patterns of autoimmune diseases. Differentiate between various autoimmune		SGD	MCQs,SEQ,Viva
L30	Immunosup pressant drugs I	pharmacology	Enlist immune-suppressants Describe the mechanism of action of different immune-suppressants	C2 C2	LGIS	MCQs,OSPE
L31	Host Defense	Community medicine	Differentiate between active & passive immunity Categorize the primary & secondary immune response Compare between humoral & cellular immunity Illustrate the combine humoral & cellular response Differentiate between herd & ring immunity	C4 C4 C5 C3 C3	LGIS	MCQs, SEQs,OSPE
L32	Immunodeficiency	Pathology	Discuss congenital immunodeficiencies of B, T cells and complement system Discuss acquired immunodeficiencies of B & T cells and complement system	C2 C2	LGIS	MCQS
P4	P drug & Prescription writing( Dyslipidemia)	Pharmacology			The student will be able to write treatment for dyslipidemias	OSPE
Р5	Assessment of burn victim	Forensic Medicine and Toxicology	Enlist and debate on the laws in relation to burns Distinguish between antemortem and post-mortem burns. Diagnose the manner of death in case of burns. (suicidal, homicidal and accidental)Explain the autopsy findings of burn victim State the role of medicolegal officer in case of receiving burnt dead body		.CBL/SGD	OSPE

Р6	Lab diagnosis of hemolytic anemia	Pathology	Enlist investigations of hemolytic anemia Enlist peripheral smear findings of hemolytic anemia	Identify periphera l smear findings in different cases of hemolyti c anemia P2	Identify RBC inclusions on peripheral smearA3	OSPE
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	Week 3							
Code No	Торіс	Discipline	Knowledge	Skill	Attitude	MOA		
L-32	WBC disorder and classification of leukemia	Pathology	Discuss disorders involving increase or decrease in different types of WBC. Classify acute and chronic leukemia Differentiate between the clinical presentation of different leukemias	C2 C3 C3	LGIS	MCQs, SEQs,OSPE		
CBL 5	Acute Leukemia	Pathology	Define leukemia and enumerate its causes. Explain Role of oncogenes and tumour suppressor genes. Describe clinical features of acute leukaemia.	C1 C2 C3	CBL	MCQs, SEQs,OSPE		
L33	Chronic Leukemia	Pathology	Define leukemia and enumerate its causes. Explain Role of oncogenes and tumour suppressor genes. Describe clinical features of acute leukaemia.	C1 C2 C3	LGIS	MCQs, SEQs,OSPE		
L34	Myeloproliferatice Diseases	Medicine	Define and classify myeloproliferative disorders (acute, chronic, polycythemia rubravera, myelofibrosis, essential thrombocythemia) Differentiate between different myeloproliferative disorders Discuss investigations and management of Myelo proliferative disorders	C2 C2 C3	LGIS	MCQs, SEQs,OSPE		
L35	Myeloprolifertive disease/Myelodysplastic syndrome	Pathology	Outline the salient feature and lab investigation of Polycythemia, Essential       C2         Thrombocythemia, Myelofibrosis       C2         Describe Myelodysplastic syndrome       C2		LGIS	MCQs, SEQs,OSPE		
S- 6	Chronic leukemia	Pathology	thology Describe clinical features of chronic leukemias Interpret lab diagnosis of chronic Myelofibrosis and Lymphoid Leukaemias			MCQs, SEQs,OSPE		
L36	Mechanical injuries – II (Laceration & Incised Wounds) Medicine Medicine Medicine Medicine Medicine Medicine Medicine Medicine Medicine Medicine Medicine Medicine Medicine Medicine		Describe and differentiate between the features of lacerated wound and incised wound Briefly describe the types of laceration. Differentiate between incised & lacerated wounds. State the medico-legal importance of both incised and lacerated wound	C2 C2 C2 C2 C2 C2 C2	LGIS	MCQs, SEQs,OSPE		
L37	Lymphoproliferative Diseases	Medicine	cine Differentiate between leukaemia and lymphoma, recognise risk factors Recognize types of lymphoma and Staging Describe investigation plan Discuss prognocis		LGIS	MCQs,SEQs, OSPE		
L38	ALL/Lymphoma	Peads	Define lymphoma and ALL Briefly describe clinical features Discuss plans of investigations Make treatment plan Briefly discuss about chemotherapy and radiotherapy	C1 C2 C2 C3 C2	LGIS	MCQs,SEQs		
L39	QURAN STUDIES							
L40	Immunosuppressant drugs II	Pharmacology	Discuss the salient features of pharmacokinetic profile of different immune- suppressants	C2	LGIS	C2 MCQs/SEQs		
SGD- 7	Immunosuppressant drugs III	Pharmacology	Enumerate the clinical indications and adverse effects of use of immune- suppressants	C2	SGD	SEQS, MCQs, OSPE		
L41 Mechanical injuries – III (Punctured and stab wound) Forensic Med		Forensic Medicine	. Describe the different types of punctured wound with calculation of age of a punctured wound. Briefly describe the features of Stab wound State the medico-legal importance of Punctured and Stab wound.	C2 C2 C2	LGIS	MCQs, SEQs		
CBL- 6	Multiple myeloma	Pathology	Outline lab diagnosis of multiple myeloma Describe prognosis of multiple myeloma. Describe pathogenesis and morphology of multiple myeloma Correlate clinical history with lab findings in a patient with multiple myeloma		CBL	MCQs, SEQs,OSPE		
CBL-	Immunosuppressant drugs	Pharmacology	Clinic pharmacology of immunosuppressant drugs	C3	CBL	MCQs, SEQs,OSPE		

7	IV		Rationale of using immunosuppressant in specific scenario			
L-42	Lymphoma	Pathology	Classify lymphoid neoplasms. Describe the etiology, pathogenesis, classification and various types of Hodgkin lymphoma. Describe the etiology, pathogenesis, classification and various types of non Hodgkin lymphoma.	C1 C2 C2	LGIS	MCQs, SEQs,OSPE
L43	Immunizing agents	Community medicine	Memorize all types of immunizing agentsC1Differentiate between functions of different types of immunoglobulinsC3Recognize different types of vaccines, their storage & administrationC2Describe the comparison ofkilled & live vaccinesC2Describe cold chain & its equipmentC2LGISEnlist the vaccines required cold chainC1C1Recall the uses of antisera or antitoxinsC2Identify the vaccines vial monitorC3Describe the correct storage & use of diluents in vaccinesC2		LGIS	MCQs, SEQs,OSPE
P7	P drug & prescription writing, IHD	Pharmacology	P drug & prescription writing for IHD s in children and adults			OSPE
Р8	Mechanical injuries Self inflicted & Defense Wound	Forensic medicine & Toxicology	Preparation of MLC/autopsy report by Observing different types of self inflicted and defense injuries. Diagnosis of common sites and features of self-inflicted injuries Self inflicted & Defense Wound		Manage a medicolegal case of self- inflicted & defense injuries. Apply the knowledge for classification of the type of injury	OSPE
Р9	Benign WBC Morphology	Pathology	Enlist morphological features of WBC in benign WBC disorders	- Focus the slide on microsco pe P3 Identify different WBCsP3	Identify the morphologica l features of WBC in a peripheral smear from a case of benign WBC disorder.A3	OSPE,VIVA

	Week 4							
Code No	Topic	Discipline	Knowledge	C/P/A	Teaching Strategy	Assessment tool		
					-			
	Planding disorders of		Classify inherited and acquired coagulation disorder.C1	C1	_			
L44	secondary haemostasis	Pathology	Discuss pattern of inheritance and clinical features and lab diagnosis of vWD, C2		LGIS	C2 MCQs/SEQs		
	secondary maemostasis							
			Revise the role of platelets in the coagulation Classify anti-platelet drugs.					
T 45	Antiplatelet, drugs I	tiplatelet, drugs I Pharmacology			LCIE	C2 MCO-/SEO-		
L45			Discuss the mechanism of action of various groups of antiplatelet drugs	C2	LGIS	C2 MCQS/SEQS		
			Describe the clinical uses & adverse effects of different anti-platelet drugs	C2				
CPI			Enumerate thrombolytic drugs	C2				
CBL- 7	Antiplatelet drugs II	Pharmacology	Describe the mechanism of action, indications & adverse effects of		CBL	MCQs,OSPE,Viva		
,	Antiplaceet, drugs n		thrombolytic (fibrinolytic) agents	05				
	Discuss pattern of inheritance, clinical features and diagnosis of hemophilia		Discuss pattern of inheritance, clinical features and diagnosis of hemophilia	C2				
CBL-	Haemophilia / ITP	Pathology	A and B	~ ~	CBL	C3		
8		1 uniorogy	Describe the pathogenesis and lab diagnosis of idiopathic thrombocytopenic	C2	022	PBQ		
			Outline the mechanism of hemostasis & coagulation pathways & trace the	C2				
			role of coagulating factors & platelets in it					
			Classify anticoagulant drugs	C1				
			Describe the mechanism of action of heparin	C2				
L46	Anticoagulants I	Pharmacology	Tabulate the difference between un-fractionated heparin & low molecular	C3	LGIS	MCQs, SEQs		
			weight heparin	~ ~				
			Summarize the indications, precautions & potential adverse effects of	C2				
			heparin	<b>C</b> 2				
			Enumerate direct information innibitors	C2				
I 47	Road traffic Accidents	Forensic medicine	sustained by occupant of a vehicle	$C^{2}$	LGIS	MCOs SEOs OSPE		
L+/	Road traffic Accidents	Porensie medicine	Define terms like Bird foot injury waddle's triad and Dicing injuries	C1	LOID	MCQ3, 5EQ3, 05FE		
			Define Hemophilia	01				
			Discuss the pattern of inheritance					
L48	hemophilia	Paediatrics	Enlist the types and classify according to severity		LGIS			
			Describe the clinical features and complications					
			Discuss Management plan and prophylaxis					
			Define AEFI	C1				
			Describe common, minor vaccines reaction	C2				
			Explain rare, more serious vaccine reactions	C2 C2				
			Memorize case definitions of AEFI	$C_2$				
	Adverse effects following	Community Medicine	Describe the treatment of AEFI	$C_2$		$C^{2}$		
L49	immunization	Community Medicille	Recognize the anaphylaxis	$C^2$	LGIS	MCOs/SFOs		
	mmumzauon		Describe error-related reactions	C3		MIC Q8/DE Q8		
			Illustrate anxiety-related reactions	C1				
			Identify coincidental events after immunization	C1				
			Enlist the precautions to be taken during immunization	C2				
			Investigate AEFI					
	<b>DI U -: :</b>	Medicine	Enumerate causes of bleeding disorders (thrombocytopenia, platelet function	C2				
L50	Bleeding Disorders		disorders, von will brand disease, diseases affecting vessel wall)	C2	LGIS	MCQs,SEQs,VIVA		
			Differentiate between different bleeding disorders	C2				

			Discuss investigation	C2		
L51		Quran class			LGIS	
L52	Injuries and law-I Qisas & Diyat	Forensic medicine	.Classify Hurt on the basis of part involved and briefly describe its types in the light of Pakistan Penal Code with their punishments. Define Itlaf-e-udw, Itlaf-e-salahiyat-e-udw, shajjah, Jurh. Classify Hurt on the basis of manner of infliction and briefly describe its types in the light of Pakistan Penal Code with their punishments	C2 C2	LGIS	C2 MCQs/SEQs
L53	Anticoagulants II	Pharmacology	Describe the mechanism of action of warfarin Outline the major drug interactions of warfarin Enlist the clinical uses of warfarin Identify the adverse effects of warfarin & suggest treatment of warfarin toxicity	C2 C2 C1 C2	SDL	MCQ, Viva
SGD- 8	Anticoagulants III	Pharmacology	Identify the drugs used in the treatment of given case Discuss briefly the salient features of different agents used in this case	C2 C3	SGD	,MCQs,SEQs
L54	Bleeding disorders of secondary haemostasis	Pathology	Classify inherited and acquired coagulation disorder.C1 Discuss pattern of inheritance and clinical features and lab diagnosis of vWD. C2	C1	LGIS	C2 MCQs/SEQs
L55	Injuries and law-II Qisas & Diyat	Forensic medicine	Enlist different types of Qatal in the light of Pakistan Penal Code and their punishments. Classify different degrees of suicide. Classify criminal miscarriages and define Isqat-e-hamal and Isqat-e-Jinin in the light of Pakistan Penal Code with their punishments.	C1 C1 C1	LGIS	MCQs/SEQs
SGD 10	Tumor immunity	Pathology	• Enumerate tumor associated antigens Explain mechanism of tumour immunity Describe antitumor effector mechanisms	C1 C2 C2	SGD	MCQs, SEQs,OSPE
L56	Regional Injuries (Skull & spinal injuries) (Thoraco-abdominal injuries)	Forensic medicine	Briefly describe the head injury, scalp injury, injury to skull, injury to meninges and brain, Classify skull fractures & hemorrhages Explain the method of Coup and countercoup injures. Describe injury to spine and spinal cord.(Whiplash injury) Describe the pattern of thoraco-abdominal injuries with special account of hemothorax, pneumothorax and hemoperitonium	C2 C1 C2 C2 C2 C2	LGIS	MCQs, SEQs,OSPE
P10	P drug & Prescription writing, DVT	Practical Pharmacology	Prescription writing and p drug for DVT	C3		OSPE
P11	Assessment of RTA       Forensic Medicine       Differentiate among the various possible etiologies of Regional Injurie and Special trauma during road traffic accidents.         •Classify Transport and pedestrian injuries		Differentiate among the various possible etiologies of Regional Injuries, and Special trauma during road traffic accidents. •Classify Transport and pedestrian injuries	Identify different injuries in RTA, Classify Transport and pedestrian injuries	Students will be able to manage a case of road traffic accidents.( RTA) A3	OSPE
P12	- Malignant WBC morphology Malignant WBC pathology Pathology Pathology Pathology Pathological features of WBC in acute leukemia.e. blast. C2 Enlist Morphological features of WBC in acute leukemia.e. blast chronic lymphoid and myeloid leukemia and outline features of Reed Sternberg cell C		Identify Blasts and atypical cells in a cse of acute leukemia – P3	Diagnose a case of acute leukemia on peripheral smear A3		

	Week 5							
Code No	Topic	Discipline	Knowledge	C/P/A	Teaching Strategy	Assessment tool		
L57	Immunization schedule	Community medicine	Memorize the EPI schedule Enlist the diseases in EPI Describe recent advance & modification in EPI Enlist the diseases other than EPI against which vaccination is recommended Categorize the vaccination of high risk population	C2 C1 C2 C1 C2	LGIS	MCQs,SEQs,Viva,OS PE		
L58	Fibrinolytic And Antifibrinolytic drugs	Pharmacology	Enumerate thrombolytic drugs Describe the mechanism of action, indications & adverse effects of thrombolytic (fibrinolytic) agents	C1 C2	LGIS	SEQS, MCQs, OSPE		
SGD- 11	Fibrinolytic And Antifibrinolytic drugs	Pharmacology	Name anti-fibrinolytic agents/agents used for neutralizing action of thrombolytic drugs Trace the possible interaction of fibrinolytic agents with anticoagulant(heparin) &antiplatelet drugs(aspirin)		LGIS	MCQs,SEQs, OSPE		
L59	Non- Mechanical Injuries Starvation, Thermal Injuries & Electrocution	Forensic medicine	<ul> <li>Describe the pathophysiology of starvation induced injuries. Describe the forensic importance of starvation injuries. Define non-mechanical injuries and classify its types.</li> <li>Describe the mode of death due to thermal injuries both heat and cold injuries. Classify Injuries due to electrocution.</li> <li>Enlist the factors affecting the production of electrocution burns.</li> <li>Describe the medico-legal aspects of death due to thermal injuries and electrocution.</li> </ul>		LGIS	SEQS, MCQs, OSPE		
S-12	Tumor immunity	Pathology	• Enumerate tumor associated antigens Explain mechanism of tumour immunity Describe antitumor effector mechanisms		CBL	MCQs, SEQs,OSPE		
L59	Hydrocyanic Acid	Forensic medicine	Briefly describe the mechanism of action of hydrocyanic acid. Mention the fatal dose, management & medico-legal importance of hydrocyanic acid. Briefly explain the autopsy findings of a victim of hydrocyanic acid poisoning	C2 C3 C2	CBL	MCQs, SEQs		
L60	Life cycle of Plasmodium	PATHOLOGY	Enlist species of Plasmodium and type of malaria caused by each. Explain life cycle, transmission, epidemiology and pathogenesis of malaria Recall parasitology of protozoa (plasmodium) and vector (anopheles mosquito) Recall pathogenesis including life cycle of malarial parasite	C1 C2 C1 C1	LGIS	C2 MCQs/SEQs		
L61	Sign Symptoms and Management of Malaria SEMINAR	Medicine	Discuss clinical features of malaria Discuss complications of malaria •Describe investigations •Discuss management of malaria •Discuss prevention of malaria		LGIS	MCQ,SEQs,OSPE		
L62	Antimalarial drugs I	Pharmacology	Revise species, life cycle of malarial parasite Give therapeutic classification & Chemical classification of anti- malarial drugs	C1 C2	LGIS			
L63	Complications of malaria	FAMILY MEDICINE	-Discuss management of complications of malaria	C2	LGIS	MCQs		
L64	Antimalarial drugs II	Pharmacology	Describe MOA, pharmacokinetics, indications adverse effects of different anti-malarial agents	C2	LGIS	SEQS, MCQs, OSPE		
L65	Spinal Poisons	Forensic medicine	Briefly describe the mechanism of action of spinal poison.		LGIS	MCQ/SEQ		

			Mention the fatal dose, management & medico-legal importance of spinal poison. Briefly explain the autopsy findings of a victim of spinal poison	C2 C1		
L66	Antimalarial drugs III	Pharmacology	List the drugs used in chloroquine resistant malaria recommended by WHO. Summarize chemoprophylaxis of malaria	C2 C2	LGIS	MCQs,Viva
SGD- 13	Leishmania & Trypanasoma	Pathology	- Explain the, Life cycle, Transmission, epidemiology and Pathogenesis of diseases caused by liesHmania species.	C2 C3	LGIS	MCQs,SEQs
SGD- 14	Disorders of Spleen & Lymph Nodes	Pathology	Describe various disorders of spleen Enumerate causes of lymph node enlargement. Describe various types of acute and chronic lymphadenitis.	C2 C1 C2	LGIS	MCQs,SEQs,OSPE,Vi va
L67	Hydrocyanic Acid	Forensic medicine	Briefly describe the mechanism of action of hydrocyanic acid. Mention the fatal dose, management & medico-legal importance of hydrocyanic acid. Briefly explain the autopsy findings of a victim of hydrocyanic acid poisoning	C2 C3 C2	LGIS	MCQs, SEQs
L68	Inferential Statistics & Anova	Community Medicine	By the end of lecture, students should be able to: Apply ANOVA for comparison of means in more than 2 groups Compute one way and two way ANOVA for a given data set Interpret the results of ANOVA	C3 C6 C5	LGIS	MCQs,SEQs,Viva
P13	P drug & Prescription writing(malaria)	Pharmacology	Recall the drug groups used in malaria treatment	C3		OSPE
P14	Autopsy visit	Forensic medicine	Classify the pattern of injuries in medico legal cases Define fracture. Briefly explain the mechanical forces with reference to fracture of bones. Describe the medicolegal importance of fractures. Classification of a fracture		Manage a medicolegal case of self- inflicted & defense injuries. Apply the knowledge for classification of the type of injury and Observe medico-legal report preparation during field visitsl A3	OSPE
P15	ICT Devices	Pathology	- Outline the uses of ICT devices Explain the principle of ICT devices		Demonstrate safe handling of lab equipment and follow SOPs A3	OSPE

	MEDICAL ETHICS & FAMILY MEDICINE										
lecture	subject	Learning objectives	Cognition level	Teaching strategy	Assessment strategy						
Prescription writing& Common errors in prescription writing	MEDICAL ETHICS	Identify the essential components of a prescription Identify common errors in prescription writing and their reasons Correlate the importance of prescription elements in minimizing prescription errors Describe the role of prescription audit in evaluating the pattern and errors in hospitals	C1 C1 C2 C3	LGIS	MCQs						
Pharmacovigilance		Define pharmacovigilance Identify the purpose of pharmacovigilance Discuss the adverse effect reporting process for health care professionals	C1 C2 C2	LGIS	MCQs						
Complications of malaria	FAMILY MEDICINE	Describe the complications of malaria Give management of complications of malaria	C2 C3	LGIS	MCQs						

### PATHOLOGY SDL

S.NO	Topic	Learning objectives	References
1	Paroxysmal Nocturnal	At the end of SDL students should be able to understand clinical presentation and	Robins Basic Pathology 10th Edition
1	Hemoglobinuria	Pathogenesis of PNH	Page # 417
		At the end of SDL students should be able to understand	
		• The early innate immune response to microbes	
		• The capture and display of microbial antigens	
2	Overview of normal	• Cell-mediated immunity: activation of T lymphocytes and elimination of	Robins Basic Pathology 10th Edition
2	Immune responses	cell-associated microbes	Page # 105-109
		• Humoral immunity: activation of B lymphocytes and elimination of	
		extracellular microbes	
		<ul> <li>Decline of immune responses and immunologic memory</li> </ul>	
		At the end of SDL students should be able to understand	
2	Reactive Leukocytosis	Causes of reactive leukocytosis	Robins Basic Pathology 10th Edition
5		Clinical presentation, pathogenesis, morphology of Infectious	
		mononucleosis	
		At the end of SDL students should be able to understand classification, Clinical	Pohine Resig Pathology 10th Edition
4	Hodgkin Lymphoma	Hodgkin Lymphoma presentation, pathogenesis, morphology, staging and grading of Hodgkin's	
		Lymphoma	1 age # ++1-++2
5	Amyloidosis	At the end of SDL students should be able to understand classification, Clinical	Robins Basic Pathology 10th Edition
5	Amyioluosis	presentation, pathogenesis and morphology of Amyloidosis	Page # 153-158

### FORENSIC MEDICINE AND TOXICOLOGY SDL

S.NO	Topic	Learning objectives	References
1	Firearm	<ul> <li>Define firearm injuries and describe the classification of firearms and ballistics.</li> <li>Describe the structure of a ammunition of a firearm/bullet.</li> <li>Briefly describe the structure of a firearm along with its mechanism of action.</li> <li>Describe the terminal ballistics effects on the body of a victim in case of various types of firearms and ranges</li> <li>Define various terms related with firearms, smooth bored weapons and riffled firearm</li> </ul>	Essential:Parikhs"text book of forensic and toxicology Recommended: Principles of Forensic Medicine & Toxicology by Gautam Biswas
2	Firearm (Smooth bore & Rifled firearm wounds)	<ul> <li>Describe the special findings to be noted in a victim of smooth bore firearm w.r.t distance and direction.</li> <li>Briefly explain the autopsy findings in firearm victims.</li> <li>Describe the special findings to be noted in a victim of rifled w.r.t distance and direction.</li> <li>Briefly explain the autopsy findings in firearm victims.</li> <li>State the method of collection and disposal of firearm entitieste the method of collection and disposal of firearm entities.</li> </ul>	Essential:Parikhs"text book of forensic and toxicology Recommended: Principles of Forensic Medicine & Toxicology by Gautam Biswas
3	Mechanical injuries Abrasion,Buise,Lacera tion,Incised,Punctured and stab wound	<ul> <li>Define mechanical injury and describe the classification of mechanical injuries</li> <li>Briefly describe the mechanism of production of a mechanical injury.</li> <li>Explain the different types of Abrasions and Bruise\ contusion.</li> <li>Briefly state the method of duration or age estimation of an injury with respect to type of injury.</li> <li>Describe the medicolegal importance of age estimation of an injury.</li> <li>Describe and differentiate between the features of lacerated wound and incised wound</li> <li>Briefly describe the types of laceration.</li> <li>Differentiate between incised &amp; lacerated wounds. State the medico-legal importance of both incised and lacerated wound</li> <li>Describe the different types of punctured wound with calculation of age of a punctured wound.</li> <li>Briefly describe the features of Stab wound</li> </ul>	Essential:Parikhs"text book of forensic and toxicology Recommended: Principles of Forensic Medicine & Toxicology by Gautam Biswas
4.	Injuries and law Qisas & Diyat	• Classify Hurt on the basis of part involved and briefly describe its types in the light of Pakistan Penal Code with their	Essential:Parikhs"text book of forensic and toxicology

		<ul> <li>punishments.</li> <li>Define Itlaf-e-udw, Itlaf-e-salahiyat-e-udw, shajjah, Jurh.</li> <li>Classify Hurt on the basis of manner of infliction and briefly describe, its types in the light of Pakistan Penal Code with their</li> </ul>	Recommended: Principles of Forensic Medicine & Toxicology by Gautam Biswas
		<ul> <li>Enlist different types of Qatal in the light of Pakistan Penal Code and their punishments.</li> <li>Classify different degrees of suicide.</li> <li>Classify criminal miscarriages and define Isqat-e-hamal and Isqat-e-Jinin in the light of Pakistan Penal Code with their punishments.</li> </ul>	
5.	Spinal Poisons Strychnos (Nux Vomica)	<ul> <li>Briefly describe the mechanism of action of spinal poison.</li> <li>Mention the fatal dose, management &amp; medico-legal importance of spinal poison.</li> <li>Briefly explain the autopsy findings of a victim of spinal poison.</li> </ul>	Essential:Parikhs"text book of forensic and toxicology Recommended: Principles of Forensic Medicine & Toxicology by Gautam Biswas

## PHARMACOLOGY SDL

S.NO	Topic	Learning objectives	References
1.	Use of Erythropoietin in performance enhancement in athletes	<ul> <li>At the end of the session, the students should be able to:</li> <li>Identify the role of erythropoietin in performance enhancement</li> <li>Explain Doping detection in sports</li> </ul>	<ol> <li>Aghadi A, Dybała E, Cuber I, Mazurek M, Białowąs E. Erythropoietin as banned substance in professional sports: effects on maximal aerobic capacity, endurance and detection methods-a review. Journal of Education, Health and Sport. 2023 Feb 15;13(3):331-6.</li> <li>Heuberger J. <i>The clinical pharmacology of performance enhancement and doping detection in sports</i> (Doctoral dissertation, Leiden University).</li> <li>Dahlgren AR, Knych HK, Arthur RM, Durbin-Johnson BP, Finno CJ. Transcriptomic Markers of Recombinant Human Erythropoietin Micro- Dosing in Thoroughbred Horses. Genes. 2021 Nov 24;12(12):1874.</li> </ol>
2.	Use of rivaroxiban in Covid-19	• Compare the efficacy and safety of therapeutic versus prophylactic anticoagulation in Covid 19	<ol> <li>Lopes RD, Furtado RH, Macedo AV, Bronhara B, Damiani LP, Barbosa LM, de Aveiro Morata J, Ramacciotti E, de Aquino Martins P, de Oliveira AL, Nunes VS. Therapeutic versus prophylactic anticoagulation for patients admitted to hospital with COVID-19 and elevated D-dimer concentration (ACTION): an open-label, multicentre, randomised, controlled trial. The Lancet. 2021 Jun 12;397(10291):2253-63.</li> <li>Capell WH, Barnathan ES, Piazza G, Spyropoulos AC, Hsia J, Bull S, Lipardi C, Sugarmann C, Suh E, Rao JP, Hiatt WR. Rationale and design for the study of rivaroxaban to reduce thrombotic events, hospitalization and death in outpatients with COVID-19: The PREVENT-HD study. American heart journal. 2021 May 1;235:12-23.</li> </ol>
3.	Novel antihyperlipidemic drug	<ul> <li>Enlist the newer drugs used in the management of hyperlipidemia</li> <li>Rationalize their use in different clinical settings</li> </ul>	<ol> <li>Hassan RM, Ali IH, Abdel-Maksoud MS, Abdallah HM, El Kerdawy AM, Sciandra F, Ghannam IA. Design and synthesis of novel quinazolinone- based fibrates as PPARα agonists with antihyperlipidemic activity. Archiv der Pharmazie. 2022 Mar;355(3):2100399.</li> <li>KOTHAWADE PB, LOKHANDE KB, SWAMY KV, Sohan SC, THOMAS AB. Novel nitrogen-containing heterocyclic compounds in GPR109A as an anti-hyperlipidemic: Homology modeling, docking, dynamic simulation studies. Journal of Research in Pharmacy. 2020 Jul 1;24(4).</li> <li>Laeeq S, Dubey DV. Insilico Screening for Identification of Novel Acyl- CoA: Cholesterol Acyltransferase Inhibitors. NeuroQuantology. 2022 Jul;20(8):2557-67.</li> </ol>
4.	Malarial vaccine	<ul> <li>Discusses the current challenges and advances in malaria vaccine development</li> <li>Review recent human clinical trials for each stage of infection.</li> </ul>	<ol> <li>Duffy PE, Patrick Gorres J. Malaria vaccines since 2000: progress, priorities, products. npj Vaccines. 2020 Jun 9;5(1):48.</li> <li>Wilson KL, Flanagan KL, Prakash MD, Plebanski M. Malaria vaccines in the eradication era: current status and future perspectives. Expert review of vaccines. 2019 Feb 1;18(2):133-51.</li> <li>Bonam SR, Rénia L, Tadepalli G, Bayry J, Kumar HM. Plasmodium falciparum malaria vaccines and vaccine adjuvants. Vaccines. 2021 Oct;9(10):1072.</li> </ol>

#### Reference books

Pharmacology:

1. Katzung's Basic and Clinical Pharmacology, 15<sup>th</sup> edition

Forensic Medicine:

Text Book

Parikh's Textbook of Medical Jurisprudence, Forensic Medicine & Toxicology

#### Reference Books

- 1. Principles & Practice of Forensic Medicine by Nasib R Awan
- 2. Principles of Forensic Medicine & Toxicology by Rajesh Bardale

#### Pathology:

ROBBINS Text book of pathology 10<sup>th</sup> Edition

Medicine:

Davidson Textbook Of Medicine

Medical Ethics:Medical Errors: The Scope of the Problem. Fact sheet, Publication No. AHRQ 00-P037. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/qual/errba

http://nbcpakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 195)

NBC Guidelines for Healthcare Professionals\* Interaction with Pharmaceutical Trade and Industry

http://nbcpakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 276)

nbcpakistan.org.pk/assets/ppi\_guidelines\_may\_2011-1-final-copy-on-PHRC-wbesite.pdf Open source document

http://karachibioethicsgroup.org/PDFs/Karachi\_Bioethics\_Group\_Ethical\_Guidelines.pdf Karachi Bioethics Group Institutional Ethical Guidelines for Physician Pharmaceutical Industry Interaction

Medical Ethics:

http://nbcpakistan.org.pk/assets/may-16-bioethics-facilitator-book---may-16%2c-2017.pdf (page 194)

Peads: Current diagnosis and treatment pediatrics 25<sup>ST</sup> EDITION.

# Time Table 2023

## Haematology, Immunology & Research Module

3<sup>rd</sup> Year MBBS

# Duration Of Module:O5 Weeks & 4 DaysModule Coordinators:Dr. Fatima-Tuz-ZahraModule Co-Coordinator :Dr. Abid

#### Members Of Module Committee

Module Committee	
Vice Chancellor RMU	Prof. Dr. Muhammad Umar
Director DME	Prof. Dr. Rai Muhammad Asghar
Convener Curriculum	Prof. Dr. Naeem Akhter
Dean Basic Sciences	Prof. Dr. Ayesha Yousaf
Additional Director DME	Prof. Dr. Ifra Saeed
Chairperson Pharmacology & Implementation Incharge 3 <sup>rd</sup> year MBBS	Dr. Asma Khan
Chairperson Pathology	Prof. Dr. Mobina Dodhy
Chairperson Forensic Medicine	Dr Filza
Focal Person Pharmacology	Dr Attiya
Focal Person Pathology	Dr Fareeha Sardar
Focal Person Forensic Medicine	Dr. Gulzeb
Focal Person Medicine	Dr. Saima Ambreen
Focal Person of Gynaecology	Dr. Sobia Nawaz
Focal Person Community Medicine	Dr. Afifa Kulsoom
Focal Person Quran Translation Lectures	Mufti Abdul Wahid
Focal Person Family Medicine	Dr Sadia Khan
Focal Person Bioethics Department	Prof. Dr. Akram Randhawa

Reviewed by: Module committee Approved by: Curriculum Committee RMU

Prepared By: Dr. Fatima-tuz-Zahra Pathology Department, Rawalpindi Medical University, Rawalpindi

## Time Table 3<sup>rd</sup> Year MBBS Haematology, And Immunology Module (First Day)

		08:00am - 08:45am	08:45am – 09:30am	09:30am – 10:30am	10:30 AM - 11:00 am	11:00am – 12:00pm	12:00:pm-01:00pm	01:00pm-02:pm
	Forensic Med. (LGIS)* L-4	Bioethics(LGIS)* L-2	Bioethics(LGIS)* L-3		Pharmacology (SGD) S- 1	Pathology/Haem (LGIS)* L-1	Behavioral sciences (LGIS)* L-5	
	26-8 23 Saturday	Firearm-1 LH1,LH2 Dr. Romana, Dr Shahida	Prescription Writing and common errors in prescription Dr. Attiya, Dr. Uzma LH1,LH2	Pharmacovigilance and roll of CTU in drug development Dr. Zunaira, Dr. Asma LH1,LH2	BREAK	Haemopoitic growth factors Dr Arsheen, Dr Tahira , Dr. Uzma, Dr. Zoefeshan LH1,LH2	Classification of anemia and Iron deficiency anemia Prof Mobeena, Dr. Fariha LH1,LH2	Obsessive Compulsive Disorder (OCD) Dr. Sara Afzal, dr Zona tahir LH1,LH2

Time table 3 <sup>rd</sup> year MBRS Haematology And Immunology Module
This table 5 year MDDS Haematology And minutology Module
(1 <sup>st</sup> week) 28th Aug to 2nd Sep 2023
(1 week) zour rug to zna sep zozo

DATE / DAY	8:00 AM - 9:30 AM	9:30 AM - 11:00 AM	11:10am – 12:00pm		•	12:00 PM - 02:00	PM	
	Clinical Clerkship		Pathology (LGIS)* L-6	Batch	Practical	Topic of Practical	Teacher name	Venue
28 AUG 23			Magalahlastia Anomia	А	Pharmacology P-1	Prescription and P drugs of Iron deficiency anemia	Dr zaheer	Lecture Hall: 06
Monday			Prof Mobeena, Dr. Fariha	В	Forensic Medicine P-2	Firearm injuries Smooth bore firearm	Dr. shahrukh	Lecture Hall: 04
			LIII, LII2,	С	Pathology P-3	Benign RBC Morphology	Dr. Abid	Pathology Lab, NTB
	Batch : A Me	dicine	Peads (LGIS)* L-7	Batch	Practical	Topic of Practical	Teacher name	Venue
20 AUG 23	Buth II II		Iron deficiency Anemia	В	Pharmacology P-1	Prescription and P drugs of iron deficiency anemia	Dr Zaheer	Lecture Hall: 06
Tuesday	Batch : B Surgery		Dr Farah Naz, Dr Nadia Mumtaz	С	Forensic Medicine P-2	Firearm injuries Smooth bore firearm	Dr. shahrukh	Lecture Hall: 04
	Batch : C Sub	-Specialty	LH1, LH2	А	Pathology P-3	Benign RBC Morphology	Dr. Abid	Pathology Lab, NTB
			Pathology (LGIS)* L-8	Batch	Practical	Topic of Practical	Teacher name	Venue
30 AUG 23	(Refer to annexure 2)		Introduction To	С	Pharmacology P-1	Prescription and P drugs of iron deficiency anemia	Dr Zaheer	Lecture Hall: 06
Wednesday			Basis of Immune Response Prof. Naeem, Prof. Wafa LH1, LH2,	А	Forensic Medicine P-2	Firearm injuries Smooth bore firearm n	Dr. shahrukh	Lecture Hall: 04
				В	Pathology P-3	Benign RBC Morphology	Dr. Abid	Pathology Lab, NTB
31 AUG			Forensic Medicine (LGIS)* L-9	Pathology/Immonology (LGIS)* L-10 12:00-1:00			Pathology/Immonology (CBL)* * *C-1 1:00 - 2:00	
23Thursday			Firearm – II Dr. Filza, Dr. Romana Classification of hemolytic anemia & Acquired Hemolytic Anemias Prof. Mobina, Dr. Fareeha			mia s	Megaloblastic Ane Dr. Abid, Dr. Saee LH1, LH2, LH6,Ph	mia d, Dr. Nida, Dr. Mahjbeen aarma lab
	08:00am - 08:45am 08:45am - 09:30am		09:30am – 10:15am	10:15am - 11:00am		11:00am – 12:00pm		
1 SED 23	Pharmacology (LGIS)* L-11	Forensic Med. (LGIS)* L-12	Pathology/Haem (LGIS)* L-13	Quran S	Quran Studies (LGIS)* L-14 Pharmacology (CH *C-2			
Friday	HaematinicsFirearm – III (Smooth boreDr. Asma, Dr. Haseebafirearm wounds)Dr. Romana, Dr Shahida		RBC Membranopathies and enzymopathies Prof Mobeena, Dr. Fariha LH1,LH2			Haematinics Dr. Tahira, Dr. Zoefeshan, Dr. Rubina, Dr. Uzma		
	08:00am - 08:45am	08:45am – 09:30am	09:30am – 10:30am	10:3	0 AM – 11:00 am	11:00am – 12:00pm	12:00:pm – 01:00pm	01:00pm - 02:pm
	Pharmacology (LGIS) * L-15	Pathology/Haem (LGIS) * L- 16	Pharmacology (LGIS) * L- 17			Pathology /Immunology SGD)**S-2	Pathology/Haem (LGIS)* L-18	Pharmacology CBL)* * *C-3
2 SEP 23 Saturday	Lipid Lowering drugs I Dr. Zunera, Dr. Attiya LH1, LH2,		Lipid Lowering drugs II Dr. Zunera, Dr. Attiya	BREAK		Antibody and compliment system Dr Mudassira, Dr. Tayaba, Dr. Fatima Zohra, Dr. Fatima Rizvi LH1, LH2, LH6,Pharma	Hemoglobinopat hies (Thalasemia, PNH) Prof Mobeena, Dr. Fariha LH1,LH2	Lipid Lowering drugs III Dr. Tahira, Dr. Arsheen, Dr rubina, ,Dr Uzma

PD	
Time Table 3 <sup>KD</sup>	YEAR MBBS Haematology, Immunology And Research Module
	(Second Week) ATH OTH SED 22
	(Second week) 4 -9 SEP 25

DATE / DAY	8:00 AM - 9:30 AM	9:30 AM - 11:00 AM	11:10am – 12:00pm		12:00	PM - 02:00 PM		
	Clinical Clerkship		Medicine (LGIS) * L-19	Batc h	Practical	Topic of Practical	Teacher name	Venue
4 <sup>TH</sup> SEP 23			Approach and workup of anemia	А	Pharmacology P	-4 Prescription writing an drug for Dyslipidem	nd P Dr. Zoefeshan	Lecture Hall: 06
Monday			Dr. Saleha Ahmad, Dr. Rizwan Mehmood	В	Forensic MedicineP-5	Assessment of burn vict	im Dr. Shahida Bashir	Lecture Hall: 04
				С	Pathology P-6	Lab diagnosis of hemoly anemia	tic Dr. Nida Fatima	Pathology Lab, NTB
			Peads(LGIS) * L-20	Batc h	Practical	Topic of Practical	Teacher name	Venue
5 <sup>rd</sup> SEP 23	Batch : A Med	icine		В	Pharmacology P	-4 Prescription writing an drug for Dyslipidem	nd P Dr. Zoefeshan	Lecture Hall: 06
Tuesday	Batch : B Surg	ery	Dr Afrah Tariq, Dr Ayesha	С	Forensic MedicineP-5	Assessment of burn vict	im Dr. Shahida Bashir	Lecture Hall: 04
	Batch C Sub-S	Specialty	Tang	А	Pathology P-6	Lab diagnosis of hemo anemia	Dr. Nida Fatima	Pathology Lab, NTB
	Daten C Sub C	pectally	Pathology/Immunology (LGIS)*L-21	Batc h	Practical	Topic of Practical	Teacher name	Venue
6 <sup>th</sup> SEP 23	(Refer to annexu	(Refer to annexure 2)		С	Pharmacology P	-4 Prescription writing an drug for Dyslipidem	nd P Dr. Zoefeshan	Lecture Hall: 06
Wednesday			LH1 LH2	А	Forensic Medicin P-5	Assessment of burn vi	ctim Dr. Shahida Bashir	Lecture Hall: 04
				В	Pathology P-6	Lab diagnosis of hemo anemia	Dr. Nida Fatima	Pathology Lab, NTB
					Pathology 12:00-	SGD)**S-3 1:00 pm	Peads (LG 1:00-2	IS) * L-23 :00pm
7 <sup>TH</sup> SEP 23 Thursday			Firearm – IV (Rifled firearm wounds) Dr. Filza, Dr. Romana LH-1, LH2	Aplasti Dr. Tay	c Anemia yaba, Dr. Rabbiya,	Dr. Sarah, Dr. Amna	Aplastic Anemia Dr Qurat ul Ain, Dr. Mari	a Shamsher
	08:00am - 08:45am	08:45am - 09:30am	09:30am – 10:15am	10:1:	5am - 11:00am	11:00am - 12:00pm		
oth ced 22	Forensic Med. (LGIS) * L-24	Pathology/Immunology (CBL)*** C-4	Pathology/Immunology (CBL)*** C-5	Quran S L-25	Studies (LGIS) *	Medicine (LGIS)* L-26		
8 SEP 25 Friday	Mechanical injuries – I (Abrasion & Buise) Dr. Filza, Dr. Romana LH-1, LH2	Hypersensitivity Reaction I and II, Dr. Haider, Dr. Unaiza, Dr. Aisha, Dr. Faiza	Hypersenstivity Reaction Type III and IV Dr. Abid, Dr. Saeed, Dr. Nida , Dr. Mahjbeen			Management of Hypersensitivity Reactions Dr. Saleha Ahmad, Dr. Rizwan Mehmood		
	08:00am - 08:45am	08:45am - 09:30am	09:30am - 10:30am	10:30	AM – 11:00 am	11:00am – 12:00pm	12:00:pm - 01:00pm	01:00pm – 02:pm
	Forensic Med. (LGIS) * L-27	Obs & Gynae (LGIS) * L- 28	Pathology/Immunology (SGD)**S-4			Pharmacology (LGIS) * L- 29	Community medicine(LGIS) * L-30	Pathology/immunolog y (LGIS)* L-31
9 <sup>TH</sup> SEP 23 Saturday	Non-Mechanical Injuries Starvation, Thermal Injuries & Electrocution Dr Shahida, Dr Naila	Anemia in Pregnancy Dr. Farah Deeba,dr amna abbasi	Immune Tolerance And Autoimmunity. Dr. Mudassira, Dr. Fatima zohra, Dr. Rabbia, Dr, Mehreen		BREAK	Immunosup pressant drugs I Dr. Zunera, Dr. Attiya	Host defenses Dr. Sana Associate prof Dr. Imran AP	Immunodefeciency Prof. Wafa, Dr. Fatima Rizvi

## Time Table 3<sup>rd</sup> YEAR MBBS – Haematology, Immunology And Research Module (Third Week) 11<sup>th</sup> to 16<sup>TH</sup> SEP 23

DATE / DAY	8:00 AM – 9:30 AM	9:30 AM - 11:00 AM	11:10am – 12:00pm			12:00 PM - 02:00	РМ	
			Pathology/Haem L32	Batch	Practical	Topic of Practical Tead	her name	Venue
11 <sup>TH</sup> SEP 23 Monday		erkship	WBC disorder and classification	А	Pharmacology P-	6 Prescription writing and P drug for IHD	Dr. Arsheen	Lecture Hall: 06
			of leukemia Dr. Dr. Sarah, Dr Fatima-tuz-	В	Forensic Medicine 7	P- Mechanical injuries	Dr. Gulzeb	Lecture Hall: 04
			Zahra	С	Pathology P-8	Benign WBC Morphology	Dr. Syeda Aisha	Pathology Lab, NTB
			Pathology/Haem (CBL)***C6	Batch	Practical	Topic of Practical	Teacher name	Venue
	Batch : A	Medicine	Acute Leukemia	В	PharmacologyP-	Prescription writing and P drug for IHD	Dr. Rubina	Lecture Hall: 06
12 <sup>TH</sup> SEP 23 Tuesday			Dr. Haider, Dr. Unaiza, Dr. Aisha, Dr. Faiza	С	Forensic Medicine 7	P- Mechanical injuries	Dr. Gulzeb	Lecture Hall: 04
	Batch : B	Surgery		А	Pathology P-8	Benign WBC Morphology	Dr. Syeda Aisha	Pathology Lab, NTB
	Batch : C	Sub-Specialty	Pathology/Haem (LGIS)* L33	Batch	Practical	Topic of Practical	Teacher name	Venue
	(Refer to annexure 2)		Chronia laukamia	С	PharmacologyP-0	Prescription writing and P drug for IHD	Dr. Arsheen	Lecture Hall: 06
13 <sup>TH</sup> SEP 23 Wednesday			Dr Fatima-tuz-Zahra, Dr. Sarah LH1,LH2	А	Forensic Medicine 7	P- Mechanical injuries	Dr.Gulzeb	Lecture Hall: 04
				В	Pathology P-8	Benign WBC Morphology	Dr. Syeda Aisha	Pathology Lab, NTB
			Medicine (LGIS) * L-34		Pathology/Haem (L	GIS)*L-35 12:00-1:00 pm	Pathology/Hae	em (SGD)**S6 :00-2:00pm
14 <sup>TH</sup> SEP 23 Thursday			Myeloproliferatice Diseases Dr. Saleha Ahmad, Dr. Rizwan Mehmood	Myelop Dr tayya	rolifertive disease/M aba , Dr Sara	velodysplastic syndrome	Chronic leukemia Dr. Dr. Mehreen, Dr. Am	. Mudassira, Dr. Fariha, na
	08:00am - 08:45am	08:45am - 09:30am	09:30am – 10:15am	10:1	5am - 11:00am	11:00am – 12:00pm		
15 <sup>th</sup> SEP 23	Forensic Med. (LGIS) * L-36	Medicine (LGIS) * L-37	Paeds (LGIS) * L-38	Quran S 39	Studies (LGIS) * L-	Pharmacology (LGIS) * L-40		
Friday	Mechanical injuries – II       Lymphoproliferative         (Punctured and stab wound)       Diseases         Dr. Filza, Dr. Romana       Dr. Saleha Ahmad, Dr.         LH-1, LH2       Rizwan Mehmood		ALL/Lymphoma Dr. Sadaf Iqbal, Dr. Mamona Qudrat			Immunosuppressant drugs II Dr. Zunera, Dr. Attiya		
	08:00am - 08:45am	08:45am - 09:30am	09:30am - 10:30am	10	0:30 AM - 11:00 am	11:00am – 12:00pm	12:00:pm - 01:00pm	01:00pm – 02:pm
	Pharmacology SGD)**S-7	Forensic Med. (LGIS) * L-41	Pathology/Haem (CBL)*** C-7		BREAK	Pharmacology CBL)* * *C-8	Pathology/Haem (LGIS) * L-42	Community medicine (LGIS) * L-43
16th SEP 23 Saturday	Immunosup Pressant drugs III ,Dr. Zaheer, Dr.Zoefeshan, Dr. Rubina, Dr. Uzma	Mechanical injuries – III(Punctured & Stab wounds Dr. Filza, Dr. Romana LH-1, LH2	Multiple myeloma Dr. Abid, Dr. Saeed, Dr. Nida , Dr. Mahjbeen			Immunosup Pressant drugs IV Dr. Zaheer, Dr. Arsheen, Dr. Rubina, Dr. Uzma	Lymphoma Dr. Tayyaba, Dr. Mehreen LH1,LH2	Immunizing agents Dr. Sana Associate prof Dr. Imran AP

DATE / DAY	8:00 AM - 9:30 AM	9:30 AM – 11:00 AM	11:10am – 12:00pm		12:00 PM	∕I − 02:00 PM		
	Clinical Cle	kship	Pathology/Haem (LGIS)* L-44	Bat ch	Practical	Topic of Practical	Teacher Name	Venue
10 <b>711 (FD 22</b>			Bleeding disorders of	Xcd	Pharmacology P-9	Prescription writing and drug for DVT	p Dr. Rubina	Lecture Hall: 06
Monday			primary haemostasis Dr. Mudassira, Dr. Fatima- tuz- Zahra	В	Forensic Medicine 10	P- Assessment of RTA Victim	Dr.Naila	Lecture Hall: 04
			LH1,LH2	С	Pathology P-11	Malignant WBC Morphology	Dr. Syed Iqbal Haider	Pathology Lab, NTB
			Pharmacology (LGIS) * L- 45	Bat ch	Practical	Topic of Practical		
	Batch : A Med	cine		В	Pharmacology P-9	Prescription writing and drug for DVT	p Dr. Rubina	Lecture Hall: 06
19TH SEP 23 Tuesday	Batch : B Surgery		Antiplatelet, drugs I Dr. Zunera, Dr. Attiya	С	Forensic Medicine 10	P- Assessment of RTA Victim	Dr.Naila	Lecture Hall: 04
	Batch : C Sub-S	pecialty		А	Pathology P-11	Malignant WBC Morphology	Dr. Syed Iqbal Haider	Pathology Lab, NTB
	(Refer to annex)	ure 2)	Pharmacology CBL)* * *C-9	Bat ch	Practical	Topic of Practical		
				С	Pharmacology P-9	Prescription writing and drug for DVT	p Dr. Rubina	Lecture Hall: 06
Wednesday			Antiplatelet, drugs II Dr. Tahira, Dr. Zoefeshan, Dr. Uzma, Dr. Zaheer	А	Forensic Medicine P-10	Assessment of RTA Victim	Dr.Naila	Lecture Hall: 04
				В	Pathology P-11	Malignant WBC Morphology	Dr. Syed Iqbal Haider	Pathology Lab, NTB
			Pathology/Haem (CBL)*** C-10		Pharmacolo 12:00-	gy (LGIS) 46 1:00 pm	Forensic Med(	LGIS) * L-47
21TH SEP 23 Thursday			Haemophilia / ITP Dr. Haider, Dr. Unaiza, Dr. Aisha, Dr. Faiza	Antice Dr. As	Anticoagulants I Dr. Asma, Dr. Haseeba		Road traffic Accidents Dr. Romana , Dr. Filza LH-1, LH2	
	08:00am - 08:45am	08:45am – 09:30am	09:30am – 10:15am	10:	15am - 11:00am	11:00am – 12:00pm		
	Peads (LGIS) * L-48	Community medicine (LGIS) * L-49	Medicine (LGIS) * L-50	Qura	n Studies (LGIS) * L-51	Forensic Med. (LGIS) * L- 52		
22ND SEP 23 Friday	Hemophilia Dr. Amal Hasham, Dr. Muneeba Dr. Gul Mehar, Dr. Maimoona		Bleeding Disorders Dr. Saleha Ahmad, Dr. Rizwan Mehmood			Injuries and law-I Qisas & Diyat Dr. Romana , Dr. Filza LH-1, LH2		
	08:00am - 08:45am	08:45am - 09:30am	09:30am - 10:30am	10:3	0 AM – 11:00 am	11:00am – 12:00pm	12:00:pm - 01:00pm	01:00pm – 02:pm
	Pharmacology (LGIS) * L-53	Pharmacology SGD)**S-8	Pathology/Haem (LGIS)* L-54		BREAK	Forensic Med. (LGIS) * L- 55	Pathology/Immunology SGD)**S-9	Forensic Med. (LGIS) * L-56
23RD SEP 23 Saturday	Anticoagulants II Dr. Asma, Dr. Haseeba	Anticoagulants III Dr. zaheeer,Dr. Arsheen Dr. Rubina,Dr. Tahira	Bleeding disorders of secondary haemostasis Dr. Fatima –tuz-Zahra,Dr. mudassira			Injuries and law-II Qisas & Diyat Dr. Filza, Dr. Romana LH-1, LH2	Tumor immunity Dr. Amna, Dr. Tayyaba, Dr. Fatima Rizvi, Dr. mehreen	Regional Injuries (Skull & spinal injuries) Dr Shahrukh, Dr Gulzaib

#### Time Table 3<sup>rd</sup> YEAR MBBS Haematology, Immunology And Research Module (Fourth Week) 18<sup>TH</sup> SEP TO 23<sup>RD</sup> SEP 23

DATE / DAY	8:00 AM - 9:30 AM	9:30 AM - 11:00 AM	11:00am – 12:00pm		12:00 PM	- 02:00 PM		
	Clinical Cle	erkship	Community medicine ((LGIS) * L-57	Bat ch	Practical	Topic of Practica	al Teacher Name	Venue
Monday			Immunization schedule Dr. Afifa Kulsoom, Dr. Imrana	А	Pharmacology P-12	Prescription writing drug for Malaria	and P Dr. Uzma	Lecture Hall: 06
25 <sup>TH</sup> SEP 23				В	Forensic Medicine P-	Autosy visit (Fract identification)	ture Dr. Raheel	Lecture Hall: 04
				С	Pathology P-14	ICT devices	Dr. Saeed Lehrasab	Pathology Lab, NTB
		1· ·	Pharmacology (LGIS) * L- 58	Bat ch	Practical	Topic of Practica	al	
	Batch : A Med	ncine	Fibrinolytic And Antifibrinol	В	Pharmacology P-12	Prescription writing drug for Malaria	and P Dr. Uzma	Lecture Hall: 06
Tuesday 26 SEP 23	Batch : B Surg Batch : C Sub-	gery Specialty	Dr. Asma, Dr. Haseeba	С	Forensic MedicineP-	Autosy visit (Fract identification)	Dr. Raheel Autosy visit (Fracture identification)	Lecture Hall: 04
	(Refer to annex	ure 2)		А	Pathology P-14	ICT devices	Dr. Saeed Lehrasab	Pathology Lab, NTB
		,						
Wednesday			Holiday 12 Rabi-ul-Awal					
Hollday								
			11.00-12.00 pm Pharmacology SGD)**S-10	12.00 Forer	) – 01.00 pm 1sic Med. (LGIS) * L-59	9	Pathology/Immunology SGD)**S-11	
Thursday 28 SEP 23			Fibrinolytic And Antifibrinolytic drugs Dr. Tahira, Dr. Arsheen, Dr. Rubina, Dr. Zaheer	Blast Dr. F LH-1	Injuries ïlza, Dr. Romana , LH2		Vac Dr. Mudassira, Dr. Rabbiy	rines a, Dr. Mehreen, Dr. Amna
	08:00am - 08:45am	08:45am – 09:30am	09:30am – 10:15am	10	0:15am - 11:00am	11:00am – 12:00pm		
Friday 29 SEP 23	Pathology (LGIS )* L-60	Medicine(LGIS) * L-61	Pharmacology (LGIS) * L- 62	Fami L-63	ly Medicine (LGIS)*	Pharmacology (LGIS) * L-64		
Seminar	Life cycle of Plasmodium Dr. Fatima Rizvi, Dr. Amna LH1, LH2	Sign Symptoms and Management of Malaria Dr. Saleha Ahmad, Dr. Rizwan Mehmood	Antimalarial drugs I Dr. Asma, Dr. Haseeba	Mana And Dr. S	agement Of Malaria Its Complications adia	Antimalarial drugs II Dr. Asma, Dr. Haseeba		
	08:00am - 08:45am	08:45am – 09:30am	09:30am – 10:30am	10:	:30 AM – 11:00 am	11:00am – 12:00pm	12:00:pm – 01:00pm	01:00pm – 02:00pm
0 4 1	Forensic Med(LGIS) * L-65	Pharmacology (LGIS) * L- 66	Pathology/Haem (SGD)**S-12			Pathology (SGD)**S- 13	Forensic Med. ((LGIS) * L 67	Community medicine LGIS) * L-68
Saturday 30 SEP 23	Hydrocyanic Acid Dr Gulzaib, Dr Shahida LH-1, LH2	Antimalarial drugs III Dr. Asma, Dr. Haseeba	Leishmania & Trypanasoma Dr. Rabbia Dr. Tayyaba, Dr. Fariha, Dr. Fatima Rizvi		Break	Disorders of Spleen & Lymph Nodes Dr. Rabbiya, Amna DrMehreen, Sarah,	Spinal Poisons Strychnos(Nux Vomica) Dr Shahrukh, Dr Raheel LH-1, LH2	Inferential Statistics & Anova Dr. Rizwana, Dr. abdulqudus

Time Table 3<sup>RD</sup> YEAR MBBS - Haematology, And Immunology Module (Fifth Week) 25<sup>TH</sup> SEP TO 30<sup>TH</sup> SEP 23

## Time Table 3<sup>RD</sup> YEAR MBBS - Haematology, Immunology And Research Module 2<sup>ND</sup> OCT to 4<sup>TH</sup> OCT 23

MONDAY 2 OCT 23	END OF MODULE EXAM
TUESDAY 3 OCT 23	END OF MODULE EXAM
WEDNESDAY 4 OCT 23	END OF MODULE EXAM

### **Teaching Hours**

SR	Disciplines	LGIS	SGD	CBL	SDL	Seminar	Hours
No.							
1.	Pharmacology	11	04	04	5	01	25
2.	Pathology (Haematology)	11	03	04	5	-	23
3.	Pathology (Immunology)	04	04	02		-	10
4.	Pathology (Parasitology)	-	01	-	-	01	02
5.	Forensic Medicine	15	-	-	04	-	19
6.	Community Medicine	05	-	-	-		05
7.	Medicine	05	-	-	-	01	06
8.	Peads	05	-	-	-		05
9.	Obstetrics and	01	-	-	-	-	01
	Gynaecology						
10.	Family medicine					01	01
11.	Bioethics	02					02
12.	Behavioral sciences	01					01
13.	Quran class	04					04
14.	Total	64	12	10	14	04	104

## Practical/ SGD and Clinical Clerkship hours

Disciplines	Practical hours	Disciplines	Clerkship hours
Pharmacology	2x5 = 10 hrs	Surgery	2.5 x 4 X4= 40 hrs
Pathology	2x5 = 10 hrs	Medicine	2.5  x  4  x 4 = 40  hrs
Forensic Medicine	2x5 = 10 hrs	Sub Specialty	2.5  x  4  x 4 = 40  hrs

 $\blacktriangleright$  LGIS (L) \*

➤ SGD (S) \*\*

≻ CBL (C) \*\*\*

> SDL (SL) \*\*\*\*

✤ For CBL/SGDs, whole class will be divided into 04 batches

Batch: A = Lecture Hall 01 (starting from batch A1 to A3)

B1,B2)

Batch: C = Lecture Hall 06 (starting from batch B3, B4, B5, C1)

Batch: B = Lecture Hall 02 (starting from batch A4, A5,

Batch: D = Pharmacy Lab(starting from batch C2 to C5)

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

### Section IV-Assessment Policies

Contents

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

#### Section IV: 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  $(2/3^{rd})$  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.

#### Module Assessment 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.

-Assessment Frequency & Time in hematology and immunology module

Block		Module – 1	Type of	Total Assessn	nents Time		No. of	Assessments
	Sr #	hematology and immunology Module Components	Assessments	Assessment Time	Summative Assessment Time	Formative Assessment Time		
	1	Mid Module Assessments LMS based (Pharmacology, Pathology, Forensic Medicine, Medicine, Surgery, community medicine gynaecology, Family Medicine, )	Summative	30 Minutes				
k-II	2	Topics of SDL Assessment on MS Team	Formative	10 Minutes (Every Friday)		20 Minutes	1	5 Commentions
Bloc	3	End Module Assessments (SEQ & MCQs Based)	Summative	6 Hours		30 Minutes	Formative	5 Summative
	4	Pharmacology Structured and Clinically Oriented Viva	Summative	10 Minutes				
	5.	Forensic Medicine Structured and Clinically oriented Viva	Summative	10 Minutes	7 hours			
	5	Pathology Structured & Clinically oriented Viva	Summative	10 Minutes				

## Hematology and Immunology Module Assessment Plan

Date / day	Assesment plan	Total marks	Assesment mode	Content
Thursday 16-09-23	Mid module assesment	20	LMS- 20 mcq	<ul> <li>15mcq-(pathology, pharmacology and forensic 5xeach)</li> <li>3 mcq - community medicine</li> <li>2 mcq- surgery and medicine 1xeach</li> </ul>
31.8.23 7.9.23 14.9.23 21.9.23	Weekly assesementson SDL topics	15 15 15 15	15 mcq 15 mcq 15 mcq 15 mcq	-(pathology, pharmacology and forensic 5xeach) -(pathology, pharmacology and forensic 5xeach)
Monday 2-10-2023	End module theory exam (9 am to 2pm)	160	Pharmacology (9 to 10:30 am) Forensic medicine,( 10: 45 am to 12 :15pm) Pathology (12:15 pm to 2pm)	Pathology- 60 marks Pharmacology-50 Forensic medicine-50 (for mcq/seq distribution see table)
3.10.23 4.10.23	Viva (12pm-2pm)	90	viva of batches in respective department	Pathology- 40 marks Pharmacology-30 marks Forensic medicine -10 marks

Table of Specification	n (TOS) For Hemato	logy and Immunolg	y End Module Assessme	ent for 3rd Year MBBS
------------------------	--------------------	-------------------	-----------------------	-----------------------

Sr. #	Discipline	No. of MCQs	No. of I accore	MCQs ding to		No. of (%	f SEQs %)	N ac	o. of SE cording	Qs to	Viva voce	OSPE Marks	Total Marks
		(%)	cogni	tive dom	nain	No. of	Marks	cogi	nitive do	main			
			C1	C2	C3	ıtems		C1	C2	C3			
1.	Pharmacology	15	2	9	4	7	35	2	4	1	30	0	80
2.	Forensic Medicine	15	4	9	3	5	25	2	2	1	25	0	65
3.	Pathology	25	2	5	3	7	35	2	4	1	40	0	100
4.	Family Medicine	2	1	0	1	0	0	0	0	0	0	0	Vertical integration
5.	Research	2	0	1	1	0	0	0	0	0	0	0	Vertical integration
6.	Medicine	5	1	3	1	0	0	0	0	0	0	0	Vertical integration
7.	Paeds	5	1	3	1	0	0	0	0	0	0	0	Vertical integration

Total marks = 245

Annexure I

(Sample MCQ & SEQ papers with analysis)

RAI	WALPINDI MEDICAL UNIVERSITY		
(RIL) DEP	PARTMENT OF PATHOLOGY	ROLL NO.	
	RMU & Allied Hospitals		
Haematology In	nmunology & Research Module Asse		
O Participant in the second	3 <sup>rd</sup> Year MBBS	astronome.	
Allowed. 30min	MCOs PAPER	Total Marks: Th	
		Time 12.00sppn	
A 20 years male with history of re-	insated attacks of jaundice was admitted in surge	Of search for antisense and	
It is an X. linked interested down	pherocytoars. What is roust appropriate in this can	(e)	
Sickling test is positive	009)		
Gall stone is an associated finds	rig .		
DAT is positive			
It presents with hacmoglobinur	3.0		
28 years female presents with pa	llor. Her Complete blood counts shows Hb 10.1	em/dL ##C 6.0 x 10 <sup>10</sup> AL THE	
ex 10%L and Platelets, 240x10%	L Blood film shows Hypochromic Microcytic b	food picture with Target cells	
nd occasional Basophilic stippling.	The most probable diagnosis is:		
Iron Delicency anemia			
Sideroblastic anensia			
Acomia of Chronic disorder			
I Indiassentia minor			
Lead posioning			
the process of Erythropoiesis	during the various stages of development, up	to soluch stage of seythend	
evelopment does matrix division	occurs and haemoglobin also starts appearing a		
Procrythroblast			
Early Normotilast			
Intermediate Normbolian			
Late Normobiast			
Reboulocyte			
disc batanana a since the	tassitude and weakness for the last 6 months	s. Blood picture showed Hb 9.2	
32 years temale prosented with	outic blood picture. Further workup revealed	i increased TIBC and decreased	
And with a Hyperchitemet like	elv diagnosis is		
insterrin Saturation. The most inc			
Non Deliciency Milenia			
Sigenshaster when an			
Thatassacrina minut			
Thelessaethis major			
Anemia of Chronic Lasorony			
a laboratory reports of a 60 year	is patient taking regular non-steroidal antrin	tal your turning cabacity what is	
	me (MCV) rugh serum territor and remained to		
	nt's anemia?		
imo debrancy anemia			
America of chiroline disease			
The abase of the property			
Dans and is not star mediate prior			
the balance of the second star second		1 1 61	
		11.2 145 1	
Level of cognition	Ouestion no	Trans.	1 August 1
--------------------	--	--------	------------
CI	3.19	Duran	Percentage
C2	1.7,8,12,15,16, 17, 20, 21, 22, 23, 24 and 25	13	56%
C3	2.4.5,6,9,10,11,13, 14 and 18	10	36%

Type of integration	Question no	Total	Percentage
Core	1, 2,4,6,9,10,12, 14,15,20,21,22,23 and 24,25	15	60%
Horizontal	5,7,16,	3	12%
Vertical	11, 13, 18	3	12%
Spiral	3 and 19	2	8%
Research and medical ethics	8, 17	2	8%

15 MA

Prof. Mobina Ahsan Dodhy Chairperson Pathology Department Rawalpindi Medical University

Assistant Director Department of Medical Education Rawalpindi Medical University

VUY

Vice Chancellor Rawalpindi Medical University Rawalpindi

<b>这些人的问题,我们就能能是这些</b>	10/12/2020	Sample Paper of SEQs		ior 03	00 00
ROLL NO. FROLL NO. Free 12-06mon r. Mother gives history of a of the boy shows Pallor, 8 pg with normal WBC and 01	02 s duration. He tells you that een is palpable 6 cm below able for leukocytosis (85 X ells is seen in the peripheral r of basophils. 01 2.5	vas evaluated for a bleeding 2.5 2.5 3.5 4ains of fatigue and repeated stigations reveals Hb 7.3 g/dt, peripheral film. 02 eloblast? 01	0-month time period despit normal for few months after th 01 02	performs a rapid kit test but pecific antigen antibody read	gland. Her thyroid function toodies.
RAWALPINDI MEDICAL UNIVERSITY RAWALPINDI MEDICAL UNIVERSITY DEPARTMENT OF PATHOLOGY BARNU & Allied Hospitals RMU & Alexer MBBS RMU & Research Module Assess 3"" Year MBBS Research Module Assess 3"" Year MBBS RMU & Alexer Some RMU & Alexer S	<ul> <li>b) What further tests you would like to perform to contirm daignosis?</li> <li>c) What advice you would give to the parents of this child?</li> <li>c) What advice you would give to the parents of this child?</li> <li>Q2. A 65-years man presents to clinic with fatigue, night sweats, and lethargy of 6 months he has experienced 10 lb weight loss over that period. On physical examination, the sph he costal margin, the rest of his examination is normal. Laboratory testing is remark the costal margin, the rest of his examination is normal. Laboratory testing is remark blood with biomodel peak of neutrophils and myelocytes. There is also increased number a) What is the most probable diagnosis?</li> <li>b) Briefly discuss the underlying genetic mutation.</li> </ul>	<ul> <li>c) Enumerate the phases of this disease.</li> <li>c) Enumerate the phases of this disease.</li> <li>c) a) pass female with history of easy bruising and increased menstrual flow w disorder. She was diagnosed with immune thrombocytopenic purpura (ITP).</li> <li>a) Discuss Peripheral film and Bone marrow examination findings.</li> <li>b) Enlist the causes of thrombocytopenia.</li> <li>c) A 47 years woman presented in basic health unit of district Jehlum with comp Q4. A 47 years woman presented in basic health unit of district Jehlum with comp Q4. A 10<sup>7</sup>/L and platelet count is 24 x 10<sup>7</sup>/L Pathologist reports 90% blast cells on WBC.174 x 10<sup>7</sup>/L and platelet count is 24 x 10<sup>7</sup>/L Pathologist reports 90% blast cells on WBC.174 x 10<sup>7</sup>/L and platelet count is 24 x 10<sup>7</sup>/L pathologist reports 30% blast cells on WBC.174 x 10<sup>7</sup>/L and platelet count is 24 x 10<sup>7</sup>/L pathologist reports 30% blast cells on WBC.174 x 10<sup>7</sup>/L and platelet count is 24 x 10<sup>7</sup>/L pathologist reports 30% blast cells on WBC.174 x 10<sup>7</sup>/L and platelet count is 24 x 10<sup>7</sup>/L pathologist reports 30% blast cells on WBC.174 x 10<sup>7</sup>/L and platelet count is 24 x 10<sup>7</sup>/L pathologist reports 30% blast cells on WBC.174 x 10<sup>7</sup>/L and platelet count is 24 x 10<sup>7</sup>/L pathologist and mybleblast platelet count is 24 x 10<sup>7</sup>/L pathologist and mybleblast platelet count is 24 x 10<sup>7</sup>/L differentiate between lymphoblast and mybleblast and myble</li></ul>	<ul> <li>A renal transplant recipient experiences gradual rise of creatinine in 10 immunomodulatory drugs. He states that he was alright and all his lab results were n transplant but then his condition deteriorated slowly.</li> <li>a) Which type of graft rejection is this?</li> <li>b) Classify different types of grafts on the basis of type of donor.</li> <li>c) Differentiate between direct and indirect graft antigen recognition</li> </ul>	<ul> <li>Q6. A physician is suspecting Hepatitis B in a patient in the ward. The laboratory physician has asked them to perform EUSA for confirmation as it is based on st technique.</li> <li>a) Enlist 4 the different types of antigen antibody reactions</li> <li>b) Enumerate 3 types of EUSA with the underlying principle in each</li> </ul>	Q7. A 45 years female presented with painless diffuse enlargement of thyroid shows decreased T3 and T4 levels and she is positive for circulating antithyroidanti a) What is your most likelydiagnosis?

1-				
for an and the second s				
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%	
	1a 1b 1c 2a 3a 4c	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

					MEDICIN	E					SURG	ERY + TR	AUMA		
	Dates	HFH Unit-	I HFH	Unit-11	BBH Unit-	1 BB	H Unit-11	DHQ	HFH Unit	-1 HF	H Unit-11	BBH Un	it-1 BB	H Unit-11	DHO
<u>S.P.W</u> <u>S.P.V</u>	08-02-2023 To 30-04-2023	AI	+	A2	A3		A4	A5	B5		B4	B3		B2	BI
<u>s.v</u>	01-05-2023 To 06-08-2022	CI	-	C2	C3	C3 C4		C5	A5		A4	A3		A2	Al
07-08-2023 To 15-10-2023		B1	B1 B2 B3		B4		B5	B5 C5		C4	C3		C2	СІ	
							MISCELI	ANEOUS	1				_	-	-
	8-2-23 To 19-2-23	20-2-23 To 5-3-23	6-3-23 To 19-3-23	<u>S.P.W</u> 20-3-23 To 9-4-23	<u>S.P.V</u> 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	5.V 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	2-10-2 To 15-10-2
Patholo	ev C1	C2	C3	C4	C5	B1	B2	B3	B4	B5	Al	A2	A3	A4	A5
Penchiat		Cl	C2	C3	C4	B5	B1	B2	B3	B4	A5	Al	A2	A3	A4
Dadiala	<b>ry</b> C4	C5	C1	C2	C3	B4	B5	B1	B2	B3	A4	A5	Al	A2	A3
CL:B I		C4	C5	CI	C2	B3	B4	B5	B1	B2	A3	A4	A5	Al	A2
E.R	C2	C3	C4	C5	C1	B2	B3	B4	B5	B1	A2	A3	A4	A5	Ϋ́ΑΙ
>	Tentative Ho Sport Sprin Sume	olidays s Week (S.P.W) g Vocations (S.P. ner Vocations (S.	V) V)	12-03-2023 24-04-2023 03-07-2023 04	TO TO TO	19-03-2023 30-04-2023 30-07-2023					A	Activat	Rawalpine	li Medical Rawalpino	Universit



Third Year MBBS 2023 Study

Guide

Cardiovascular & Respiration Module-VI

Date: 31<sup>st</sup> July, 2023 by DME,, New Teaching Block

1 | P a g e

Table of Contents	
CVS & Resp Module Team	5
University Moto, Vision, Values & Goals	6
Module VI – CVS & Resp Module	7
SECTION - I Terms & Abbreviations	
Teaching and Learning Methodologies / Strategies	9
SECTION- II b Learning Objectives, Teaching Strategies & Assessments of Pharmacology, Forensic medicine, Pathology, Medicine, Surgery, Gynae/obs, Family Medicine	
Clinically Integrated Learning Objectives	
Self-Directed Learning (SDL)	27
SECTION-III	
Integrated Module Time Table	
Teaching hours Summary	
Venues for Academic Session	
SECTION IV: Assessment Policies	40
Assessment plan	41
Types of Assessment:	
SECTION V	45
SECTION VI	
Table of Specification (TOS) For CVS & Resp Module Assessment for Third Year MBBS Modules during running academic session:	
	<b>2  </b> P a g e

Date: 31<sup>st</sup> July, 2023 by DME,, New Teaching Block

Annexure I4	8
(Sample MCQ & SEQ papers with analysis)	9
Annexure II	1

# CVS & Respiration Module Team

Duration of module	:	06 Weeks
Coordinator	:	Dr. Filza .Ali
Co-coordinator	:	Dr.Naila Batool / Dr. Raheel. Baig
Review by	:	Module Committee

	Module			Module Task Force				
	Committee				Team			
1.	Vice Chancellor RMU	Prof. Dr. Muhammad Umar	1	Coordinator	Dr. Attiya Munir (Assissant Professor of Pharmacology)			
2.	Director DME	Prof. Dr. Rai Muhammad Asghar	2	DME Focal Person	Dr. Maryum Batool			
3.	Convener Curriculum	Prof. Dr. Naeem Akhter	3.	Co-coordinator	Dr. Omaima, Dr Haseeba (Demonstrator of Pharmacology)			
4.	Dean Basic Sciences	Prof. Dr. Ayesha Yousaf						
5.	Additional Director DME	Prof. Dr. Ifra Saeed						
6.	Chairperson Pharmacology & Implementation Incharge 3 <sup>rd</sup> year MBBS	Dr. Asma Khan						
7.	Chairperson Pathology	Prof. Dr. Mobina Dhodhy						
			1.	Director DME	Prof. Dr. Rai Muhammad Asghar			
8.	Chairperson Forensic Medicine	Dr Romana Malik	2.	Add. Director DME	. Dr. Asma Khan			
9.	Focal Person Pharmacology	Dr Zunaira Hakim	3.	Assistant Director DME	Dr Omaima Asif			
10.	Focal Person Pathology	Dr Fareeha Afzal	4.	Module planner & Implementation coordinator	Dr. Omaima Asif			
11.	Focal Person Forensic Medicine	Dr. Gulzeb	5.	Editor	Mr. Ahmed Rafay, Dr. Omaima Asif			
12.	Focal Person Medicine	Dr. Saima Ambreen	•	· · · · ·				
13.	Focal Person Behavioral Sciences	Dr. Saadia Yasir						
14.	Focal Person Community Medicine	Dr. Afifa Kulsoom						
15.	Focal Person Quran Translation	Mufti abdul Wahid						
	Lectures							
16.	Focal Person Family Medicine	Dr Sadia Khan						
17.	Focal Person Bioethics Department	Prof. Dr. Akram Randhawa						
18.	Focal Person Surgery	Dr Huma Sabir						

#### 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 evidencebased 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 – VI: CVS & Respiration Module

Introduction: CVS and Respiration module aims to provide students with essential knowledge of pathological processes involved in cardiovascular and respiratory system. Detailed understanding of these is the essence of the study for intelligent clinical practice, presentation/interpretation of diseases & management.

Rationale : The CVS & Respiration module is designed to impart knowledge about the concepts & principles of the basic sciences in context of clinical symptoms & signs of commonly occurring CVS & Respiratory diseases and develop a problem solving approach in diagnosing and management of these diseases.

#### 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
- 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 6 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!

Date: 31<sup>st</sup> July, 2023 by DME,, New Teaching Block

## 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)

#### Tables & Figures

- Table1. Domains of learning according to Blooms Taxonomy
- Figure 1. Prof Umar's Model of Integrated Lecture
- 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
	С	Cognitive Domain: knowledge and mental skills.
	C1	Remembering
	C2	Understanding
1.	C3	Applying
	C4	Analyzing
	C5	Evaluating
	C6	Creating
	Р	Psychomotor Domain: motor skills.
	P1	Imitation
2	P2	Manipulation
2.	P3	Precision
	P4	Articulation
	P5	Naturalization
	А	Affective Domain: feelings, values, dispositions, attitudes, etc
	A1	Receive
2	A2	Respond
5.	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 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 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
Step 16	Ending remarks	9 Page

## 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	60%
	topic	
5	Vertical Integration	20%
6	Related	3%
	Advance	
	Research	
	points	
7	Related Ethical points	2%

### 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	Торіс	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching strategies	Assessmen t tools				
L-1	Thanatology- I (Introduction & Types of death Immediate & Early changes of death)	Forensic Medicine	<ul> <li>Define death and Classify its types</li> <li>State the WHO criteria &amp; and indicators to diagnose death</li> <li>Briefly describe the the causes, manner, mode, mechanisms, medico legal aspects of death</li> <li>Define Algor mortis and state its medico-legal importance</li> <li>Enlist various factors affecting algor mortis.</li> <li>Briefly explain the method to measure the temperature of body after death.</li> <li>Briefly describe Postmortem caloricity.</li> </ul>	C1 C1 C2 C2 C2 C2 C2	LGIS	MCQ SEQs VIVA				
L-2	Thanatology- II (Livor mortis & Rigor mortis)	Forensic Medicine	<ul> <li>Define Livor mortis and state its medico legal importance</li> <li>Differentiate between Livor mortis and bruise.</li> <li>State the mechanism of Rigor Mortis in the body after death and its medico legal importance</li> <li>Enumerate the factors which modify the onset &amp; duration of rigor mortis</li> <li>Enlist the conditions simulating rigor mortis and differentiate them</li> </ul>	C1 C3 C2 C2 C2 C2 C2 C2	LGIS	MCQs SEQs VIVA				
L-3	Concept of environment & water	Community Medicine	<ul> <li>Define safe wholesome water</li> <li>Describe sources of water supply</li> <li>Explain water pollution, pollutants, indicators of water pollution</li> <li>Differentiate between shallow and deep wells</li> <li>Enlist guidelines for drinking water quality</li> <li>Elaborate concepts of water</li> </ul>	C1 C2 C4 C1 C2	LGIS	MCQ SEQs VIVA				
L-4	Approach to a patient with chronic Peripheral arterial Disease	Surgery	<ul> <li>Recall the vascular anatomy and histology briefly.</li> <li>Briefly describe the features of chronic peripheral occlusive arterial disease.</li> <li>Enlist the investigations and state treatment options for occlusive arterial disease.</li> <li>Explain the principles of management of the chronic ischemic limb and role of surgery .</li> </ul>	C1 C2 C2 C3	LGIS	MCQs SEQs VIVA				
L-5	Artherosclerosis Pathogenesis and morphology	Pathology	<ul> <li>Classify risk factors for atherosclerosis</li> <li>Describe the role of endothelium in pathogenesis of atheromatous plaque</li> <li>Describe the role of vessel smooth muscles in pathogenesis of atheromatous plaque</li> <li>Describe the roll of endothelium in pathogenesis of atheromatous plaque</li> <li>Describe the roll of extracellular matrix in pathogenesis of atheromatous plaque</li> <li>Describe the morphology of atheromatous plaque</li> </ul>	C3 C2 C2 C2 C2 C2 C2 C2	LGIS	MCQs SEQs VIVA				

L-6	Anti-hypertensive I (Introduction and classification)	Pharmacology	<ul> <li>Define hypertension</li> <li>Classify anti-hypertensive drugs groups</li> <li>Explain the mechanisms of action of centrally acting antihypertensive drugs</li> </ul>	C1 C2 C2	LGIS	MCQs SEQs VIVA
L-7	Consequences of Atherosclerosis	Pathology	<ul> <li>Enlist complications of Atheroma</li> <li>Correlate the consequences of atherosclerosis with clinical features .</li> </ul>	C2 C3	LGIS	MCQs SEQs VIVA
L-8	Water distribution, Conservation and purification	Community Medicine	<ul> <li>Define intermittent and continuous system of distribution of water.</li> <li>Define water conservation.</li> <li>Describe hardness of water and types.</li> <li>Explain ways for removal of hardness of water.</li> <li>Describe methods of purification.</li> <li>Enlist artificial and natural methods of purification.</li> <li>Elaborate concepts on purification on large and small scale.</li> </ul>	C1 C1 C2 C2 C2 C2 C1 C2	LGIS	MCQs SEQs VIVA
L-9	Hypertension	Medicine	<ul> <li>Define hypertension.</li> <li>Enlist causes of hypertension.</li> <li>Describe clinical manifestations of hypertension including target organ damage.</li> <li>Outline investigations and management of hypertension.</li> <li>Highlight choice of antihypertensive drugs in different comorbidities</li> </ul>	C1 C1 C2 C2 C1	LGIS	MCQs SEQs
L-10	Hypertensive disorders in pregnancy PIH, Preeclampsia	Obstetric	<ul> <li>Define hypertension in pregnancy</li> <li>Classify the types of hypertension in pregnancy</li> <li>State the pathophysiology of pre-eclampsia</li> <li>Describe the clinical presentation of pre-eclampsia and understand the principles of its management</li> <li>Enlist and discuss maternal and fetal complications and long term risks to both mother and baby associated with hypertensive disorders</li> </ul>	C 1 C 1 C 2 C 3 C 2	LGIS	MCQs SEQs VIVA
L-11	Antihypertensive II ( ACE inhibitors and ARBs)	Pharmacolog	<ul> <li>Enlist ACEI and ARB</li> <li>Describe mechanism of action, uses and adverse effects of this groups</li> </ul>	C1 C2	LGIS	MCQs SEQs VIVA
L-12	Air and Ventilation (control of air pollution)	Community Medicine	<ul> <li>Enlist indices of thermal comfort</li> <li>Describe the factors responsible for vitiation of air</li> <li>Define air pollution</li> <li>Identify sources of air pollution and air pollutants</li> <li>Demonstrate selection of air sample for analysis</li> <li>Enumerate the methods to prevent &amp; control of air pollution</li> <li>Describe standards and types of ventilation</li> </ul>	C1 C2 C1 C3 C4 C1 C1 C1 C2	LGIS	MCQs SEQs

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S-1	Hypertensive Heart Disease	Patholog	<ul> <li>Define criteria of systemic hypertensive heart disease</li> <li>Classify the etiological factors of hypertension</li> <li>Differentiate between benign and malignant Hypertension</li> <li>Describe the pathogenic mechanisms of essential hypertension</li> <li>Describe morphology of heart in systemic hypertensive heart disease</li> <li>Describe Morphology of cor –pulmonale</li> <li>Differentiate b/w systemic and pulmonary hypertension</li> <li>Demonstrate clinical reasoning in interpreting the clinical history and symptomatology</li> </ul>	C1 C3 C3 C2 C2 C2 C2 C2 C2 C3 A2	SGD	MCQs SEQs VIVA
L-13	Air and Ventilation (global warming.)	Community Medicine	<ul> <li>Enlist natural and artificial methods of air purification.</li> <li>Describe the green house effect</li> <li>Enlist green house gases.</li> <li>Identify sources of green house gases.</li> <li>Describe global warming.</li> <li>Define ozone hole.</li> <li>Describe link between global warming and climate change.</li> </ul>	C1 C2 C1 C3 C2 C1 C2 C2	LGIS	MCQs SEQs VIVA

			2nd Week			
Code no	Торіс	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching strategies	Assessment tools
L-14	Antihypertensives III (Vasodilators)	Pharmacology	<ul> <li>Classify vasodilators</li> <li>Discuss mechanism of action ,clinical uses and side effects of different types of vasodilators</li> </ul>	C1 C2	LGIS	MCQs SEQs VIVA
L-15	Antihypertensives IV (Ca Channel Blockers)	Pharmacolog	<ul> <li>Classify calcium channel blockers</li> <li>Discuss mechanism of action ,clinical uses and side effects of calcium channel blockers</li> </ul>	C2 C1	LGIS	PBQS
L-16	Prevention of Radiation Hazards	Community Medicine	<ul> <li>Describe sources of radiation exposure</li> <li>Describe types of radiations</li> <li>Discuss biological effects of radiation</li> <li>Discuss radiation protection</li> </ul>	C2 C2 C2 C2 C2	LGIS	MCQs SEQs VIVA
L-17	Antianginal I	Pharmacology	<ul> <li>Enlist Anti-Anginal Drugs</li> <li>Describe mechanism of action and adverse effects of nitrates</li> </ul>	C1 C2	LGIS	MCQs SEQs VIVA
L-18	Thanatology- III (Late changes of Death Putrefaction)	Forensic Medicine	<ul> <li>Enlist the bacteria participates in putrefaction</li> <li>Briefly describe the features of putrefaction and its mechanism</li> <li>State the medicolegal importance of maggots.</li> </ul>	C1 C2 C2 1	LGIS Page	MCQs SEQs VIVA
			Briefly describe the factors affecting putrefaction in water.	C2		
S-2	Pathophysiol ogy of Angina	Pathology	<ul> <li>Classify the ischemic heart disease on the basis of pattern of clinical presentation</li> <li>Describe the types of angina</li> <li>Describe the pathophysiology of angina</li> <li>Correlate the pathogenesis of ischemic heart disease with various etiological factors</li> </ul>	C3 C2 C2 C3	SGD	MCQs SEQs VIVA
L-19	Ischemic Heart Disease	Medicine	<ul> <li>Classify coronary heartdiseases.</li> <li>Explain clinical manifestation of ischemic heart disease including stable angina, unstable angina, MI and heart failure.</li> <li>Describe investigation of IHD.</li> <li>Outline management of IHD</li> </ul>	C1 C2 C2 C3	LGIS LGIS	MCQs SEQs VIVA
L-20	Antianginal II	Pharmacology	• Describe mechanism of action and adverse effects of other anti angina Drugs	C2	LGIS	MCQs SEQs VIVA

C-1	Diuretics	Pharmacology	• Rationalize the use of diuretics in specific clinical scenario	C3	CBL	MCQs SEQs VIVA
L-21						
S-3	Ischemic Heart Disease	Pathology	<ul> <li>Describe morphological features of MI</li> <li>Correlate pathogenesis, And Complications of MI.</li> <li>Describe chronic ischemic heart disease</li> <li>Describe the pathogenesis of myocardial infarction</li> <li>Describe the patterns of myocardial infarction</li> <li>Correlate the evolution of morphological changes in myocardial infarction with time duration of infarct</li> <li>Correlate the complications of myocardial infarction with clinical features</li> </ul>	C2 C3 C2 C2 C2 C2 C3 C3	SGD	MCQs SEQs
C-2	Vascuilitis	Pathology	<ul> <li>Describe Pathogenesis of vasculitis</li> <li>Clarify Various forms of vasculitis</li> <li>Describe complication of vasculitis</li> <li>Differentiate among Morphological features of various type of vasculitis</li> <li>Interpret the clinical features and lab findings of a case with vasculitis</li> <li>Demonstrate collaborative learning skills</li> <li>Demonstrate adequate communication skills in describing the clinical problem</li> </ul>	C2 C3 C2 C3 P2 A3 A3	CBL	MCQs SEQs
L-22	Cyanotic congenital heart disease	Paediatrics	<ul> <li>Define Tetralogy of Fallot</li> <li>Describe the haemodynamics of the defect and its clinical presentation</li> <li>Plan investigations, interpret and to take appropriate action</li> <li>Discuss medical and surgical Management</li> <li>Assess for complications and their management</li> </ul>	C1 C2 C2 C3 C3 1	LGIS	MCQs SEQs VIVA

L-23	Approach to a patient with Gangrene and Amputations	Surgery	<ul> <li>Recall the causes of acute limb ischemia.</li> <li>State definition of thromboembolism.</li> <li>Describe the Pathophysiology of Thromboembolism .</li> <li>Discuss the various types of Gangrene.</li> <li>Explain the types of amputations according to ischemia site in a patient.</li> </ul>	C1 C1 C2 C2 C3	LGIS	PBQS
L-24	Thanatology- IV Adipocere, Mummification Estimation of time since death	Forensic Medicine	<ul> <li>Define Adipocere and state its medicolegal importance.</li> <li>Define mummification and state its medicolegal importance</li> <li>Briefly describe the method to calculate the time since death.</li> <li>Enumerate different changes after death which helps to calculate the time since death.</li> </ul>	C1 C2 C3 C2	LGIS	MCQs SEQs VIVA
L-25	Acyanotic heart disease	Paediatrics	<ul> <li>Describe the haemodynamics of VSD and PDA</li> <li>Discuss the clinical presentation</li> <li>Make Plan of Investigations</li> <li>Discuss the medical and surgical treatment</li> <li>Identify Complications and manage them</li> </ul>	C2 C2 C1 C3 C2	LGIS	MCQs SEQs VIVA
L-26	CCF I (Introduction & classification)	Pharmacology	<ul> <li>Classify drug groups used in CCF</li> <li>Describe mechanism of action of digoxin</li> <li>Describe digoxin toxicity and its management</li> </ul>	C2 C2 C2	LGIS	MCQs SEQs VIVA
P-1	P drug and prescription of HTN	Pharmacology	• Clincal pharmacology of anti hypertensive drugs.	C3	practical	OSPE
P-2	Cardiac Poisons	Forensic Medicine	<ul> <li>Enlist important cardiac poisons,</li> <li>Mention the alkaloids, fatal dose and fatal period along with medicolegal significance of Digitalis and Aconite</li> <li>Briefly describe sign and symptoms and autopsy findings of these poisons.</li> <li>Write down important steps of management of such cases.</li> </ul>	C1 C2 C2 C2 C2	practical	OSPE
P-3	Morphology of vascular lesions	Pathology	<ul> <li>Identify the morphological features of Calcification</li> <li>Identify the morphological features of atherosclerosis</li> <li>Identify the morphological features of thrombus</li> <li>Demonstrate collaborative working skills</li> </ul>	P3 P3 P3 A3	practical	OSPE

	3rd Week								
Code no	Торіс	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching strategies	Assessment tools			
S-4	Aneurysms & Dissection	Pathology	<ul> <li>Classify aneurysms</li> <li>Correlate the etiological factors with the pathogenic mechanisms of aneurysm formation.</li> <li>Correlate atherosclerosis with abdominal aortic aneurysms</li> <li>Enlist the etiological factors for aortic dissection</li> <li>Describe the morphological features of aortic dissection</li> <li>Differentiate between Type A and Type B aortic dissections.</li> </ul>	C3 C3 C3 C1 C2 C3	SGD	MCQs SEQs VIVA			
L-27	Rheumatic fever	Medicine	<ul> <li>Explain pathogenesis of rheumatic fever.</li> <li>Describe clinical manifestations and JONES criteria for diagnosis of Rheumatic fever</li> <li>Enlist investigations for Rheumatic fever</li> <li>Describe management of acute attack and secondary prevention of Rheumatic fever</li> </ul>	C2 C2 C1 C3	LGIS	MCQs SEQs VIVA			
L-28	Forensic Serology Trace Evidence Blood, Semen & Saliva	Forensic Medicine	<ul> <li>Briefly describe the physical, chemical, microscopic, biochemical, spectroscopic Assessment of blood.</li> <li>Enlist the information gathered from a blood ,saliva &amp; seminal stain.</li> <li>State the Medicolegal importance of blood groups ,secretors and non-secretors.</li> <li>Mention the method to Collect, preserve, and dispatch specimen of blood stain</li> <li>Briefly describe the features of salivary and vomitus stain w.r.t Medicolegal importance</li> </ul>	C2 C1 C2 C2 C2 C2	LGIS	MCQs SEQs VIVA			
L-29	Pathogenesis of Rheumatic Fever Morphological changes in Rheumatic Heart Disease	Pathology	<ul> <li>Describe the Pathogenesis of rheumatic fever C2</li> <li>Describe the Pathogenesis of rheumatic Heart Disease</li> <li>Outline the diagnostic criteria of rheumatic fever</li> <li>Discuss the complications of rheumatic fever</li> <li>Define chronic rheumatic heart disease</li> <li>Describe the morphology of rheumatic heart disease</li> <li>Outline the diagnostic criteria of rheumatic Heart Disease</li> <li>Dutline the diagnostic criteria of rheumatic Heart Disease</li> <li>Describe the morphology of rheumatic Heart Disease</li> <li>Dutline the diagnostic criteria of rheumatic Heart Disease</li> </ul>	C2 C2 C2 C2 C1 C2 C1 C2 C3 C2	LGIS	MCQs SEQs VIVA			
L-30	CCF II (Digoxin and related drugs):	Pharmacology	<ul> <li>Describe mechanism of action of other drugs used in CCF</li> <li>Enlist their therapeutic uses and adverse effects</li> </ul>	C2 C2	LGIS	PBQs			

L-31	Infective Endocarditis	Medicine	<ul> <li>Describe pathogenesis of Infective Endocarditis.</li> <li>Explain clinical features of Infective Endocarditis and Dukes criteria.</li> <li>Enlist investigation of Infective Endocarditis</li> <li>Outline management of Infective Endocarditis</li> </ul>	C2 C2 C1 C3	LGIS	MCQ SEQ
L-32	Valvular heart disease	Medicine	<ul> <li>Describe rheumatic heart disease with pathogenesis.</li> <li>Describe clinical features of valvular heart disease including mitral stenosis</li> </ul>	C2 C2	LGIS	MCQs SEQs
L-33	Rheumatic fever	Paediatrics	<ul> <li>Discuss etiology of rheumatic fever and its diagnostic criteria</li> <li>Briefly describe its clinical features</li> <li>Make plan of investigations and their interpretation</li> <li>State the plan of management and discuss about the prophylaxis of rheumatic fever</li> </ul>	C2 C2 C2 C3	LGIS	MCQs SEQs VIVA
L-34	Introduction to Diuretics	Pharmacology	<ul> <li>Classify diuretics</li> <li>Describe the role of diuretics in hypertension</li> <li>Rationalize the use of diuretics in specific clinical scenario</li> </ul>	C2 C2 C3	LGIS	MCQs SEQs VIVA
L-35	IHD/CCF	Family Medicine	<ul> <li>Explain the management strategies of a patient with IHD and heart failure in general practice including the psychosocial impact of disease on patient and their families</li> <li>Describe the strategies for prevention of IHD and CCF</li> </ul>	C2 C2	LGIS	MCQs
L-36	Infective Endocarditis	Pathology	<ul> <li>Enlist the causes of infective endocarditis</li> <li>Classify infective endocarditis</li> <li>Describe morphology of infective endocarditis</li> <li>Differentiate b/w vegetations of different type of endocarditis</li> </ul>	C1 C2 C2 C3	LGIS	MCQs SEQs VIVA
C-3	Myocarditis & pericarditis	Pathology	<ul> <li>Differentiate between various types of pericarditis</li> <li>Correlate the pathogenesis of pericardial effusions with the clinical presentation.</li> <li>Correlate different forms of fluid accumulations in pericardial sac with the underlying pathology.</li> <li>Interpret the lab report of a patient with pericardial effusion</li> <li>Demonstrate the critical thinking attitude needed for applying basic knowledge to a clinical situation</li> <li>Enumerate the causes of myocarditis &amp; pericarditis</li> <li>Describe the morphological features of myocarditis</li> <li>Demonstrate the critical thinking attitude needed for applying basic knowledge to a clinical situation</li> </ul>	C3 C3 C3 P3 A3 C1 C2 C2 C2 A3	CBL	PBQS
L-37	Approach to a patient with DVT and varicose veins	Surgery	<ul> <li>Briefly recall the venous anatomy and the physiology of venous return.</li> <li>Describe the etiology and pathophysiology of deep venous thrombosis.</li> <li>State the clinical significance and management of varicose veins.</li> </ul>	C1 C2 C3	LGIS	MCQs SEQs VIVA
L-38	Childhood Asthma	Paediatric	<ul> <li>Define Asthma and Identify risk factors</li> <li>Discuss clinical presentation and Classify as per GINA guidelines</li> <li>Make differential diagnosis</li> <li>Plan pertinent investigations, interpret and take appropriate action</li> <li>Discuss the treatment of Acute Attack of Asthma and long term management</li> </ul>	C1 C2 C1 C3 C2	LGIS	PBQS

L-39	Antiarrhythmic drugs I (Introduction to normal rhythm and classification)	Pharmacology	Classify antiarrythmic drugs	C2	LGIS	MCQs SEQs VIVA
L-40	Antiarrythmic drugs II (class I and class II)	Pharmacology	Describe mode of action, clinical uses and adverse effects of Class I, Class II antiarrythmic drugs	C1	LGIS	MCQs SEQs VIVA
L-41 P-4	Gestational diabetesmellitus P drug and prescription of	Obstetrics Pharmacology	<ul> <li>Define gestational diabetes mellitus</li> <li>Describe the pathogenesis of GDM</li> <li>Identify and state the risks factor associated with GDM</li> <li>Screen and diagnose GDM</li> <li>Briefly explain the management of GDM</li> <li>Discuss clinical pharmacology of cardiotonic drugs</li> </ul>	CI C2 C2 C1 C3 C2	LGIS Practical	MCQs SEQs OSPE
	angina					
P-5	Assessment of a Stain	Forensic Medicine	<ul> <li>State the medicolegal importance of Biological specimens (Blood, Semen, Salvia, Vomitus, Breath, Urine, Hair).</li> <li>Briefly describe the method to Collect, preserve and dispatch various human body specimens</li> </ul>	C2 C2	Practical	OSPE
P-6	Lipid profile and cardiac enzymes	Pathology	<ul> <li>Enlist cardiac enzymes</li> <li>Enlist parameters for lipid profile</li> </ul>	C1 C1	Practical	OSPE

			4th Week			
Code no	Торіс	Discipline	At the end of the lecture student should be able to	C/P/A	Teaching strategies	Assessment tools
L-42	Antiarrhythmic drugs III(class IV and class V)	Pharmacology	<ul> <li>Describe mode of action, clinical uses and</li> <li>adverse effects of Class III and Class IV antiarrythmic drugs</li> </ul>	C2 C2	LGIS	MCQs SEQs VIVA
L-43	Asphxia-I (Classification& Hanging)	Forensic Medicine	<ul> <li>Classify Asphyxia</li> <li>Define Hanging , its types/classification and give causes of death of hanging</li> <li>Explain the medicolegal aspects of hanging</li> <li>Differentiate between ante mortem and post mortem hanging</li> <li>Differentiate between suicidal , homicidal and accidental hanging</li> <li>Enumerate its external and internal autopsy findings</li> </ul>	C1 C1 C2 C3 C2 C2 C2	LGIS	MCQs SEQs VIVA
C-4	Cardiomyopathies	Pathology	<ul> <li>Formulate differential diagnosis of cardiomyopathy</li> <li>Describe pathogenesis of cardiomyopathies</li> <li>Classify Various types of cardiomyopathies</li> <li>Describe Consequences of cardiomyopathies</li> <li>Describe Morphological features of cardiomyopathies</li> <li>Demonstrate adequate communication skills in describing the clinical problem</li> </ul>	C3 C2 C3 C2 C2 C2 A3	CBL	MCQs SEQs VIVA
L-44	Antiasthmatics II (Drug groups)	Pharmacology	<ul> <li>Discuss the roles of corticosteroids in the treatment of bronchial asthma. C1</li> <li>Discuss the role of ipratropium in asthma C2</li> <li>Discuss the mechanism of action and adverse effects of leukotrine synthesis and receptor blockers used in asthma C2</li> <li>Enlist drugs used in acute and chronic asthma C2</li> </ul>	C1 C2 C2 C2 C2	LGIS	MCQs SEQs VIVA
L-45	Asphxia –II (Strangulation)	Forensic Medicine	<ul> <li>Define strangulation, its types/classification and give causes of death of strangulation.</li> <li>Explain the medico-legal aspects of strangulation.</li> <li>Differentiate between hanging and strangulation</li> <li>Differentiate between suicidal, homicidal and accidental strangulation</li> </ul>	C1 C2 C2 C2 C2 C3	LGIS	MCQs SEQs VIVA
C-5	Anti asthamatic drugs	Pharmacology	Rationalize the use of antiasthamatic drugs in specific clinical scanerio	C3	CBL	MCQs SEQs
L-46	Chronic bronchitis and emphysema	Pathology	<ul> <li>Define COPD</li> <li>Enumerate diseases of COPD</li> <li>Differentiate b/w the pathophysiology of emphysema and chronic bronchitis.</li> <li>Correlate morphology of each type of emphysema with its pathogenesis</li> </ul>	C1 C1 C3 C3	LGIS	MCQs SEQs VIVA

L-47	Antiasthmatics-II (Classification)	Pharmacology	<ul> <li>Describe the mechanism of action &amp; adverse effects of Beta 2 agonists used in asthma</li> <li>Describe the mechanism of action, actions &amp; adverse effects of Methylxanthines</li> <li>Describe mechanism of action and adverse effects of Mast Cell Stabilizers</li> </ul>	C2 C2 C1	LGIS	MCQs SEQs
L-48	Approach to a patient with lymphedema	Surgery	<ul> <li>Recall the main functions of the lymphatic system</li> <li>Recall the development of the lymphatic system.</li> <li>Enumerate the various causes of limb swelling.</li> <li>Briefly describe the etiology, clinical features and investigations of lymphedema.</li> </ul>	C1 C1 C2 C2		MCQs SEQs
L-49	Asphxia – III (Suffocation)	Forensic Medicine	<ul> <li>Outline management plan for lymphedema.</li> <li>Define suffocation.</li> <li>Enlist different types of suffocation.</li> <li>Briefly explain the postmortem findings in death due to suffocation</li> <li>State the medico-legal importance of death from different types of suffocation</li> </ul>	C3 C1 C1 C2 C2 C2	LGIS	MCQs SEQs
L-50	Asthma, COPD	Medicine	<ul> <li>Describe pathophysiology of asthma and its clinical manifestations.</li> <li>Enlist predisposing factors of asthma.</li> <li>Describe diagnostic tests and management of asthma in step wise fashion.</li> <li>Define COPD and briefly describe pathophysiology of COPD.</li> <li>Enumerate risk factors for development of COPD.</li> <li>Outline investigations and management of COPD</li> </ul>	C2 C1 C3 C2 C1 C3	LGIS	MCQs SEQs
L-51	Approach to a patient with cardiac diseases. (Cardiac surgery)	Surgery	<ul> <li>Describe the cardiac diseases Ischemic heart disease, valvar heart diseases, congenital heart diseases, tumors of heart.</li> <li>Explain the basics of surgical treatment of different heart diseases like cardiac bypass, valve replacements etc.</li> </ul>	C2 C2	LGIS	MCQs SEQs
L-52	Approach to a patient with Chest trauma and its management	Surgery	<ul> <li>State the life threatening and potentially life threatening chest trauma (ATLS)</li> <li>Describe the treatment of chest trauma according to ATLS principles including chest intubation.</li> </ul>	C2 C3	LGIS	MCQs SEQs VIVA
S-1	Anti tussive drugs	Pharmacology	<ul> <li>Describe anti-tussive, mucolytics and expectorants</li> <li>Classify Anti-tussives</li> <li>Describe Pharmacodynamics of these drugs</li> </ul>	C2 C2 C2	SGD	PBQs
L-53	Asphxia – IV (Drowning)	Forensic Medicine	<ul> <li>Define drowning and Classify drowning.</li> <li>State the cause of death in different types of drowning</li> <li>Briefly explain the patho-physiology of wet drowning both in sea and fresh water.</li> <li>Describe the postmortem findings and their medico-legal importance.</li> <li>Differentiate between antemortem and postmortem drowning</li> </ul>	C1 C2 C2 C2 C2 C3	LGIS	

S-5	Tumors of CVS	Pathology	• Describe epidemiology, pathogenesis, clinical feature and morphology of primary,	C2	SGD	
			<ul> <li>metastatic and other tumors of heart.</li> <li>Describe epidemiology, pathogenesis, clinical feature and morphology of Benign Tumors and Tumor-Like Conditions of blood vessels.</li> </ul>	C2		
			<ul> <li>Describe epidemiology, pathogenesis, clinical feature and morphology of Intermediate- Grade (Borderline) Tumors of blood vessels.</li> </ul>	C2		
			<ul> <li>Describe epidemiology, pathogenesis, clinical feature and morphology of Malignant Tumors of blood vessels.</li> </ul>	C2		
L-54	Asthma & Bronchiectasis	Pathology	• Enlist the types of asthma	C1	LGIS	
			Describe etiology of asthma	C2		
			Describe the pathogenesis of asthma	C2		
			Enlist genetic associations of asthma	C1		
			• Describe morphological changes in lungs in a patient with asthma	C2		
			Describe the pathogenesis of bronchiectasis	C2		
			• Describe the gross and microscopic changes in bronchiectatic lung	C2		
P-7	P drug and prescription of CCF	Pharmacology	• Rationalize the use of drugs in specific clinical scanerio	C3	Practical	OSPE
P-8	Asphyxiants	Forensic Medicine	• Briefly describe the mechanism of action of asphyxial poison.(Carbomonoxide,	C2	Practical	OSPE
			Carbondioxide, Hydrogen sulphide)	C2		
			• Mention the fatal dose, management & medico-legal importance of Asphyxial poison.	C2		
			• Briefly explain the autopsy findings of a victim of Asphyxial poison.	C2		
P-9	MI and Rhematic heart	Pathology	• Illustrate with help of diagram the different types of Vegetation in heart valves	P3	Practical	OSPE
	disease		Interpret the morphological Changes in MI	P3		
			Demonstrate collaborative work in the group	A3		

			5th Week			
Code no L-55	Topic Sexual Offences (Rape & Sodomy)	Discipline Forensic Medicine	<ul> <li>At the end of the lecture student should be able to</li> <li>Define rape, intercourse, sodomy.</li> <li>Explain laws relating to sexual offences.</li> <li>Assess the sexual offences and relate it to relevant Sections of Law (Zina and Hudood Ordina •</li> <li>Differentiate between natural and unnatural sexual Offences.</li> <li>Define sodomy &amp; Bestiality</li> <li>Briefly explain the typical finding in active and passive agent of sodomy).</li> </ul>	C/P/A C1 C2 C3 C1 C1 C1 C2	Teaching strategies LGIS	Assessment tools MCQs SEQs VIVA
L-56	Medico-legal aspects of Pregnancy ,Delivery and Abortion	Forensic Medicine	<ul> <li>Define pregnancy and describe forensic importance of delivery.</li> <li>Briefly explain the signs and symptoms of pregnancy.</li> <li>Describe the autopsy findings in case of recent and remote delivery in living and dead body.</li> <li>Enlist the types and methods of abortion.</li> <li>Briefly explain the causes of death in abortion.</li> <li>Assess the abortion and relate it to relevant Sections of Law &amp; state its medicolegal aspects.</li> <li>Briefly describe the autopsy findings in case of criminal abortion.</li> </ul>	C1 C2 C3 C1 C2 C3 C2 C3 C2	LGIS	MCQs SEQs VIVA
L-57	Medico-legal aspects of Infanticide Child abuse Battered child & wife	Forensic Medicine	<ul> <li>Define infanticide, live born, dead born &amp; still born.</li> <li>Briefly describe the method of assessing the age of fetus &amp; define Hess's Rule.</li> <li>Differentiate between features of live and dead born.</li> <li>Explain the autopsy findings in case of live and dead born.</li> <li>Explain the magnitude of the problem related to child abuse.</li> <li>Describe the phenomena of battered wife and related laws</li> <li>Identify criminal and non-accidental violence or abuse to a newborn, infant or child</li> </ul>	C1 C2 C3 C2 C1 C2 C2 C2 C3	LGIS	MCQs SEQs VIVA
L-58	Custodial Torture	Forensic Medicine	<ul> <li>Define Cusodial torture</li> <li>Briefly explain various types of custodial torture</li> <li>Enlist the the types of injuries receive in custodial torture</li> <li>State the medicolegal importance of death in custody and custodial torture</li> </ul>	C1 C2 C2 C3	LGIS	MCQs SEQs VIVA

23 | P a g e

S-6 L-59	Interstitial lung disease Bronchial Asthma	Pathology Family Medicine	<ul> <li>Define and classify interstitial lung diseases.</li> <li>Differentiate between restrictive and obstructive lung diseases</li> <li>Differentiate between fibrosing and granulomatous interstitial lung diseases.</li> <li>Describe the Pathogenesis of idiopathic pulmonary fibrosis (IPF)</li> <li>Describe the clinical features of restrictive lung disease</li> <li>Discuss the risk factors for Asthma in our population <ul> <li>Explain the risk assessment for Asthma</li> <li>Discuss the primary and secondary prevention of Asthma in a</li> </ul> </li> </ul>	C3 C3 C2 C2 C2 C2 C2 C2 C2 C2 C2 C2	SGD LGIS	PBQs MCQs
			<ul> <li>primary health setting</li> <li>Identify the guidelines that should be followed in a patient with Asthma</li> </ul>	C3		
L-60	Pleural effusion	Medicine	<ul> <li>Define pleural effusion.</li> <li>Classify and explain different types of pleural effusion.</li> <li>Enlist causes and clinical features of pleural effusion.</li> <li>Outline investigations and treatment of pleural effusion.</li> <li>Enlist indication of chest intubation in pleural effusion</li> </ul>	C1 C2 C2 C3 C2	LGIS	MCQs SEQs
S-7	Acute Pulmonary infections	Pathology	<ul> <li>Classify pulmonary infections on basis of etiology and morphology .</li> <li>Describe the pneumonia syndromes.</li> <li>Differentiate between the morphology of different types of pneumonia.</li> </ul>	C3 C3 C3	SGD	PBQS
L-61	Pneumonia	Paediatrics	<ul> <li>Classify Pneumonia according to the WHO ARI protocol</li> <li>Plan pertinent investigations, interpret and take appropriate action</li> <li>Assess complications</li> <li>Manage Pneumonia and its complications</li> </ul>	C1 C2 C2 C2 C2	LGIS	MCQs SEQs VIVA
L-62	Barbiturates & Hypnotics	Forensic Medicine	<ul> <li>Briefly describe the mechanism of action of Barbiturates &amp; Hypnotics</li> <li>Mention the fatal dose, management &amp; medico-legal importance of Barbiturates &amp; Hypnotics</li> <li>Briefly explain the autopsy findings of a victim of Barbiturates &amp; Hypnotics poisoning</li> </ul>	C2 C2 C3	LGIS	MCQs SEQs VIVA
S-8	Chronic Pulmonary infections	Pathology	<ul> <li>Describe chronic pneumonias.</li> <li>Describe epidemiology, pathogenesis, etiology and morphology of Histoplasmosis, Coccidioidomycosis, and Blastomycosis.</li> <li>Describe Pneumonia in the Immunocompromised Host, Opportunistic Fungal Infections and Pulmonary Disease in HIV.</li> </ul>	C2 C2 C2	SGD	PBQS
L-63	TUBERCULOSIS	Pathology	<ul> <li>Enlist the risk factors for acquiring tuberculosis</li> <li>Describe pathophysiology of primary and secondary tuberculosis.</li> <li>Describe the processes of formation of granulomas</li> <li>Differentiate between the morphology of lesions in primary and secondary tuberculosis</li> <li>Describe the lesions in miliary tuberculosis</li> </ul>	C1 C2 C2 C3 C2	LGIS	MCQs SEQs

			<ul> <li>Enumerate first and second line drugs for treatment of tuberculosis</li> <li>Describe mechanism of action uses and adverse effects of first line drugs used in tuberculosis</li> </ul>	C2 C2		
C-6	Squamous cell Carcinoma	Pathology	<ul> <li>Classify lung tumors</li> <li>Describe the carcinogenic pathways of squamous cell carcinoma of lung</li> <li>Describe the morphology of squamous cell carcinoma of lung</li> <li>Correlate the clinical presentation of lung carcinoma with the stage of disease</li> <li>Interpret the clinical data of patient with lung carcinoma for the prognosis of the disease</li> <li>Demonstrate understanding of team work in diagnosing a patient with critical disease</li> </ul>	C1 C2 C3 P3 A2	CBL	MCQs SEQs VIVA
L-64	Croup	Paediatrics	<ul> <li>State the etiology of croup</li> <li>Briefly explain the Clinical features and make differential diagnosis of stridor</li> <li>Enlist the X-Ray findings of CROUP</li> <li>Describe Treatment and Management plan of Croup</li> </ul>	C1 C2 C1 C3	LGIS	PBQS
L-65	Anti TB drugs I & II	Pharmacology	<ul> <li>Enlist 1st and 2nd line Anti TB Drugs</li> <li>Discuss their mechanism of action.</li> <li>Discuss their adverse effects and drug interaction</li> <li>Discuss different regimes for treatment of TB</li> <li>Describe drug interactions of isoniazid and Rifampicin</li> </ul>	C1 C2 C2 C2 C2 C2	LGIS	MCQs SEQs VIVA
L-66	Approach to benign Diseases of the Thorax	Surgery	<ul> <li>Briefly describe different benign diseases of respiratory system of surgical importance like empyema, lung abscess, lobar collapse, destructive lung disease.</li> <li>Explain the basics of Surgical treatment of the benign diseases of thorax like chest intubation, VATS, thoracotomy.</li> </ul>	C2 C3	LGIS	MCQs SEQs VIVA
L-67	Seminar on TB	Medicine	<ul> <li>Recognize pathophysiology of Tuberculosis.</li> <li>Explain clinical features of Pulmonary and pulmonary Tuberculosis.</li> <li>Outline Investigations and management plan of Tuberculosis</li> </ul>	C1 C2 C2	LGIS	MCQs SEQs
P-10	P drug and prescription of asthma and TB	Pharmacology	Rationalize the use of antiasthamatic drugs in specific clinical scanerio	C3	Practical	OSPE
P-11	Assessment of a Rape victim	Forensic Medicine	<ul> <li>Briefly describe the procedure of performing clinical l Assessment of victim and assailant in case of sexual assault.</li> <li>Explain the method of collection of specific specimens in sexual offences</li> <li>Write a required certification in case of diagnosed sexual assault</li> </ul>	C2 C2 C2	Practical	OSPE

P-12	Morphology of lung leisons	Pathology	<ul> <li>Illustrate with the help of a diagram the morphology of emphysema</li> <li>Illustrate with the help of a diagram the morphology of granuloma</li> <li>Demonstrate positive attitude towards safe handling of laboratory specimens</li> </ul>	Р3 Р3 А3	Practical	OSPE

# Family Medicine

Lecture	Learning Objectives	Cognition level	Teaching Strategy	Assessment Strategy
IHD/CCF	• Explain the management strategies of	C2	LGIS	MCQs
	a patient with IHD and heart failure in			
	general practice including the			
	psychosocial impact of disease on	C2		
	patient and their families			
	• Describe the strategies for prevention			
	of IHD and CCF			
Bronchial Asthma	• Discuss the risk factors for Asthma in our population	C2	LGIS	MCQs
	• Explain the risk assessment for	C2		
	Asthma			
	• Discuss the primary and secondary prevention of Asthma in a primary	C2		
	health setting			
	• Identify the guidelines that should be followed in a patient with Asthma	C3		

## SDL Curriculum

# (Self Directed Learning)

	Week-1			
	Pharmacology			
Торіс	Learning Objectives	References		
<ul> <li>Role of α-2 agonists in clinical settings other than hypertension</li> </ul>	<ul> <li>Enlist the conditions in which α-2 agonists are used C1</li> <li>Rationalize their use in these conditions C2</li> </ul>	• Kaye AD, Chernobylsky DJ, Thakur P, Siddaiah H, Kaye RJ, Eng LK, Harbell MW, Lajaunie J, Cornett EM. Dexmedetomidine in enhanced recovery after surgery (ERAS) protocols for postoperative pain. Current pain and headache reports. 2020 May;24:1-3.		
		• Baller EB, Hogan CS, Fusunyan MA, Ivkovic A, Luccarelli JW, Madva E, Nisavic M, Praschan N, Quijije NV, Beach SR, Smith FA. Neurocovid: pharmacological recommendations for delirium associated with COVID-19. Psychosomatics. 2020 Nov 1;61(6):585- 96.		
		• Banas K, Sawchuk B. Clonidine as a treatment of behavioural disturbances in autism spectrum disorder: A systematic literature review. Journal of the Canadian Academy of Child and Adolescent Psychiatry. 2020 May;29(2):110.		
	Pathology			
Disorders of veins & Lymphatics	<ul> <li>Define heart failure C1</li> <li>Describe the pathogenesis of right and left heart failure. C2</li> <li>Describe compensatory responses of CVS for heart failure. C2</li> <li>Describe clinical features of right and left heart failure. C2</li> <li>Describe morphology of different tissues in event of heart failure. C2</li> </ul>			
	Forensic Medicine			

Thanatology	<ul> <li>Briefly explain Scientific concepts regarding death,</li> </ul>	https://www.merriam-webster.com/dictionary/thanatology https://pubmed.ncbi.nlm.nih.gov/22375350/
	<ul> <li>State Medico-legal aspect of Brain death</li> <li>Enlist Indicators of Death, medico-legal aspects of Sudden and unexpected deaths</li> <li>Define Cause, manner, mode and mechanisms of death</li> </ul>	Parikh Text Book Of Forensic Medicine Principles of Forensic Medicine by Gautam Biswas

	Week-2					
	Pharmacology					
Торіс	Learning Objectives	References				
<ul> <li>Novel Anti anginal drug</li> </ul>	<ul> <li>Discuss the newer drugs used in management of different types of Angina C2</li> </ul>	<ul> <li>Dutt HK, Pratik AH, Dhapola VS. Comparative Efficacy and Impact on Quality of Life with Add-on Therapy of Emerging Newer Anti Anginal Drugs in Stable Angina-A Meta-Analysis.</li> <li>Zhu H, Xu X, Fang X, Zheng J, Zhao Q, Chen T, Huang J. Effects of the antianginal drugs ranolazine, nicorandil, and ivabradine on coronary microvascular function in patients with nonobstructive coronary artery disease: a meta-analysis of randomized controlled trials. Clinical therapeutics. 2019 Oct</li> </ul>				
	Pathology					
• Heart failure	<ul> <li>Define heart failure C1</li> <li>Describe the pathogenesis of right and left heart failure. C2</li> <li>Describe compensatory responses of CVS for heart failure. C2</li> <li>Describe clinical features of right and left heart failure. C2</li> <li>Describe morphology of different tissues in event of heart failure. C2</li> </ul>					
Forensic Medicine						
<ul> <li>Forensic Serology</li> <li>(Trace Evidence: Blood</li> <li>Semen &amp; Saliva )</li> </ul>	<ul> <li>State Forensic importance of Biological specimens (Blood)</li> <li>Enumerate Methods of their collection, preservation and dispatch for common laboratory tests</li> </ul>	https://www.sciencedirect.com/topics/medicine-and-dentistry/forensic- serology https://www.sjsu.edu/people/mary.juno/courses/1066/s7/ForensicSerology.pdf Parikh Text Book Of Forensic Medicine Principles of Forensic Medicine by Gautam Biswas				
	Week-3					
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	Pharmacology					
Торіс	Learning Objectives	References				
• Current guidelines in the management of CCF	Explain current drug therapies used to treat heart failure C2	<ul> <li>Berliner D, Hänselmann A, Bauersachs J. The treatment of heart failure with reduced ejection fraction. Deutsches Ärzteblatt International. 2020 May;117(21):376.</li> <li>Authors/Task Force Members:, McDonagh TA, Metra M, Adamo M, Gardner RS, Baumbach A, Böhm M, Burri H, Butler J, Čelutkienė J, Chioncel O. 2021 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure: developed by the Task Force for the diagnosis and treatment of acute and chronic heart failure and chronic heart failure of the European Society of Cardiology (ESC). With the special contribution of the Heart Failure Association (HFA) of the ESC. European journal of heart failure. 2022 Jan;24(1):4-131.</li> </ul>				
Pathology						
• Congenital heart disease	<ul> <li>Define congenital heart diseases. C1</li> <li>Enumerate common congenital heart diseases(CHD). C1</li> <li>Describe pathogenesis of CHD. C2</li> <li>Describe Left-to-Right Shunts, Right-to-Left Shunts and Obstructive Lesions. C2</li> </ul>					
	Forensic Medicine					
• Asphxia	<ul> <li>Detect the Anatomical, Physiological, Biochemical and</li> <li>Enlist Pathological signs of violent death; and of Mechanical, chemical and environmental asphyxia death and their medico legal implications.</li> <li>Recognize signs of violent death, mechanical, chemical and environmental asphyxia death</li> </ul>	https://my.clevelandclinic.org/health/diseases/24725-asphyxiation https://www.webmd.com/first-aid/asphyxia-overview Parikh Text Book Of Forensic Medicine Principles of Forensic Medicine by Gautam Biswas				

		• State their medico legal implications.	
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	Week-4	
	Pharmacology	
Торіс	Learning Objectives	References
Management of TB in immunocompromised patients	• Discuss the use of anti TB drugs and antiretroviral drugs in immunocompromised states C2	<ul> <li>Sester M. Tuberculosis in immunocompromised patients. ERS Handbook of Respiratory Medicine. 2019 Sep 1:429.</li> </ul>
		<ul> <li>Bastos ML, Melnychuk L, Campbell JR, Oxlade O, Menzies D. The latent tuberculosis cascade-of-care among people living with HIV: A systematic review and meta-analysis. PLoS Medicine. 2021 Sep 7;18(9):e1003703.</li> <li>Sterling TR, Njie G, Zenner D, Cohn DL, Reves R, Ahmed A, Menzies D, Horsburgh Jr CR, Crane CM, Burgos M, LoBue P. Guidelines for the treatment of latent tuberculosis infection: recommendations from the National Tuberculosis Controllers Association and CDC, 2020. American Journal of Transplantation. 2020 Apr 1;20(4):1196-206.</li> </ul>
	Pathology	
Pulmonary diseases of Vascular origin	<ul> <li>Describe epidemiology, etiology, pathogenesis, morphology, clinical features of Pulmonary Embolism, Hemorrhage, and Infarction. C2</li> <li>Describe epidemiology, etiology, pathogenesis, morphology, clinical features of Pulmonary Hypertension. C2</li> <li>Describe epidemiology, etiology, pathogenesis, morphology, clinical features of Diffuse Alveolar Hemorrhage Syndrome. C2</li> </ul>	

	Forensic Medicine	
• SOCIAL CRIME : Sexual Offences, Abortion, Infanticide, Child abuse	<ul> <li>Define Sexual Offences and Relevant Sections of Law (Zina and Hudood Ordinance)</li> <li>Enlist Natural and unnatural sexual offences</li> <li>Mention Criminal processes during delivery, their medico-legal aspects, Assessment procedure and reporting.</li> <li>Briefly explain Crime against New-Born, Infants and Child.</li> <li>Identify Infanticide and differentiation between live and dead born</li> </ul>	https://ojp.gov/ncjrs/virtual-library/abstracts/offence-rape-islamic-law- pakistanhttps://reproductiverights.org/maps/provision/pakistans-abortion- provisions/ https://www.sciencedirect.com/topics/medicine-and-dentistry/infanticideParikh Text Book Of Forensic Medicine Principles of Forensic Medicine by Gautam Biswas

Cardiovascular & Respiratory Module



Integrated Modular Curriculum



# Cardiovascular & Respiratory Module – VI

Time Table 2023 Rawalpindi Medical University Duration Of Module: O6 Weeks Coordinator: Dr. Filza. Ali

## Reviewed by: Module Committee Members of module committee

Co-Coordinators: Dr. Naila Batool & Dr. Raheel Baig

Prof.Dr.Muhammad Umar	Chairman	Vice Chancellor RMU
Prof. Dr. Tahzeeb ul Hassan	Dean of Basic Sciences/Convener	Physiology 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 Attiya Munir	Focal Person	Pharmacology Department
Dr Mudassara	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 Afifa Kalsoom	Focal Person	Community Medicine Department
Dr Asad Shabbir	Focal Person	Pediatrics Department

Approved by: Curriculum Committee

Documented By: Dr. Filza Ali

Prepared By: Dr. Filza Ali

Tentative Time Table 3 <sup>rd</sup> Year MBBS – CVS Module 2023 (Week 1)									
DATE / DAY	8:00 AM - 9:30 AM	9:30 AM – 11:00 AM	11:10am – 12:00pm		12:00 PM - 02:00 PM				
	Clinica	l Clerkship		Batch Practical	Topic of Practical	Teacher	Venue		
Monday 2-11-23				Mod	ule Assessment of Haemotology,I	mmunology and research(	vritten)		
Tuesday 3-10-23			Forensic Medicine* L-1 Thanatology- I (Introduction & Types of death) Immediate & Early changes of death) Dr. Romana Assot Prof Dr . Filza Ali Asst Prof Venue: lectute hall 1& 2	Batch Wise Viva Haematology Module					
Wednesday 4-10-23			Forensic Medicine *L-2 Thanatology- II (Livor mortis & Rigor mortis) Dr. Romana Assot Prof Dr . Filza Ali Asst Prof Venue: lectute hall 1& 2	Batch Wise Viva Haematology Module					
Thursday 5-10-23			Community Medicine * L-3 Concept of environment & water Venue: lectute hall 1& 2	Batch Wise Viva Haematology Module					
	08:00am - 08:45am	08:45am-09:30am	09:30am – 10:15am	10:15am - 11:00am	11:00am-12:00pm				
	Surgery * L-4	Pathology * L-5	Pharmacology* L-6	Pathology * L-7	CommunityMedicine*L-8				
Friday 6-10-23	Approach to a patient with chronic Peripheral arterial Disease Dr. Aurangzeb AP, SU II, BBH Dr. Iqbal AP, SU II, BBH Venue: lect hall 1& 2	Artherosclerosis Pathogenesis and morphology Teacher Name: Prof Mobina Ahsan Dodhy Dr Wafa Venue: lecture hall 1& 2	Anti-hypertensive I (Introduction and classification) Dr. ZuneraAssist prof Dr. Asma Khan associate prof Venue: lecture hall 1& 2	Consequences of Atherosclerosis Prof Mobina Ahsan Dodhy Dr Wafa Venue: lecture hall 1& 2	Water distribution, Conservation and purification Dr. Nargis Sr Demo Dr. Maimoona Sr. Demo Venue: lecture hall 1& 2				
	08:00am - 08:45am	08:45am – 09:30am	09:30am - 10:30am	10:30 AM – 11:00 am	11:00am – 12:00pm	12:00:pm – 01:00pm	01:00pm – 02:pm		
Saturday 7-10-23	Medicine *L-9 Hypertension Dr. Abrar Akbar Dr.Maryam Venue lecture hall 1& 2	Obstetrics *L 10 Hypertensive disorders in pregnancy PIH, Preeclampsia Dr.Ruqhia Sr DHQ Dr Asma khan Sr BBH Venue: lecture hall 1 & 2	Pharmacology *L-11 Antihypertensive II ( ACE inhibitors and ARBs) Dr Attiya MunirAsst Prof Dr Sobia Assistant Prof Venue: lecture hall 1 & 2	BREAK	Air and Ventilation (control of air pollution) Dr. Gulmehar AP Dr. Imran AP Venue: lecture hall 1& 2	Pathology ** S-1 Hypertensive Heart Disease Dr. Muddassira,Dr. Tayyaba Dr. Fatima , Dr. Aasiya	Community Medicine * L- 13 Air and Ventilation (global warming.) Dr. Gulmehar AP Dr. Imran AP Venue: lecture hall 1& 2		

# Tentative Time Table 3<sup>rd</sup> Year MBBS – CVS Module 2023 (Week 2)

DATE / DAY	8:00 AM - 9:30 AM	9:30 AM - 11:00 AM	11:10am – 12:00pm			12:00 PM - 02	2:00 PM		
	C	linical erkship	Pharmacology* L-14	Batch	Practical	Topic of Pra	actical	Teacher	Venue:
Monday		<u>^</u>	Antihypertensives III (Vasodilators)	А	Pharmacology P1	P drug and prescription of I	HTN	Dr Arsheen	Pharma lab
9-10-23			Dr Attiya Assistant prof	В	Forensic Medicine P	2 Cardiac Poisons		Dr. Gulzaib	Forensic lab
210 -0			Dr Sobia Assistant prof Venue: lecture hall 1 & 2	С	Pathology P3	Morphology of vascular lea	sions	Dr Nida	Patho lab
			Pharmacology *L-15	Batch	Practical	Topic of Practical			
			Antihypertensives IV (Ca	В	Pharmacology P1	P drug and prescription of	HTN	Dr Arsheen	Pharma lab
Tuesday			Channel Blockers)	С	Forensic Medicine P	2 Cardiac Poisons		Dr. Gulzaib	Forensic lab
10-10-23			Dr. ZuneraAssist Prof Dr. Asma Khan Assoct Prof	А	Pathology P3	Morphology of vascular lea	sions	Dr Nida	Patho lab
			Community Medicine*L-16	Batch	Practical	Topic of Practical			
Wednesday			Prevention of Radiation Hazards	С	Pharmacology P1	P drug and prescription of	HTN	Dr Arsheen	Pharma lab
11-10-23			Dr. Imrana Sr Demo	А	Forensic Medicine F	2 Cardiac Poisons		Dr. Gulzaib	Forensic lab
		Venue: lecture hall 1 & 2 B Pathology P3 Morphology of vascular		sions	Dr Nida	Patho lab			
			11:10am – 12:00pm	12:00pm-1:00pm			1:00 pm – 2:00pm		
			Pharmacology* L-17	Forensic M	fedicine* L-18		Patholo	ogy ** S-2	
Thursday 12-10-23			Antianginal I Dr Asma Assot Prof, Dr SobiaaAssist Prof Venue: lecture hall 1 & 2	Thanatology- III (Late changes of Death Putrefaction) Dr. Romana Assot Prof Dr. Shahida Sr.Demo Venue: lecture hall 1 & 2		Pathophysiology of Angina Dr. Muddassira Dr. Tayyaba Dr. Fatima tuz Zahra Dr. Aasiya			
	08:00am - 08:45am	08:45am-09:30am	09:30am – 10:15am	10:15am -	11:00am	1:00am – 12:00pm			
	Medicine *L-19	Pharmacology *L-20	Pharmacology ***C-1	Quran Class	s * L-21 I	athology** S-3			
Friday 13-10-23	Ischemic Heart Disease Dr. Abrar Akbar Dr.Maryam Venue: lecture hall 1 & 2	Antianginal II Dr Asma Assot Prof, Dr SobiaaAssist Prof Venue: lecture hall 1& 2	Diuretics Dr RubinaSRDemosnstrtor, Dr Arsheen, Demosnstrtor Dr HaseebaSRDemosnstrtor, Dr OmaimaDemosnstrtor	Venue:CP	C Is D Ti D D	chemic Heart Disease r. Muddassira Dr. ayyaba r. Fatima tuz Zahra r. Aasiya2			
	08:00am - 08:45am	08:45am – 09:30am	09:30am – 10:30am	10:30 A	AM – 11:00 am	11:00am-12:00pm	12:00:pr	n – 01:00pm	01:00pm-02:pm
Saturday	Pathology *** C-2 Vascuilitis	Peads* L-22 Cyanotic congenital heart	Surgery * L-23 Approach to a patient with		BREAK I	Forensic Medicine * L-24 hanatology- IV Adipocere,	Peads * Acyanot	L-25 ic heart disease	Pharmacology* L-26 CCF I
14-10-23	Dr SyedaAyesha Dr. Fariha Sardar Dr Iqbal haider Dr. Unaiza	disease Dr Hafeez SR HFH, Dr Maria SR HFH Venue: lecture hall 1 & 2	Gangrene and Amputations Dr. Nazan SR, SU II, BBH Dr. Yasmeen SR, SU I, BBH Venue: lecture hall 1 & 2		M Es I	ummification stimation of time since death Dr. Romana Assot Prof Dr. Shahida Sr.Demo Venue: lecture hall 1 & 2	Dr Jawa Dr Faiza SR BBI Venue: 1	ria SR HFH , a Fayyaz H lecture hall 1 & 2	(Introduction classification Dr Attiya Assist Prof, Dr Zunera Assist Prof

Tentative Time Table 3<sup>rd</sup> Year MBBS – CVS Module 2023

(Week3)

DATE / DAY	8:00 AM - 9:30 AM	9:30 AM – 11:00 AM	11:10am – 12:00pm			12:00 PM - 02:	00 PM	
		Clinical lerkship	Pathology ** S-4	Batch	Practical	Topic of Practical	Teacher	Venue
		•	Aneurysms & Dissection	А	Pharmacology	P4 P drug and prescription of an	gina Dr. uzma	Pharma lab
Monday			Dr. Muddassira Dr. Tayyaba	В	Forensic medic	ine P5 Assessment of a Stain	Dr. Shahrukh	Forensic lab
16-10-23			Dr. Fatima tuz Zahra Dr. Aasiya	С	Patholog y P	6 Lipid profile and cardiac en	zymes Dr Saeed	Patho lab
	-		Medicine* L-27	Batch	Practical	Topic of Practi	cal	
Tuesday			Rheumatic fever Dr. Abrar Akbar	В	Pharmacology	P4 P drug and prescription of ar	ngina Dr. uzma	Pharma lab
17-10-23			Dr.Maryam Venue: lecture hall 1 & 22	С	Forensic medic P5	ine Assessment of a Sta	ain Dr. Shahrukh	Forensic lab
				А	Pathology P6	5 Lipid profile and cardiac en	zymes Dr Saeed	Patho lab
	1		Forensic Medicine * L-28	Batch	Tumors of CV	S Topic of Prac	tical	-
Wednesday			Forensic Serology Trace Evidence	C	Pharmacology	P4 P drug and prescription of an	ngina Dr. uzma	Pharma lab
18-10-23			Blood , Semen & Saliva Dr. Romana Malik Assoct Prof	А	Forensic Medi	cine P5 Assessment of a Stain	Dr. Shahrukh	Forensic lab
			Dr . Filza Ali Asst Prof Venue: lecture hall 1 & 2	В	Pathology P6	Lipid profile and cardiac en	zymes Dr Saeed	Patho lab
			11:10am – 12:00pm		12:0	00pm-1:00pm	1:00 pm	n – 2:00pm
Thursday 19-10-23			Pathology * L-29 Pathogenesis of Rheumatic Fever Morphological changes in Rheumatic Heart Disease Prof Mobina Ahsan Dodhy Dr Wafa Venue: lect hall 1& 22	CCF II (D. related dru Zunera A Venue: le	Pharmacology *L-30 CCF II (Digoxin and elated drugs): Dr Attiya, Assistant Prof Dr Junera Assistant Prof Venue: lecture hall 1 & 2		Medicine *L-31 Infective endocarditis Dr. Abrar Akbar Dr.Maryam Venue: lecture hall 1 & 2	
	08:00am - 08:45am	08:45am-09:30am	09:30am – 10:15am	10:15am	n - 11:00am	11:00am-12:00pm		
Friday	Medicine *L-32	Paediatric* L-33	Pharmacology* L-34	Family	MedicineL-35	Pathology * L-36		
20-10-23	Valvular heart disease Dr. Aimen SR HFH , Dr. Ibrar AP HFH lecture hall 1&2	Rheumatic fever Dr Sonia SR HFH Dr Amal Hasham SR HFH Venue: lecture hall 1 & 2	Introduction to Diuretics Dr Zunera Asst Prof Dr,Asma khan Assoct Prof Venue: lecture hall 1&	IHD/CCF Dr Saadia K Venue: lectu	Khan HOD ure hall 1 & 2	Infective Endocarditis Prof Dr. Mobina Dodhy, Dr Wafa Venue: lecture hall 1 & 2		
Saturday	08:00am - 08:45am	08:45am-09:30am	09:30am – 10:30am	10:30 AM	– 11:00 am	11:00am-12:00pm	12:00:pm - 01:00pm	01:00pm-02:pm
21-10-23	Pathology***C-3	Surgery* L-37	Paediatric * L-38		Break	Pharmacology * L-39	Pharmacology * L-40	Obstetrics *L-41
	Myocarditis and pericarditis Dr Fatima .Dr Nida, Dr. Abid, Dr. Saeed	Approach to a patient with DV and varicose veins Dr. Amina SR, SU II, HFH Dr. Omer Qaiser SR, Surgery, DHQ,	Γ Childhood Asthma Dr.Maryam SR HFH Dr,Irum SR HFH Venue: lecture hall 1 & 2			Antiarrhythmic drugs I (Introduction to normal rhythm and classification) Dr Asma Assot Prof , Dr SobiaaAssist Prof	Antiarrythmic drugs II (class I and class II) Dr Asma Ass prof Dr Sobia Assist Prof Venue: lecture hall 1& 2	Gestational diabetesmellitus Dr Ruqhia Sr DHQ Dr Asma khan Sr BBH Venue: lecture hall 1 & 2

38 | Page

Tentative Time Table 3 <sup>rd</sup>	Vear MBBS	CVS Module 2023
Tentative Time Table 5	Teal MDDS -	- $C$ $v$ $S$ into unle 202 $S$

(Week 4)

DATE / DAY	8:00 AM – 9:30 AM	9:30 AM – 11:00 AM	11:10am – 12:00pm			12:00 PM - 02	:00		
	Clinical	Clarkship	Dharmaaclagy* I 42	Datah	Drastical	PM Torris of Prostical	[	Taaabar	Vanua
	Ciniicai	Clerkship	Antiarrhythmic drugs III(class		Pharmacology P7	P drug and prescription of C	СЕ	Dr Haseeba	Pharma lab
			IV and class V)	11	Tharmacology 17	I utug unu presemption of C		Di Haseeba	
Monday			Dr Asma associate prof	В	Forensic medicine P8	Asphyxiants		Dr. Naila	DHQ
23-10-23			Dr Sobia assistant prof	С	Pathology P9	MI and Rheumatic heart dis	ease	Dr Ali	Patho lab
25 10 25			Venue: lecture hall 1 & 2						
			Forensic Medicine * L-43	Batch	Practical	Topic of P	ractical		
			Asphxia-I (Classification& Hanging) Dr. Romana	В	Pharmacology P7	P drug and prescription of C	CF	Dr Haseeba	Pharma lab
Tuesday			Assot Prof Dr. Filza Ali Asst Prof	С	Forensic Medicine P8	Asphyxiants		Dr. Naila	DHQ
24-10-23			Venue: lecture hall 1 & 2	А	Pathology P9	MI and Rheumatic heart dis	ease	Dr Ali	Patho lab
			Pathology ***C-4	Batch	Practical	Topic o	of Practical		
			Cardiomyopathies	С	Pharmacology P7	P drug and prescription of C	CCF	Dr Haseeba	Pharma lab
Wednesda			Dr. Sayed Ayesha	А	Forensic Medicine P8	Asphyxiants		Dr. Naila	DHQ
y			Dr Iqbal haider	В	Pathology P9	MI and Rhematic heart dise	ase	Dr Ali	Patho lab
25-10-23			Dr. Unaiza						
		11:10am – 12:00pm 12:00pm – 1:00pm			1:00 pm-	2:00pm			
<b>T</b> 1 1.			Pharmacology * L-44	Forensic	Medicine * L-45		Pharmac	ology***C-5	
26-10-23			Antiastimatics-I (Drug groups) Dr Asma assoc prof , Dr Sobia assist prof	Asphxia –II (Strangulation)AntaDr. Romana Assot ProfDr FDr. Filza Ali Asst ProfDr FVenue: lecture hall 1 & 2Ven		Dr Rubi Dr Hase Venue:	namatic drugs ina, Sr Demo , Dr æba Sr Demo,,Dr. See Anexure	Arsheen Demo,. Omaima Demon	
	08:00am - 08:45am	08:45am – 09:30am	09:30am – 10:15am	10:15am	n - 11:00am	11:00am – 12:00pm			
	Pathology * L-46	Pharmacology * L-47	Surgery* L -48	Forensic 1	Medicine)* L-49	Medicine* L-50			
Friday 27-10-23	Chronic bronchitis and emphysema Prof Dr.Mobina	Antiasthmatics -II (Classification) Dr Asma Assot Prof,	Approach to a patient with lymphedema Dr. Waqas Hassan SR,HFH	Asphxia Dr. Ror Dr. Filz	– III (Suffocation) nana Assot Prof za Ali Asst Prof	Asthma, COPD Dr. Abrar Akbar Dr.Maryam			
	Ahsan Dodhy , Dr Wafa Lecture 1&2	Dr Sobia Assist Prof Venue: lecture hall 1& 2	Dr. Samra , Sr, DHQ Venue: lect hall 1&2	venue:	lecture half 1 & 2	Venue: lec hall 1& 2			
	08:00am - 08:45am	08:45am-09:30am		10:30 A	M – 11:00 am	11:00am-12:00pm	12:00:pi	m – 01:00pm	01:00pm-02:pm
Saturday	Surgery * L-51	Surgery * L-52	Pharmacology **S-1		BREAK	Forensic medicine * L-53	Patholo	gy** S-5	Pathology*L-54
28-10-23	Approach to a patient with cardiac diseases. (Cardiac surgery) Dr. Qasim SR, S U II, HFH Dr. Asifa Diyan SR, Su I, BBH Venue: lecture hall 1&2	Approach to a patient with Chest trauma and its management Dr. Huma Sabir Khan AP, SU II, BBH Dr. Rahat AP, Surgery, BBH Venue: lecture hall 1.2	Anti tussive drugs Dr RubinaSr semonstrator DrArsheen, Demonsrater Dr HaseebaSr demonstrator ,Dr Omaima demonstrator Venue: See Anexure			Asphxia – IV (Drowning) Dr. Romana Assot Prof Dr. Filza Ali Asst Prof Venue: lecture hall 1 & 2	Tumors of Dr. Mudo Dr. Tayy Dr. Fatim Dr. Aasiy	of CVS dassira aba na tuz Zahra ya	Asthma & Bronchiectasis Prof Mobina Ahsan Dodhy , Dr Wafa Lecture 1&2 hall1&2

Tentative Time Table 3<sup>rd</sup> Year MBBS – CVS Module 2023

		Tentative Ti	ime Table 3 <sup>rd</sup> Year MBBS –	-CVS	Module 2023	(Week5	)		
DATE / DAY	8:00 AM - 9:30 AM	9:30 AM - 11:00 AM	11:10am – 12:00pm			12:00 PM - 02:00 PM	-		
	Cl	linical erkship	Forensic medicine * L-55	Batch	Practical	Topic of Practical			
Monday			Sexual Offences (Rape & Sodomy)	А	Pharmacology P10	P drug and prescription of as and TB	thma	Dr Omiama	Pharma lab
30-10-23			Dr.Filza Ali Asst Prof Dr. Gulzaib Sr Demo	В	Forensic Medicine P11	Assessment of a Rape victin	n	Dr Raheel	DHQ
			Venue: lecture hall 1, 2	C	Pathology P12	Morphology of lung leisons		Dr Abid	Patho lab
	1		Forensic Medicine * L-56	Batch	Practical	Topic of Practical			
			Medico-legal aspects of Pregnancy ,Delivery and Abortion	В	Pharmacology P10	P drug and prescription of as and TB	thma	Dr Omiama	Pharma lab
Tuesday			Dr. Romana Assoct Prof Dr.Filza Ali Asst Prof	С	Forensic Medicine P11	Assessment of a Rape victim	L	Dr. Raheel	DHQ
31-10-23			Venue: lecture hall 1, 2	A	Pathology P12	Morphology of lung leisons		Dr Abid	Patho lab
	1		Forensic Medicine *L-57	Batch	Practical	Topic of Practical		<u>.</u>	
			Medico-legal aspects of Infanticide child abuse Battered child & wife	C	Pharmacology P10	P drug and prescription of as and TB	thma	Dr Omiama	Pharma lab
Wednesday			Dr. Romana Assoct Prof Dr. Shahrukh Sr. Demo	А	Forensic Medicine P11	Assessment of a Rape victi	m	Dr. Raheel	DHQ
1-11-23			Venue: lecture hall 1, 2	В	Pathology P12	Morphology of lung leisons		Dr Abid	Patho lab
	1		11:10am-12:00pm		12:00pm-	1:00pm		1:00 pm-	- 2:00pm
			Forensic Medicine* L-58	Patholo	ogy** S-6		Family	Medicine*L-59	
Thursday			Custodial Torture	Interstit	tial lung disease				
2-11-23			Dr. Romana Assoct Prof	Dr. Mud	Idassira Dr. Tayyaba			ronchial Asthma	
			Venue: lecture hall 1, 2	Dr. Faun Venue: le	Dr. Fatima tuz Zahra Dr. Aasiya Venue: lect hall 1 & 2		Dr Saadia Khan HOD Venue: lect hall 1 & 2		
Friday	08:00am - 08:45am	08:45am - 09:30am	09:30am – 10:15am	10:15ar	m - 11:00am	11:00am – 12:00pm			
•	Medicine* L-60	Pathology** S-7	Paediatrics *L-61	Forensi	ic Medicine*L-62	Pathology** S-8			
3-11-23	Pleural effusion Dr. Abrar Akbar/ Dr.	Acute Pulmonary infections Dr. Muddassira	Pneumonia Dr Uzma SR BBH	Barbitura Dr. Sh	ates & Hypnotics ahida Sr.Demo	Chronic Pulmonary infections			
	Maryam Venue: lecture hall 1& 2	Dr. Tayyaba Dr. Aasiya Dr. Fatima tuz Zahra	Dr.Afrah SR BBH Venue: lecture hall 1 & 2	Dr. Nai Venue:	ila Sr Demo lecture hall 1, 2	Dr. MuddassiraDr. Tayyaba Dr. Fatima , Dr. Aasiya			
Saturday	08:00am - 08:45am	08:45am - 09:30am	09:30am – 10:30am	10:30 A	AM – 11:00 am	11:00am – 12:00pm	12:00:p	m – 01:00pm	01:00pm-02:pm
4-11-23	Pathology *L-63	Pathology ***C-6	Paediatrics *L-64		BREAK	Pharmacology *L-65	Surgery	*L-66	Medicine *L-67
SEMINAR	TUBERCULOSIS Prof Dr. Naeem Venue: CPC Hall	Squamous cell Carcinoma Dr Fatima ,Dr Nida, Dr. Abid Dr. Saeed Venue: CPC Hall	Croup Dr Saima Dr Mamona Qudrat Venue: lecture hall 1& 2			Anti TB drugs I & II Dr AttiyaAssistant prof, Dr Zunera assistant prof Venue: lecture hall 1,2	Approac Diseases Dr. Zafa Dr. Atifa Venue:	h to benign of the Thorax rAP, DHQ AP,HFH lecture hall 1,2	Seminar on TB Dr. Abrar Akbar/ Dr.Maryam Venue: lecture hall 1 &2

Ttentative Time Table 3 <sup>rd</sup>	Year MBBS –	CVS Module 2023	(Week 6)
---------------------------------------	-------------	-----------------	----------

	8:00 AM – 9:30 AM 9:30 AM – 11:00 AM	11:10am – 12:00pm	12:00 PM - 02:00 PM
DATE/DAY	Clinical Clerkship		
Monday 6-11-23			Block- III (Haematology & CVS Module) Theory Exam
Tuesday 7-11-23			BLOCK - III OSPE & VIVA
Wednesday 8-11-23			BLOCK - III OSPE & VIVA
Thursday 9-11-23			BLOCK - III OSPE & VIVA
Friday		PRE	P-LEAVE

## **Teaching Hours**

SR	Disciplines	LGIS	SGD	CBL	SDL	Seminar	Hours
No.							
1.	Pharmacology	13	1	2	0	2	18
2.	Pathology	06	08	4	0	1	19
3.	Forensic Medicine	14	0	0	0	0	14
4.	Community Medicine	5	0	0	0	0	5
5.	Medicine	8	0	0	0	1	9
6.	Paeds	5	0	0	0	1	6
7.	Surgery	6	0	0	0	1	7
8.	obstetrics	2	0	0	0	0	2
	Total						

Disciplines	Practical hours
Pharmacology	2x4= 8
Pathology	2x4 =8
Forensic Medicine	2x4 = 8

\*

LGIS (L)

➤ SGD (S) \*\*

► CBL (C) \*\*\*'

➢ SDL (SL) \*\*\*\*

♦ For CBL/SGDs, whole class will be divided into 04 batches

Batch: A = Lecture Hall 01 (starting from batch A1 to A3) Batch: C = Lecture Hall 06 (starting from batch B3, B4, B5, C1) Batch: B = Lecture Hall 02 (starting from batch A4, A5, B1,B2) Batch: D = Pharmacy Lab (starting from batch C2 to C5)

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

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

• <u>Small Group Discussion (SGD) /Case Based Learning (CBL)</u>

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.

Rawalpindi Medical University Rawalpindi

Date: 31<sup>st</sup> July, 2023 by DME,, New Teaching Block

### Section IV

## - Assessment Policies

#### Contents

- Assessment planTypes of Assessment:
- Modular Assessments
- Block Assessment ٠
- Table 4: Assessment Frequency & Time in Foundation Module

Date: 18<sup>th</sup> February, 2023 by DME, New Teaching Block



### 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  $(2/3^{rd})$  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 Assessment

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

# Learning Resources

Subject	Resources
	1.
Pathology/Microbiology	Text Books
	1. Robbins & Cotran, Pathologic Basis of Disease, 10 <sup>th</sup> edition.
	2. Rapid Review Pathology, 5 <sup>th</sup> edition by Edward F. Goljan MD.
	3. http://library.med.utah.edu/WebPath/webpath.html
Pharmacology	Text Books
	1. Basic and Clinical Pharmacology by Bertram Z. Katzung 15th Edition
	2. Goodman and Gillmans The Pharmacological basics of Therapeutics, 13th Edition
Forensic Medicine	Text Books
	1. Parikh Text Book of Medical Jurisprudence Forensic Medicine & Toxicology Edition 9
Medicine	Text Books
	Davidsons Textbook of Medicine
Surgery	Text Books
	Balley & Love textbook of surgery
Research	Digital library

# SECTION VI

## Table of Specification (TOS) For CVS & Resp Module Assessment for 3rd Year MBBS

Sr. #	Discipline	No. of MCQs	No. of Mo to cogn	CQs acco itive doi	ording nain	No. of ( <sup>0</sup>	f SEQs %)	N ac	o. of SE ccording	Qs to	Viva voce	OSPE Marks	Total Marks		
		(%)				No.	Marks	cogi	nitive do	main					
			<u>C1</u>	C	<u>C2</u>	0f itoms		C1	<u> </u>	<u>C2</u>					
			CI	C2	CS	nems		CI	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		
			•						Gran	d Total	275				

Annexure I

(Sample MCQ & SEQ papers with analysis)

Sample of MCQs Paper

## 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%

Matsuna 15/11/22

Prof. Mobina Ahsan Dodhy Chairperson Pathology Department Rawalpindi Medical University

vz Assistant Director

Department of Medical Education Rawalpindi Medical University

Vice Chancelon 9/12/12 Rawalpindi Medical University Rawalpindi

**OPPO A54** · ©love ya 2023/02/18 10:44

Date: 18<sup>th</sup>

Sample Paper of SEQs physician is suspecting Hepatitis B in a patient in the ward. The laboratory performs a rapid kit test but the 000 physician has asked them to perform ELISA for confirmation as it is based on specific antigen antibody reaction Q7. A 45 years female presented with painless diffuse enlargement of thyroid gland. Her thyroid function tes 03 3 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 02 02 01 repeated infections. Physical examination shows scattered bruises on body. Her laboratory investigations reveals Hb 7.3 g/dL 02 02 01 2.5 30 years female with history of easy bruising and increased menstrual flow was evaluated for a bleeding 1.5  $\times$  $10^{\circ}/L$ ) and an elevated lactate dehydrogenase level. A complete spectrum of myeloid cells is seen in the peripheral 2.5 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 5 rest of his examination is normal. Laboratory testing is remarkable for leukocytosis (85 consanguineous marriage. His elder sister is on regular transfusion. Physical examination of the boy shows Pallor, platelet count. 5 02 fotal Marks: 35 Time: 12:00noon Q4. A 47 years woman presented in basic health unit of district Jehlum with complains of fatigue and ROLL NO. 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. blood with biomodel peak of neutrophils and myelocytes. There is also increased number of basophils. Which cytochemical stain helps to differentiate between lymphoblast and myeloblast? shows decreased T3 and T4 levels and she is positive for circulating antithyroidantibodies. Haematology Immunology & Research Module Assessment Give any two cytogenetic abnormalities seen in Acute myeloid leukemia. DEPARTMENT OF PATHOLOGY RAWALPINDI MEDICAL UNIVERSITY Differentiate between direct and indirect graft antigen recognition Enumerate 3 types of ELISA with the underlying principle in each disorder. She was diagnosed with immune thrombocytopenic purpura (ITP). Briefly compare the morphology of lymphoblast and myeloblast? What further tests you would like to perform to confirm diagnosis? Classify different types of grafts on the basis of type of donor. Discuss Peripheral film and Bone marrow examination findings. **RMU & Allied Hospitals** of Enlist 4 the different types of antigen antibody reactions rise 3<sup>rd</sup> Year MBBS SEQs PAPER What advice you would give to the parents of this child? gradual chameratu ovgen vescific autoimmunediseases? Briefly discuss the underlying genetic mutation. transplant but then his condition deteriorated slowly. renal transplant recipient experiences Enlist the causes of thrombocytopenia. What is the most probable diagnosis? Enumerate the phases of this disease. Which type of graft rejection is this? What is your most likelydiagnosis? What is the most likely diagnosis? /Enat():45nune tolerance? Date: 07<sup>th</sup> November 2022 the costal margin, the Allowed: 45min technique. (e 9 5 Q3. A p q 0 (P 9 e q 5 (P q 0 (e 9 e à 2 a. **PP** 

53 | P a g e

## Detailed Analysis of SEQs Paper

Levels of cognition	Question number	Total	Percentage	
C1	Sb,6a and 7c	3	16%	
C2	2b, 2c, 3b, 4a, 4b, 5c,	8	42%	
	6b and 7b			
	1a 1b 1c 2a 3a 4c	8	42%	
C3		1000		

PROF. MOBINA AHSAN DODHY Chairperson, Department of Pathology, RMU ASSISTANT DIRECTOR Department of Medical Education, RMU

VICE CHANCELLOR RAWALPINDI MEDICAL UNIVERSITY

Date: 18<sup>th</sup> February, 2023 by DME, New Teaching Block

3<sup>rd</sup> YE

## ANNEXURE II

				1	MEDICIN	E					SURGERY + TRAUMA							
0	ates	HFH Unit-	I HFH	Unit-11	BBH Unit	-1 BBI	l Unit-11	DHQ	HFH Unit	t-1 HF	H Unit-11	BBH Un	it-1 BB	H Unit-II	DHO			
<u>S.P.W</u> <u>S.P.V</u>	08-02-2023 To 30-04-2023	AI	•	A2	A3		A4	A5	B5		B4	B3		B2	BI			
<u>s.v</u>	01-05-2023 To 06-08-2022	CI		C2	C3		C4	C5	A5		A4	A3		A2				
07-0	8-2023 Го 0-2023	B1		B2	B3		B4		C5		C4	C3		C2	CI			
	_					1	MISCELI	ANEOUS	i		-		_	-	-			
	8-2-23 To 19-2-23	20-2-23 To 5-3-23	6-3-23 To 19-3-23	<u>S.P.W</u> 20-3-23 To 9-4-23	<u>S.P.V</u> 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	5.V 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	2-10-2 To 15-10-2			
Patholog	v Cl	C2	C3	C4	C5	B1	B2	B3	B4	B5	Al	A2	A3	A4	A5			
Peychiate	× C5	Cl	C2	C3	C4	B5	B1	B2	B3	B4	A5	A1	A2	A3	A4			
	,	C5	Cl	C2	C3	B4	B5	B1	B2	B3	A4	A5	Al	A2	A3			
Kadiolog	y C4				<b>C</b> 2	D3	R4	B5	BI	B2	A3	A4	A5	Al	A2			
Skill Lat	• C3	C4	C5	CI	C2	DJ			<b>D5</b>	BI	A2	A3	A4	A5	`AI			
E.R	C2	C3	C4	C5	C1	B2	B3	B4	ВЗ					1	-			
>	Tentative Ho Sport	Week (S.P.W) Vocations (S.P. Vocations (S.P.	v) V)	12-03-2023 24-04-2023 03-07-2023	то то то	19-03-2023 30-04-2023 30-07-2023					A	Activat	E avvaloring	A chance	Hor University			

# Clinical Clerkship

In medical education, a **clerkship**, or **rotation**, refers to the practice of medicine by medical students. Students are required to undergo a pre-clerkship course, which include introduction to clinical medicine, clinical skills, and clinical reasoning. A performance assessment such as the Objective Structured Clinical Examination (OSCE) is conducted at the end of this period. During the clerkship training, students are required to rotate through different medical specialties and treat patients under the supervision of physicians. Students elicit patient histories, complete physical examinations, write progress notes, and assist in surgeries and medical procedures. They are also actively involved in the diagnoses and treatment of patients under the supervision of a resident or faculty.

In 3<sup>rd</sup> year MBBS students are exposed to wards and patients after getting 2 years of basic science training. A class is divided into 15 batches which are rotated in different wards of Medicine & Allied, Surgery & Allied and Sub Specialties. (Annexure 2 a)

Rawalpindi Medical University has structured these rotations so that each students gets to gain knowledge equally in which ever ward he or she may be placed. (Annexure 2 b)

Learning objectives of the topics taught during the bedside studies and rotations are also given to the students in the form of study guide so that they are well aware what they have to study according to Knowledge, Skill & Attitude. (Annexure 2 c)

Students during their rotations in Medicine & Allied and Surgery & Allied are required to fill the log books which is dually signed by the facilitator. Each student is required to take 10 histories and fill the log book with short cases and long cases discussed which is then again signed by Head of the department. Also during their practical classes of Preclinical sciences they are fill their log books & pracital copies. (Annexure 2 d)

## Annexure 2 B

							1	lime I	able 3	<sup>rd</sup> yea	r MBB	S														
							Clinic	al Teacl	hing an	d Traini	ing Post	ing														
TT A Revis	oproval / sion Date		MEDICINE						SURGERY + TRAUMA						SUB SPECIALITIES											
Batch	es & Units	Dates	HFH Unit-1	HFH Unit- 1I	BBH Unit-1	BBH Unit- 1I	DHQ	HFH Unit-1	HFH Unit- 1I	BBH Unit-1	BBH Unit- 1I	DHQ	7		۲		<u> </u>									
MODULES	WEEKS	w.v	Al	A2	A3	A4	A5	В5	B4	B3	B2	B1	PATHOLOG	TOPICS	PSYCHIATR	TOPIC	RADIOLOG	TOPIC	SKILL LAB	TOPIC	TOPIC					
		MONDAY	General introduction to the field of medicine. Medical ethics	General introduction to the field of medicine. Medical ethics	General introduction to the field of medicine. Medical ethics	General introduction to the field of medicine. Medical ethics	General introduction to the field of medicine. Medical ethics	introduction & bed side manners		Introductory round of laboratory & benches. Working of Autoclave. & Guidelines of Microbiological specimen collection & transport		History Taking Allotment of Cases and Groups		Chest x ray anatomy		Use of Injections I/M, I/V, Intradermal, subcutaneous, I/V Cannulation, Arterial Tap	Introduction to ER services regarding triage system. History taking Monitoring of vitals									
	WEEK 1	TUSEDAY	Art of History, Taking, Importance of history, Contents of history, Presenting Complaint History of Present illness	Art of History, Taking, Importance of history, Contents of history, Presenting Complaint History of Present illness	Art of History, Taking, Importance of history, Contents of history, Presenting Complaint History of Present illness	Art of History, Taking, Importance of history, Contents of history, Presenting Complaint History of Present illness	Art of History, Taking, Importance of history, Contents of history, Presenting Complaint History of Present illness	art of history taking		Culture media (Inoculated & Uninoculated). Antibiotic sensitivity testing. Orientation to Serology & PCR.		Demonstration of History taking and MSE		Chest x ray pathology		Nasogastric Intubation	Introduction to medicolegal cases and maintenance of record. Observation of IV cannulas IM injections									
MODULE	WEEK 1	WEDNESDAY	Systemic Inquiry, Past Medical History	Systemic Inquiry, Past Medical History	Systemic Inquiry, Past Medical History	Systemic Inquiry, Past Medical History	Systemic Inquiry, Past Medical History	systemic history	systemic history	systemic history	systemic history	systemic history		Performance & interpretation of Gram & ZN staining. Catalase, Coagulase & Oxidase Tests.		Interview with the patient Theoretical aspect of depression		Bones & joints with fractures		Male & Female catheterization(urine)	• Setting of IV drips Nebulization					
NDATION 1 & 2		THURSDAY	Family History, Occupational History, Personal History , Developmental+ Obstetrics History.	Family History, Occupational History, Personal History , Developmental+ Obstetrics History.	Family History, Occupational History, Personal History , Developmental+ Obstetrics History.	Family History, Occupational History, Personal History , Developmental+ Obstetrics History.	Family History, Occupational History, Personal History , Developmental+ Obstetrics History.	GPE	GPE	GPE	GPE	GPE		Urine & Stool Examination, Examination of CSF & Body Fluids		Interview with the patient Theoretical aspect of Dissociation		Plain x ray abdomen & KUB		Endotracheal intubation & tracheostomy	Insertion of folleys catheter					
FOU		MONDAY	General physical examination. Pulse, BP, Temp. Resp Rate	General physical examination. Pulse, BP, Temp. Resp Rate	General physical examination. Pulse, BP, Temp. Resp Rate	General physical examination. Pulse, BP, Temp. Resp Rate	General physical examination. Pulse, BP, Temp. Resp Rate	systemic examination	systemic examination	systemic examination	systemic examination	systemic examination	C1	Reception, Sampling Techniques & Phlebotomy, Routine Hematology, Preparation of Blood Smear and Retics, Quality Control	C5	Interview with the patient Theoretical aspect of schezopherenia	C4	Fluoroscopic procedures & Ba studies.	C3	Breast Examination	Nasogastric tube • COUNSEI a patient with febrile illness					

	WEEK 2	TUSEDAY	GIT System Systemic Inquiry Vomiting, jaundice, pain abdomen, acute and chronic diarrhea GPE, Jaundice, Clubbing, Koilonychia, Pallor, Leuconychia, Oedema Examination of	GIT System Systemic Inquiry Vomiting, jaundice, pain abdomen, acute and chronic diarrhea GPE, Jaundice, Clubbing, Koilonychia, Pallor, Leuconychia, Oedema Examination of	GIT System Systemic Inquiry Vomiting, jaundice, pain abdomen, acute and chronic diarrhea GPE, Jaundice, Clubbing, Clubbing, Koilonychia, Pallor, Leuconychia, Ocedema	GIT System Systemic Inquiry Vomiting, jaundice, pain abdomen, acute and chronic diarrhea GPE, Jaundice, Clubbing, Koilonychia, Pallor, Leuconychia, Oedema Examination of	GIT System Systemic Inquiry Vomiting, jaundice, pain abdomen, acute and chronic diarrhea GPE, Jaundice, Clubbing, Kodlonychia, Pallor, Leuconychia, Oedema Examination of	local examination	local examination	local examination	local examination	local examination		Coagulation Studies, Bone Marrow, Hb Studies, Coomb's Test.	Presentation of cases histories of Substance use Interview with the patient Theoretical aspect of Substance use		CT scan brain: basics		Prostate Examination	• counsel a patient with stroke
		WEDNESDAY	Inspection of abdomen, Superficial Palpation of Abdomen	Inspection of abdomen, Superficial Palpation of Abdomen	Inspection of abdomen, Superficial Palpation of Abdomen	Inspection of abdomen, Superficial Palpation of Abdomen	Inspection of abdomen, Superficial Palpation of Abdomen	basic physical signs in detail		Grouping, Cross Matching	Presentation of cases histories of Delirium/deme ntia/ organicity by medical students & Theoretical aspects		Basics of ultrasound and observation		revision	counsel a patient with upper GI bleed				
		THURSDAY	Palpation of Liver, Spleen, Kidneys, Pelvic Masses	Palpation of Liver, Spleen, Kidneys, Pelvic Masses	Palpation of Liver, Spleen, Kidneys, Pelvic Masses	Palpation of Liver, Spleen, Kidneys, Pelvic Masses	Palpation of Liver, Spleen, Kidneys, Pelvic Masses	history & examination of lump		Ward test	Evaluation (OCSE + case histories + attendance & Signatures on logbook) & Feedback		Ward assessment(film based)		Test	• counsel a patient with obstructive lung disease				
		MONDAY	Percussion of Abdominal Viscera, Fluid Thrill, Shifting Dullness, Auscultation of abdomen	Percussion of Abdominal Viscera, Fluid Thrill, Shifting Dullness, Auscultation of abdomen	Percussion of Abdominal Viscera, Fluid Thrill, Shifting Dullness, Auscultation of abdomen	Percussion of Abdominal Viscera, Fluid Thrill, Shifting Dullness, Auscultation of abdomen	Percussion of Abdominal Viscera, Fluid Thrill, Shifting Dullness, Auscultation of abdomen	history & examination of lump		Introductory round of laboratory & benches. Working of Autoclave. & Guidelines of Microbiological specimen collection & transport	History Taking Allotment of Cases and Groups		Chest x ray anatomy		Use of Injections I/M, UV, Intradermal, subcutaneous, I/V Cannulation, Arterial Tap	Introduction to ER services regarding triage system. History taking Monitoring of vitals				
2 MODULE	WEEK 3	TUSEDAY	GIT System Test ODD Roll Numbers	GIT System Test ODD Roll Numbers	GIT System Test ODD Roll Numbers	GIT System Test ODD Roll Numbers	GIT System Test ODD Roll Numbers	history & examination of ulcer		Culture media (Inoculated & Uninoculated). Antibiotic sensitivity testing. Orientation to Serology & PCR.	Demonstration of History taking and MSE		Chest x ray pathology		Nasogastric Intubation	Introduction to medicolegal cases and maintenance of record. Observation of IV cannulas IM injections				
JNDATION 1 &	WEEK 3	WEDNESDAY	GIT SystemS Test Even Roll Numbers	GIT SystemS Test Even Roll Numbers	GIT SystemS Test Even Roll Numbers	GIT SystemS Test Even Roll Numbers	GIT SystemS Test Even Roll Numbers	history & examination of Sinus/fistula		Performance & interpretation of Gram & ZN staining. Catalase, Coagulase & Oxidase Tests.	Interview with the patient Theoretical aspect of depression		Bones & joints with fractures		Male & Female catheterization(urine)	Setting of IV drips Nebulization				
FOL		THURSDAY	Respiratory System Examination Systemic Inquiry. Cough, Sputum, Dyspnea + Cyanosis	Respiratory System Examination Systemic Inquiry. Cough, Sputum, Dyspnea + Cyanosis	Respiratory System Examination Systemic Inquiry. Cough, Sputum, Dyspnea + Cyanosis	Respiratory System Examination Systemic Inquiry. Cough, Sputum, Dyspnea + Cyanosis	Respiratory System Examination Systemic Inquiry. Cough, Sputum, Dyspnea + Cyanosis	history & examination of skin		Urine & Stool Examination, Examination of CSF & Body Fluids	Interview with the patient Theoretical aspect of Dissociation		Plain x ray abdomen & KUB		Endotracheal intubation & tracheostomy	Insertion of folleys catheter Nasogastric tube				
		MONDAY	Hemoptysis, wheezing, pleuritic chest pain.	Hemoptysis, wheezing, pleuritic chest pain.	Hemoptysis, wheezing, pleuritic chest pain.	Hemoptysis, wheezing, pleuritic chest pain.	Hemoptysis, wheezing, pleuritic chest pain.	history & examination of Neck Swelling	C2	Reception, Sampling Techniques & Philebotomy, Routine Hematology, Preparation of Blood Smear and Retics, Quality Control	Interview with the patient Theoretical aspect of schezopherenia	C5	Fluoroscopic procedures & Ba studies.	C4	Breast Examination	counsel a patient with febrile illness				

WEEK 4	TUSEDAY	GPE; Cyanosis, Clubbing, Pulsus paradosus, Intercostal in drawing, Tracheal tug Palpation of trachea	GPE; Cyanosis, Clubbing, Pulsus paradosus, Intercostal in drawing, Tracheal tug Palpation of trachea	GPE; Cyanosis, Clubbing, Pulsus paradoxus, Intercostal in drawing, Tracheal tug Palpation of trachea	GPE; Cyanosis, Clubbing, Pulsus paradoxus, Intercostal in drawing, Tracheal tug Palpation of trachea	GPE; Cyanosis, Clubbing, Pulsus paradoxus, Intercostal in drawing, Tracheal tug Palpation of trachea	history & examination of Neck Swelling	history & examination of Neck Swelling	history & examination of Neck Swelling	history & examination of Neck Swelling	history & examination of Neck Swelling		Coagulation Studies, Bone Marrow, Hb Studies, Coomb's Test.	Pre cas of S use Int the Th asp Sub	esentation of es histories Substance erview with patient eoretical sect of sstance use		CT scan brain: basics		Prostate Examination	• counsel a patient with stroke
	WEDNESDAY	Inspection of chest from front Chest movements, Percussion of front of chest and Auscultation	Inspection of chest from front Chest movements, Percussion of front of chest and Auscultation	Inspection of chest from front Chest movements, Percussion of front of chest and Auscultation	Inspection of chest from front Chest movements, Percussion of front of chest and Auscultation	Inspection of chest from front Chest movements, Percussion of front of chest and Auscultation	history & examination of Thyroid	history & examination of Thyroid	history & examination of Thyroid	history & examination of Thyroid	history & examination of Thyroid		Grouping, Cross Matching	Pre cas of Del ntia by stu The asp	esentation of ees histories lirium/deme a/ organicity medical dents & ecoretical beets		Basics of ultrasound and observation		revision	counsel a patient with upper GI bleed
	THURSDAY	Inspection of back of chest. Chest movements Percussion of back of chest and Auscultation	Inspection of back of chest. Chest movements Percussion of back of chest and Auscultation	Inspection of back of chest. Chest movements Percussion of back of chest and Auscultation	Inspection of back of chest. Chest movements Percussion of back of chest and Auscultation	Inspection of back of chest. Chest movements Percussion of back of chest and Auscultation	history & examination of Thyroid	history & examination of Thyroid	history & examination of Thyroid	history & examination of Thyroid	history & examination of Thyroid		Ward test	Eva (OC hist atte Sige log Fee	Iluation CSE + case tories + endance & natures on book) & edback		Ward assessment(film based)		Test	counsel a patient with obstructive lung disease
	MONDAY	Resp., System (Even Roll Numbers)	Resp., System (Even Roll Numbers)	Resp., System (Even Roll Numbers)	Resp., System (Even Roll Numbers)	Resp., System (Even Roll Numbers)	history & examination of , Mouth & tongue Salivary Gland	history & examination of Mouth & tongue, Salivary Gland	history & examination of Mouth & tongue ,Salivary Gland	history & examination of Mouth & tongue ,Salivary Gland	history & examination of Mouth & tongue, Salivary Gland		Introductory round of laboratory & benches. Working of Autoclave. & Guidelines of Microbiological specimen collection & transport	His Allo Cas Gro	tory Taking otment of ses and oups		Chest x ray anatomy		Use of Injections VIA, IV, Intradermal, subcutaneous, IV Cannulation, Arterial Tap	Introduction to ER services regarding triage system. History taking Monitoring of vitals
	TUSEDAY	Resp. System (Odd Roll Numbers)	Resp. System (Odd Roll Numbers)	Resp. System (Odd Roll Numbers)	Resp. System (Odd Roll Numbers)	Resp. System (Odd Roll Numbers)	history & examination of Breast & Axillary lymph nodes	history & examination of Breast & Axillary lymph nodes	history & examination of Breast & Axillary lymph nodes	history & examination of Breast & Axillary lymph nodes	history & examination of Breast & Axillary lymph nodes		Culture media (Inoculated & Uninoculated). Antibiotic sensitivity testing. Orientation to Serology & PCR.	Der of H tak	monstration History ing and MSE		Chest x ray pathology		Nasogastric Intubation	Introduction to medicolegal cases and maintenance of record. Observation of IV cannulas IM injections
WEEK 5	WEDNESDAY	CVS Examination Systemic Inquiry Precordial Chest Pain, Palpitation, Patient with murmur.	CVS Examination Systemic Inquiry Precordial Chest Pain, Palpitation, Patient with murmur.	CVS Examination Systemic Inquiry Precordial Chest Pain, Palpitation, Patient with murmur.	CVS Examination Systemic Inquiry Precordial Chest Pain, Palpitation, Patient with murmur.	CVS Examination Systemic Inquiry Precordial Chest Pain, Palpitation, Patient with murmur.	history & examination of Breast & Axillary lymph nodes	history & examination of Breast & Axillary lymph nodes	history & examination of Breast & Axillary lymph nodes	history & examination of Breast & Axillary lymph nodes	history & examination of Breast & Axillary lymph nodes		Performance & interpretation of Gram & ZN staining. Catalase, Coagulase & Oxidase Tests.	Int the The asp dep	erview with patient coretical pect of pression		Bones & joints with fractures		Male & Female catheterization(urine)	• Setting of IV drips Nebulization
	THURSDAY	CVS Examination GPE, JVP, Oedema, Clubbing Osler's Nodes, Janeway's Lesions, Splinter harmorrhages.	CVS Examination GPE, JVP, Oedema, Clubbing Osler's Nodes, Janeway's Lesions, Splinter harmorrhages.	CVS Examination GPE, JVP, Ocdema, Clubbing Osler's Nodes, Janeway's Lesions, Splinter harmorrhages.	CVS Examination GPE, JVP, Oedema, Clubbing Osler's Nodes, Janeway's Lesions, Splinter harmorrhages.	CVS Examination GPE, JVP, Oedema, Clubbing Osler's Nodes, Janeway's Lesions, Splinter harmorrhages.	history & examination of Acute Abdomen	history & examination of Acute Abdomen	history & examination of Acute Abdomen	history & examination of Acute Abdomen	history & examination of Acute Abdomen		Urine & Stool Examination, Examination of CSF & Body Fluids	Inte the The asp Dis	erview with patient coretical pect of sociation		Plain x ray abdomen & KUB		Endotracheal intubation & tracheostomy	Insertion of folleys catheter Nasogastric tube
	MONDAY	Inspection of precordium location + palpation of apex beat. Right parasternal heave, palpation of base of heart, epigastric pulsations	Inspection of precordium location + palpation of apex beat. Right parasternal heave, palpation of base of heart, epigastric pulsations	Inspection of precordium location + palpation of apex beat. Right parasternal heave, palpation of base of hearon of base of hearon pulsations	Inspection of precordium location + palpation of apex beat. Right parasternal heave, palpation of base of heart, epigastric pulsations	Inspection of precordium location + palpation of apex beat. Right parasternal heave, palpation of base of heart, epigastric pulsations	history & examination of Chronic Abdomen	history & examination of Chronic Abdomen	history & examination of Chronic Abdomen	history & examination of Chronic Abdomen	history & examination of Chronic Abdomen	C3	Reception, Sampling Techniques & Phiebotomy, Routine Hematology, Preparation of Blood Smear and Retics, Quality Control	C2 Inte the asp sch	erview with patient coretical sect of eczopherenia	C1	Fluoroscopic procedures & Ba studies.	C5	Breast Examination	• counsel a patient with febrile illness

FOUNDATION 1 & 2 MODULE

	WEEK 6	TUSEDAY	Examination of Pulse	history & examination of Abdomenal Mass		Coagulation Studies, Bone Marrow, Hb Studies, Coomb's Test.	Presentation of cases histories of Substance use Interview with the patient Theoretical aspect of Substance use		CT scan brain: basics		Prostate Examination	counsel a patient with stroke								
		WEDNESDAY	JVP	JVP	JVP	JVP	JVP	history & examination of bleeding per rectum		Grouping, Cross Matching	Presentation of cases histories of Delirium/deme ntia/ organicity by medical students & Theoretical aspects		Basics of ultrasound and observation		revision	• counsel a patient with upper GI bleed				
JLE		THURSDAY	1.Auscultation of heart 1. Normal heart sound 2. Effect of respiration on heart sound 3. Murmurs and Thrills	1.Auscultation of heart 1. Normal heart sound 2. Effect of respiration on heart sound 3. Murmurs and Thrills	1.Auscultation of heart 1. Normal heart sound 2. Effect of respiration on heart sound 3. Murmurs and Thrills	1.Auscultation of heart 1. Normal heart sound 2. Effect of respiration on heart sound 3. Murmurs and Thrills	1.Auscultation of heart 1. Normal heart sound 2. Effect of respiration on heart sound 3. Murmurs and Thrills	history & examination of hernia		Ward test	Evaluation (OCSE + case histories + attendance & Signatures on logbook) & Feedback		Ward assessment(film based)		Test	• counsel a patient with obstructive lung disease				
ION 1 & 2 MODU		MONDAY	CVS Test Even Roll Number	history & examination of hernia		Introductory round of laboratory & benches. Working of Autoclave. & Guidelines of Microbiological specimen collection & transport	History Taking Allotment of Cases and Groups		Chest x ray anatomy		Use of Injections I/M, I/V, Intradermal, subcutaneous, I/V Cannulation, Arterial Tap	<ul> <li>Introduction to ER services regarding triage system.</li> <li>History taking</li> <li>Monitoring of vitals</li> </ul>								
FOUNDAT	WEEK 7	TUSEDAY	CVS Test Odd Roll Number	history & examination of inguino-scrotal swelling		Culture media (Inoculated & Uninoculated). Antibiotic sensitivity testing. Orientation to Serology & PCR.	Demonstration of History taking and MSE		Chest x ray pathology		Nasogastric Intubation	Introduction to medicolegal cases and maintenance of record. Observation of IV cannulas IM injections								
		WEDNESDAY	NERVOUS SYSTEM : Conscious level, HMF, orientation, speech, memory, intellect, sleep	NERVOUS SYSTEM : Conscious level, HMF, orientation, speech, memory, intellect, sleep	NERVOUS SYSTEM : Conscious level, HMF, orientation, speech, memory, intellect, sleep	NERVOUS SYSTEM : Conscious level, HMF, orientation, speech, memory, intellect, sleep	NERVOUS SYSTEM : Conscious level, HMF, orientation, speech, memory, intellect, sleep	urinogenital system	urinogenital system	urinogenital system	urinogenital system	urinogenital system		Performance & interpretation of Gram & ZN staining, Catalase, Coagulase & Oxidase Tests.	Interview with the patient Theoretical aspect of depression		Bones & joints with fractures		Male & Female catheterization(urine)	• Setting of IV drips Nebulization
		THURSDAY	Headaches ,Numbness, Paresthesias, weakness patterns	Headaches ,Numbness, Paresthesias, weakness patterns	Headaches ,Numbness, Paresthesias, weakness patterns	Headaches ,Numbness, Paresthesias, weakness patterns	Headaches ,Numbness, Paresthesias, weakness patterns	Peripheral vascular system	C4	Urine & Stool Examination, Examination of CSF & Body Fluids	Interview with the patient Theoretical aspect of Dissociation	C2	Plain x ray abdomen & KUB	C1	Endotracheal intubation & tracheostomy	Insertion of folleys catheter Nasogastric tube				
LRY		MONDAY	Cranial nerves. 7 Cranial nerves. 7 to 12	Cranial nerves. Cranial nerves. 7 to 12	Cranial nerves. Cranial nerves. 7 to 12	Cranial nerves. 7 Cranial nerves. 7 to 12	Cranial nerves. 7 Cranial nerves. 7 to 12	Venous lymphatic system	Venous lymphatic system	Venous lymphatic system	Venous lymphatic system	Venous lymphatic system		Reception, Coagulation Studies, Bone Marrow, Hb Studies, Coomb's Test.	the patient Presentation of cases histories of Substance use Interview with		Fluoroscopic CT scan brain: basics		Breast Examination Prostate Examination	counsel a     counsel a     patient with     stroke
PATOBILIA															the patient Theoretical aspect of Substance use					

GIT & HE	WEEK 8	WEDNESDAY	Examination of motor system (bulk, tone, power/ Reflexes.	peripheral nerves	peripheral nerves	peripheral nerves	peripheral nerves	peripheral nerves		Grouping, Cross Matching	Presentation of cases histories of Delirium/deme ntia/ organicity by medical students & Theoretical aspects		Basics of ultrasound and observation		revision	• counsel a patient with upper GI bleed				
		THURSDAY	Examination of sensory system	patient with head injuries		Ward test	Evaluation (OCSE + case histories + attendance & Signatures on logbook) & Feedback		Ward assessment(film based)		Test	• counsel a patient with obstructive lung disease								
		MONDAY	Examination of Cerebellar System/ Gait	bone lesions & injuries		Introductory round of laboratory & benches. Working of Autoclave. & Guidelines of Microbiological specimen collection & transport	History Taking Allotment of Cases and Groups		Chest x ray anatomy		Use of Injections JAM, JVV, Intradermal, subcutaneous, JV Cannulation, Arterial Tap	<ul> <li>Introduction to ER services regarding triage system.</li> <li>History taking</li> <li>Monitoring of vitals</li> </ul>								
	WEEK 9	TUSEDAY	CNS Test ODD Roll Numbers	Joint problems & injuries		Culture media (Inoculated & Uninoculated). Antibiotic sensitivity testing. Orientation to Serology & PCR.	Demonstration of History taking and MSE		Chest x ray pathology		Nasogastric Intubation	Introduction to medicolegal cases and maintenance of record. Observation of IV cannulas IM injections								
		WEDNESDAY	CNS Test Even Roll Numbers	indivisual joints		Performance & interpretation of Gram & ZN staining. Catalase, Coagulase & Oxidase Tests.	Interview with the patient Theoretical aspect of depression		Bones & joints with fractures		Male & Female catheterization(urine)	• Setting of IV drips Nebulization								
<b>ATOBILIARY</b>		THURSDAY	Revision	Revision	Revision	Revision	Revision	Management of pneumothorax		Urine & Stool Examination, Examination of CSF & Body Fluids	Interview with the patient Theoretical aspect of Dissociation		Plain x ray abdomen & KUB		Endotracheal intubation & tracheostomy	Insertion of folleys catheter Nasogastric tube				
GIT & HEP,		MONDAY	Revision	Revision	Revision	Revision	Revision	trauma primary care	C5	Reception, C4 Sampling C4 Phebotomy, Routine Hematology, Preparation of Blood Smear and Retics, Quality Control	Interview with the patient Theoretical aspect of schezopherenia	C3	Fluoroscopic procedures & Ba studies.	C2	Breast Examination	counsel a patient with febrile illness				
	WEEK 10	TUSEDAY	Final Test ODD Roll Numbers	trauma secondary care		Coagulation Studies, Bone Marrow, Hb Studies, Coomb's Test.	Presentation of cases histories of Substance use Interview with the patient		CT scan brain: basics		Prostate Examination	• counsel a patient with stroke								
															aspect of Substance use					

		WEDNESDAY	Final Test Even Roll Numbers	Final Test Even Roll Numbers	Final Test Even Roll Numbers	Final Test Even Roll Numbers	Final Test Even Roll Numbers	managemnet of limb fracture		Grouping, Cross Matching	Presentation of cases histories of Delirium/deme ntia/ organicity by medical students & Theoretical aspects		Basics of ultrasound and observation		revision	• counsel a patient with upper GI bleed				
		THURSDAY	MCQs	MCQs	MCQs	MCQs	MCQs	TEST	TEST	TEST	TEST	TEST		Ward test	Evaluation		Ward		Test	counsel a
		21-01-2019 TO 7/4/2019 SPW	CI	C2	C3	C4	C5	A5	A4	A3	A2	Al								
IILIARY		MONDAY TUSEDAY	General introduction to the field of Art of History, Taking, Importance of history, Contents of history, Contents of history, Presenting Complaint History of Present illness	General introduction to the field of Art of History, Taking, Importance of history, Contents of history, Contents of history, Presenting Complaint History of Present illness	General introduction to the field of Art of History, Taking, Importance of history, Contents of history, Presenting Complaint History of Present illness	General introduction to the field of Art of History, Taking, Importance of history, Contents of history, Presenting Complaint History of Present illness	General introduction to the field of Art of History, Taking, Importance of history, Contents of history, Presenting Complaint History of Present illness	introduction & bed side manners art of history taking		Introductory round of laboratory & Culture media (Inoculated & Uninoculated). Antibiotic sensitivity testing. Orientation to Serology & PCR.	History Taking Allotment of Demonstration of History taking and MSE		Chest x ray anatomy Chest x ray pathology		Use of Injections VM, IV, http://defemal, subcutaneous, IV Nasogastric Intubation	<ul> <li>Introduction to F.R. services regarding triage system.</li> <li>Introduction to medicolegal cases and maintenance of record.</li> <li>Observation of IV cannulas</li> <li>IM injections</li> </ul>				
Т & НЕРАТОВ	WEEK 11	WEDNESDAY	Systemic Inquiry, Past Medical History	Systemic Inquiry, Past Medical History	Systemic Inquiry, Past Medical History	Systemic Inquiry, Past Medical History	Systemic Inquiry, Past Medical History	systemic history	systemic history	systemic history	systemic history	systemic history		Performance & interpretation of Gram & ZN staining. Catalase, Coagulase & Oxidase Tests.	Interview with the patient Theoretical aspect of depression		Bones & joints with fractures		Male & Female catheterization(urine)	• Setting of IV drips Nebulization
D		THURSDAY	Family History, Occupational History, Personal History , Developmental+ Obstetrics History.	Family History, Occupational History, Personal History , Developmental+ Obstetrics History.	Family History, Occupational History, Personal History, Developmental+ Obstetrics History.	Family History, Occupational History, Personal History , Developmental+ Obstetrics History.	Family History, Occupational History, Personal History , Developmental+ Obstetrics History.	GPE	GPE	GPE	GPE	GPE		Urine & Stool Examination, Examination of CSF & Body Fluids	Interview with the patient Theoretical aspect of Dissociation		Plain x ray abdomen & KUB		Endotracheal intubation & tracheostomy	Insertion of folleys
		MONDAY	General physical examination. Pulse, BP, Temp. Resp Rate	General physical examination. Pulse, BP, Temp. Resp Rate	General physical examination. Pulse, BP, Temp. Resp Rate	General physical examination. Pulse, BP, Temp. Resp Rate	General physical examination. Pulse, BP, Temp. Resp Rate	systemic examination	systemic examination	systemic examination	systemic examination	systemic examination	B1	Reception, Sampling Techniques & Philobotomy, Routine Hematology, Preparation of Blood Smear and Retics, Quality B5 Control B5	Interview with the patient Theoretical aspect of schezopherenia	В4	Fluoroscopic procedures & Ba studies.	В3	Breast Examination B2	catheter Nasogastric tube • counsel a patient with febrile illness
	WEEK 12	TUSEDAY	GTT System Systemic Inquiry Vomiting, jaundice, pain abdomen, acute diarrhea GPE, Jaundice, Clubbing, Koilonychia, Pallor, Leuconychia, Oedema Examination of Oral Cavity	GTT System Systemic Inquiry Vomiting, jaundice, pain abdomen, acute diarrhea GPE, Jaundice, Clubbing, Koilonychia, Pallor, Leuconychia, Oedema Examination of Oral Cavity	GIT System Systemic Inquiry Vomiting, jaundice, pain abdomen, acute and chronic diarrhea GPE, Jaundice, Clubbing, Koilonychia, Pallor, Leuconychia, Oedema Examination of Oral Cavity	GIT System Systemic Inquiry Vomiting, jaundice, pain abdomen, acute diarrhea GPE, Jaundice, Clubbing, Kollonychia, Pallor, Leuconychia, Oedema Examination of Oral Cavity	GIT System Systemic Inquiry Vomiting, jaundice, pain abdomen, acute and chronic diarrhea GPE, Jaundice, Clubbing, Kollonychia, Pallor, Leuconychia, Oedema Examination of Oral Cavity	local examination	local examination	local examination	local examination	local examination		Coggulation Studies, Bone Marrow, Hb Studies, Coomb's Test.	Presentation of cases histories of Substance use Interview with the patient Theoretical aspect of Substance use		CT scan brain: basics		Prostate Examination	counsel a patient with stroke

	WEDNESDAY	Inspection of abdomen, Superficial Palpation of Abdomen	basic physical signs in detail		Grouping, Cross Matching		Presentation of cases histories of Delirium/deme ntia/ organicity by medical students & Theoretical aspects		Basics of ultrasound and observation		revision		counsel a patient with upper GI bleed				
	THURSDAY	Palpation of Liver, Spleen, Kidneys, Pelvic Masses	history & examination of lump		Ward test		Evaluation (OCSE + case histories + attendance & Signatures on logbook) & Feedback		Ward assessment(film based)		Test		<ul> <li>counsel a patient with obstructive lung disease</li> </ul>				
	MONDAY	Percussion of Abdominal Viscera, Fluid Thrill, Shifting Dullness, Auscultation of abdomen	history & examination of lump		Introductory round of laboratory & benches. Working of Autoclave. & Guidelines of Microbiological specimen collection & transport		History Taking Allotment of Cases and Groups		Chest x ray anatomy		Use of Injections I/M, I/V, Intradermal, subcutaneous, I/V Cannulation, Arterial Tap		Introduction to ER services regarding triage system.     History taking     Monitoring of vitals				
WEEK 13	TUSEDAY	GIT System Test ODD Roll Numbers	GIT System Test ODD Roll Numbers	GIT System Test ODD Roll Numbers	GIT System Test ODD Roll Numbers	GIT System Test ODD Roll Numbers	history & examination of ulcer		Culture media (Inoculated & Uninoculated). Antibiotic sensitivity testing. Orientation to Serology & PCR.		Demonstration of History taking and MSE		Chest x ray pathology		Nasogastric Intubation		Introduction to medicolegal cases and maintenance of record. Observation of IV cannulas IM injections
	WEDNESDAY	GIT SystemS Test Even Roll Numbers	history & examination of Sinus/fistula		Performance & interpretation of Gram & ZN staining. Catalase, Coagulase & Oxidase Tests.		Interview with the patient Theoretical aspect of depression		Bones & joints with fractures		Male & Female catheterization(urine)		• Setting of IV drips Nebulization				
	THURSDAY	Respiratory System Examination Systemic Inquiry. Cough, Sputum, Dyspnea + Cyanosis	history & examination of skin		Urine & Stool Examination, Examination of CSF & Body Fluids		Interview with the patient Theoretical aspect of Dissociation		Plain x ray abdomen & KUB		Endotracheal intubation & tracheostomy		Insertion of folleys catheter Nasogastric tube				
	MONDAY	Hemoptysis, wheezing, pleuritic chest pain.	history & examination of Neck Swelling	В2	Reception, Sampling Techniques & Phlebotomy, Routine Hematology, Preparation of Blood Smear and Retics, Quality Control	B1	Interview with the patient Theoretical aspect of schezopherenia	В5	Fluoroscopic procedures & Ba studies.	Β4	Breast Examination	B3	counsel a patient with febrile illness				

| WEEK 14 | TUSEDAY   | GPE; Cyanosis,<br>Clubbing,<br>Pulsus<br>paradoxus,<br>Intercostal<br>in drawing,<br>Tracheal tug<br>Palpation of<br>trachea | GPE; Cyanosis,<br>Clubbing,<br>Pulsus<br>paradoxus,<br>Intercostal<br>in drawing,<br>Tracheal tug<br>Palpation of<br>trachea | GPE; Cyanosis,<br>Clubbing,<br>Pulsus<br>paradoxus,<br>Intercostal<br>in drawing,<br>Tracheal tug<br>Palpation of<br>trachea | GPE; Cyanosis,<br>Clubbing,<br>Pukus<br>paradoxus,<br>Intercostal<br>in drawing,<br>Tracheal tug<br>Palpation of<br>trachea | GPE; Cyanosis,<br>Clubbing,<br>Pulsus<br>paradoxus,<br>Intercostal<br>in drawing,<br>Tracheal tug<br>Palpation of<br>trachea | history &<br>examination of<br>Neck Swelling                       |    | Coagulation<br>Studies, Bone<br>Marrow, Hb<br>Studies, Coomb's<br>Test.  |    | Presentation of<br>cases histories<br>of Substance<br>use<br>Interview with<br>the patient<br>Theoretical<br>aspect of<br>Substance use |    | CT scan brain:<br>basics                    |    | Prostate<br>Examination  |    | • counsel a<br>patient with<br>stroke   |
|---------|-----------|--|--|--|---|--|--|--|--|--|--|----|--|----|---|----|---|----|--|----|---|
|         | WEDNESDAY | Inspection of<br>chest from front<br>Chest<br>movements,<br>Percussion of<br>front<br>of chest and<br>Auscultation           | Inspection of<br>chest from front<br>Chest<br>movements,<br>Percussion of<br>front<br>of chest and<br>Auscultation           | Inspection of<br>chest from front<br>Chest<br>movements,<br>Percussion of<br>front<br>of chest and<br>Auscultation           | Inspection of<br>chest from front<br>Chest<br>movements,<br>Percussion of<br>front<br>of chest and<br>Auscultation          | Inspection of<br>chest from front<br>Chest<br>movements,<br>Percussion of<br>front<br>of chest and<br>Auscultation           | history &<br>examination of<br>Thyroid                             |    | Grouping, Cross<br>Matching  |    | Presentation of<br>cases histories<br>of<br>Delirium/deme<br>ntia/ organicity<br>by medical<br>students &<br>Theoretical<br>aspects     |    | Basics of<br>ultrasound and<br>observation  |    | revision   |    | • counsel a<br>patient with<br>upper GI bleed   |
|         | THURSDAY  | Inspection of<br>back of chest.<br>Chest<br>movements<br>Percussion of<br>back of<br>chest and<br>Auscultation               | Inspection of<br>back of chest.<br>Chest<br>movements<br>Percussion of<br>back of<br>chest and<br>Auscultation               | Inspection of<br>back of chest.<br>Chest<br>movements<br>Percussion of<br>back of<br>chest and<br>Auscultation               | Inspection of<br>back of chest.<br>Chest<br>movements<br>Percussion of<br>back of<br>chest and<br>Auscultation              | Inspection of<br>back of chest.<br>Chest<br>movements<br>Percussion of<br>back of<br>chest and<br>Auscultation               | history &<br>examination of<br>Thyroid                             |    | Ward test  |    | Evaluation<br>(OCSE + case<br>histories +<br>attendance &<br>Signatures on<br>logbook) &<br>Feedback                                    |    | Ward<br>assessment(film<br>based)           |    | Test   |    | <ul> <li>counsel a<br/>patient with<br/>obstructive lung<br/>disease</li> </ul>   |
|         | MONDAY    | Percussion and<br>auscultation of<br>back<br>of chest  | Percussion and<br>auscultation of<br>back<br>of chest  | Percussion and<br>auscultation of<br>back<br>of chest  | Percussion and<br>auscultation of<br>back<br>of chest   | Percussion and<br>auscultation of<br>back<br>of chest  | history &<br>examination of ,<br>Mouth & tongue<br>Salivary Gland  |    | Introductory<br>round of<br>laboratory &<br>benches. Working<br>of Autoclave. &<br>Guidelines of<br>Microbiological<br>specimen<br>collection &<br>transport |    | History Taking<br>Allotment of<br>Cases and<br>Groups   |    | Chest x ray<br>anatomy                      |    | Use of Injections<br>I/M, I/V, Intradermal,<br>subcutaneous, I/V<br>Cannulation, Arterial<br>Tap |    | Introduction to ER<br>services regarding<br>tringe system.<br>History taking<br>Monitoring of vitals                    |
| WEEK 15 | TUSEDAY   | Resp., System<br>(Even Roll<br>Numbers)  | Resp., System<br>(Even Roll<br>Numbers)  | Resp., System<br>(Even Roll<br>Numbers)  | Resp., System<br>(Even Roll<br>Numbers)   | Resp., System<br>(Even Roll<br>Numbers)  | history &<br>examination of<br>Breast &<br>Axillary lymph<br>nodes |    | Culture media<br>(Inoculated &<br>Uninoculated).<br>Antibiotic<br>sensitivity testing.<br>Orientation to<br>Serology & PCR.                                  |    | Demonstration<br>of History<br>taking and MSE   |    | Chest x ray<br>pathology                    |    | Nasogastric<br>Intubation  |    | Introduction to<br>medicolegal cases and<br>maintenance of<br>record.<br>Observation of IV<br>cannulas<br>IM injections |
|         | WEDNESDAY | Resp. System<br>(Odd Roll<br>Numbers)  | Resp. System<br>(Odd Roll<br>Numbers)  | Resp. System<br>(Odd Roll<br>Numbers)  | Resp. System<br>(Odd Roll<br>Numbers)   | Resp. System<br>(Odd Roll<br>Numbers)  | history &<br>examination of<br>Breast &<br>Axillary lymph<br>nodes |    | Performance &<br>interpretation of<br>Gram & ZN<br>staining. Catalase,<br>Coagulase &<br>Oxidase Tests.  |    | Interview with<br>the patient<br>Theoretical<br>aspect of<br>depression   |    | Bones & joints<br>with fractures            |    | Male & Female<br>catheterization(urine)  |    | Setting of IV drips<br>Nebulization   |
|         | THURSDAY  | CVS<br>Examination<br>Systemic Inquiry<br>Precordial Chest<br>Pain, Palpitation,<br>Patient with<br>murmur                   | CVS<br>Examination<br>Systemic Inquiry<br>Precordial Chest<br>Pain, Palpitation,<br>Patient with<br>murmur                   | CVS<br>Examination<br>Systemic<br>Inquiry<br>Precordial<br>Chest Pain,<br>Palpitation,<br>Patient with<br>murmur             | CVS<br>Examination<br>Systemic Inquiry<br>Precordial Chest<br>Pain,<br>Palpitation,<br>Patient with<br>murmur               | CVS<br>Examination<br>Systemic Inquiry<br>Precordial Chest<br>Pain,<br>Palpitation,<br>Patient with<br>murmur                | history &<br>examination of<br>Acute Abdomen                       |    | Urine & Stool<br>Examination,<br>Examination of<br>CSF & Body<br>Fluids  |    | Interview with<br>the patient<br>Theoretical<br>aspect of<br>Dissociation   |    | Plain x ray<br>abdomen &<br>KUB             |    | Endotracheal<br>intubation &<br>tracheostomy   |    | Insertion of folleys<br>catheter<br>Nasogastric tube  |
|         | MONDAY    | CVS<br>Examination<br>GPE, JVP,<br>Oedema,<br>Clubbing<br>Osler's Nodes,<br>Janeway's<br>Lesions, Splinter<br>harmorrhages   | CVS<br>Examination<br>GPE, JVP,<br>Oedema,<br>Clubbing<br>Osler's Nodes,<br>Janeway's<br>Lesions, Splinter<br>harmorrhages   | CVS<br>Examination<br>GPE, JVP,<br>Oedema,<br>Clubbing<br>Osler's Nodes,<br>Janeway's<br>Lesions, Splinter<br>harmorrhages   | CVS<br>Examination<br>GPE, JVP,<br>Oedema,<br>Clubbing<br>Osler's Nodes,<br>Janeway's<br>Lesions, Splinter<br>harmorrhages  | CVS<br>Examination<br>GPE, JVP,<br>Oedema,<br>Clubbing<br>Osler's Nodes,<br>Janeway's<br>Lesions, Splinter<br>harmorrhages   | history &<br>examination of<br>Chronic<br>Abdomen                  | B3 | Reception,<br>Sampling<br>Techniques &<br>Phlebotomy,<br>Routine<br>Hematology,<br>Preparation of<br>Blood Smear and<br>Retics, Quality<br>Control           | B2 | Interview with<br>the patient<br>Theoretical<br>aspect of<br>schezopherenia   | B1 | Fluoroscopic<br>procedures &<br>Ba studies. | В5 | Breast Examination   | Β4 | counsel a<br>patient with<br>febrile illness  |

MICROBES & ANTI MICROBIALS ( MYCOCOLOGY, BATERIOLOGY, VIROLOGY)

WEEK 16	TUSEDAY	Inspection of precordium location + palpation of apex beat. Right parasternal heave, palpation of base of heart, epigastric pulsations	Inspection of precordium location + palpation of apex beat. Right parasternal heave, palpation of base of heart, epigastric pulsations	Inspection of precordium location + palpation of apex beat. Right parasternal heave, palpation of base of heart, epigastric pulsations	Inspection of precordium location + palpation of apex beat. Right parasternal heave, palpation of base of heart, epigastric pulsations	Inspection of precordium location + palpation of apex beat. Right parasternal heave, palpation of base of heart, epigastric pulsations	history & examination of Abdomenal Mass		Coagulation Studies, Bone Marrow, Hb Studies, Coomb's Test.	Presentation of cases histories of Substance use Interview with the patient Theoretical aspect of Substance use	CT scan brain: basics	Prostate Examination	• counsel a patient with stroke							
	WEDNESDAY	Examination of Pulse	history & examination of bleeding per rectum		Grouping, Cross Matching	Presentation of cases histories of Delirium/deme ntia/ organicity by medical students & Theoretical aspects	Basics of ultrasound and observation	revision	• counsel a patient with upper GI bleed											
	THURSDAY	JVP	JVP	JVP	JVP	JVP	history & examination of hernia	history & examination of hernia	history & examination of hernía	history & examination of hernia	history & examination of hernia		Ward test	Evaluation (OCSE + case histories + attendance & Signatures on logbook) & Feedback	Ward assessment(film based)	Test	<ul> <li>counsel a patient with obstructive lung disease</li> </ul>			
	MONDAY	1.Auscultation of heart 1. Normal heart sound 2. Effect of respiration on heart sound 3. Murmurs and Thrills	1.Auscultation of heart 1. Normal heart sound 2. Effect of respiration on heart sound 3. Murmurs and Thrills	1.Auscultation of heart 1. Normal heart sound 2. Effect of respiration on heart sound 3. Murmurs and Thrills	1.Auscultation of heart 1. Normal heart sound 2. Effect of respiration on heart sound 3. Murmurs and Thrills	1.Auscultation of heart 1. Normal heart sound 2. Effect of respiration on heart sound 3. Murmurs and Thrills	history & examination of hernia		Introductory round of laboratory & benches. Working of Autoclave. & Guidelines of Microbiological specimen collection & transport	History Taking Allotment of Cases and Groups	Chest x ray anatomy	Us of Injections I/M, I/V, Intradermal, subcutaneous, I/V Cannulation, Arterial Tap	Introduction to ER services regarding tringe system. History taking Monitoring of vitals							
WEEK 17	TUSEDAY	CVS Test Even Roll Number	history & examination of inguino-scrotal swelling		Culture media (Inoculated & Uninoculated). Antibiotic sensitivity testing. Orientation to Serology & PCR.	Demonstration of History taking and MSE	Chest x ray pathology	Nasogastric Intubation	Introduction to medicolegal cases and maintenance of record. Observation of IV cannulas IM injections											
	WEDNESDAY	CVS Test Odd Roll Number	urinogenital system	urinogenital system	urinogenital system	urinogenital system	urinogenital system		Performance & interpretation of Gram & ZN staining, Catalase, Coagulase & Oxidase Tests.	Interview with the patient Theoretical aspect of depression	Bones & joints with fractures	Male & Female catheterization(urine)	• Setting of IV drips Nebulization							
	THURSDAY	NERVOUS SYSTEM : Conscious level,	NERVOUS SYSTEM : Conscious level,	NERVOUS SYSTEM : Conscious	NERVOUS SYSTEM : Conscious	NERVOUS SYSTEM : Conscious	Peripheral vascular system		Urine & Stool Examination, Examination of	Interview with the patient Theoretical	Plain x ray abdomen & KLIR	Endotracheal intubation & tracheostomy	Insertion of folleys catheter Nasogastric tube							
	MONDAY TUSEDAY	Headaches ,Numbness, Cranial nerves. 1 to 6	Headaches,Num bness, Cranial nerves. 1 to 6	Headaches ,Numbness, Cranial nerves. 1 to 6	Headaches ,Numbness, Cranial nerves. 1 to 6	Headaches ,Numbness, Cranial nerves. 1 to 6	Venous Problems lymphatic system	Venous Problems lymphatic system	Venous Problems lymphatic system	Venous Problems 1 lymphatic system	Venous Problems lymphatic system	Β4	Reception, Sampling Coagulation Studies, Bone Marrow, Hb Studies, Coomb's Test.	B3 B3 Presentation of cases histories of Substance use Interview with the patient	Fluoroscopic procedures & CT scan brain: basics	Breast Examination 1 Prostate E Examination	counsel a patient with counsel a patient with stroke			
														Theoretical aspect of Substance use						
v	VEEK 18	WEDNESDAY	Cranial nerves. 7 to 12	Cranial nerves. 7 to 12	Cranial nerves. 7 to 12	Cranial nerves. 7 to 12	7 Cranial nerves. 7 to 12	peripheral nerves	peripheral nerves	peripheral nerves	peripheral nerves	peripheral nerves		Grouping, Cross Matching	Presentation of cases histories of Delirium/deme ntia/ organicity by medical students & Theoretical aspects		Basics of ultrasound and observation		revision	• counsel a patient with upper GI bleed
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		THURSDAY	Examination of motor system (bulk, tone, power/ Reflexes.	patient with head injuries		Ward test	Evaluation (OCSE + case histories + attendance & Signatures on logbook) & Feedback		Ward assessment(film based)		Test	• counsel a patient with obstructive lung disease								
		MONDAY	Examination of sensory system	bone lesions & injuries		Introductory round of aboratory & senches. Working of Autoclave. & Guidelines of Microbiological specimen collection & ransport	History Taking Allotment of Cases and Groups		Chest x ray anatomy		Use of Injections I/M, I/V, Intradermal, subcritaneous, I/V Cannulation, Arterial Tap	Introduction to ER services regarding triage system. History taking Monitoring of vitals								
	VEEK 19	TUSEDAY	Examination of Cerebellar System/ Gait	Joint problems & injuries	()          	Culture media Inoculated & Uninoculated). Antibiotic sensitivity testing. Drientation to Serology & PCR.	Demonstration of History taking and MSE		Chest x ray pathology		Nasogastric Intubation	Introduction to medicolegal cases and maintenance of record. Observation of IV cannulas IM injections								
		WEDNESDAY	CNS Test ODD Roll Numbers	indivisual joints	I i s o	Performance & interpretation of Gram & ZN staining. Catalase, Coagulase & Oxidase Tests.	Interview with the patient Theoretical aspect of depression		Bones & joints with fractures		Male & Female catheterization(urine)	• Setting of IV drips Nebulization								
λs		THURSDAY	CNS Test Even Roll Numbers	Management of pneumothorax		Urine & Stool Examination, Examination of CSF & Body Fluids	Interview with the patient Theoretical aspect of Dissociation		Plain x ray abdomen & KUB		Endotracheal intubation & tracheostomy	Insertion of folleys catheter								
TOLOGY & IMUNOLO		MONDAY	Revision	Revision	Revision	Revision	Revision	trauma primary care	B5 5 1 1 1 1 1 1 1	Reception, Sampling Fechniques & Phiebotomy, Routine Hematology, Preparation of Blood Smear and Retics, Quality Control	B4 Interview with the patient Theoretical aspect of schezopherenia	B3	Fluoroscopic procedures & Ba studies.	B2	Breast Examination B:	Nasogastric tube 1 - counsel a patient with febrile illness				
НАЕМА		TUSEDAY	Final Test ODD Roll Numbers	trauma secondary care		Coagulation Studies, Bone Marrow, Hb Studies, Coomb's Fest.	Presentation of cases histories of Substance use Interview with the perform		CT scan brain: basics		Prostate Examination	• counsel a patient with stroke								
v	VEEK 20														the patient Theoretical aspect of Substance use					

	WEDNESDAY	Final Test Even Roll Numbers	Final Test Even Roll Numbers	Final Test Even Roll Numbers	Final Test Even Roll Numbers	Final Test Even Roll Numbers	managemnet of limb fracture		Grouping, Cross Matching		Presentation of cases histories of Delirium/deme ntia/ organicity by medical students & Theoretical aspects		Basics of ultrasound and observation		revision		counsel a patient with upper GI bleed				
	THURSDAY	MCQs	MCQs	MCQs	MCQs	MCQs	TEST	TEST	TEST	TEST	TEST		Ward test		Evaluation		Ward		Test		counsel a
	4/8/2019 TO 10/8/2019 S.V	B1	B2	В3	B4	В5	C5	C4	C3	C2	Cl										
	MONDAY	General introduction to the field of medicine. Medical ethics	General introduction to the field of medicine. Medical ethics	General introduction to the field of medicine. Medical ethics	General introduction to the field of medicine. Medical ethics	General introduction to the field of medicine. Medical ethics	introduction & bed side manners		Introductory round of laboratory & benches. Working of Autoclave. & Guidelines of Microbiological specimen collection & transport		History Taking Allotment of Cases and Groups		Chest x ray anatomy		Use of Injections I/M, I/V, Intradermal, subcutaneous, I/V Cannulation, Arterial Tap		Introduction to ER services regarding triage system.     History taking     Monitoring of vitals				
WEEK 21	TUSEDAY	Art of History, Taking, Importance of history, Contents of history, Presenting Complaint History of Present illness.	Art of History, Taking, Importance of history, Contents of history, Presenting Complaint History of Present illness.	Art of History, Taking, Importance of history, Contents of history, Presenting Complaint History of Present illness.	Art of History, Taking, Importance of history, Contents of history, Presenting Complaint History of Present illness.	Art of History, Taking, Importance of history, Contents of history, Presenting Complaint History of Present illness.	art of history taking		Culture media (Inoculated & Uninoculated). Antibiotic sensitivity testing. Orientation to Serology & PCR.		Demonstration of History taking and MSE		Chest x ray pathology		Nasogastric Intubation		Introduction to medicolegal cases and maintenance of record. Observation of IV cannulas IM injections				
	WEDNESDAY	Systemic Inquiry, Past Medical History	Systemic Inquiry, Past Medical History	Systemic Inquiry, Past Medical History	Systemic Inquiry, Past Medical History	Systemic Inquiry, Past Medical History	systemic history	systemic history	systemic history	systemic history	systemic history		Performance & interpretation of Gram & ZN staining. Catalase, Coagulase & Oxidase Tests.		Interview with the patient Theoretical aspect of depression		Bones & joints with fractures		Male & Female catheterization(urine)		• Setting of IV drips Nebulization
	THURSDAY	Family History, Occupational History, Personal History , Developmental+ Obstetrics History.	Family History, Occupational History, Personal History , Developmental+ Obstetrics History.	Family History, Occupational History, Personal History, Developmental+ Obstetrics History.	Family History, Occupational History, Personal History , Developmental+ Obstetrics History.	Family History, Occupational History, Personal History , Developmental+ Obstetrics History.	GPE	GPE	GPE	GPE	GPE		Urine & Stool Examination, Examination of CSF & Body Fluids		Interview with the patient Theoretical aspect of Dissociation		Plain x ray abdomen & KUB		Endotracheal intubation & tracheostomy		Insertion of folleys catheter Nasogastric tube
	MONDAY	General physical examination. Pulse, BP, Temp. Resp Rate	General physical examination. Pulse, BP, Temp. Resp Rate	General physical examination. Pulse, BP, Temp. Resp Rate	General physical examination. Pulse, BP, Temp. Resp Rate	General physical examination. Pulse, BP, Temp. Resp Rate	systemic examination	systemic examination	systemic examination	systemic examination	systemic examination	A1	Reception, Sampling Techniques & Phiebotomy, Routine Hematology, Preparation of Blood Smear and Retics, Quality Control	A5	Interview with the patient Theoretical aspect of schezopherenia	A4	Fluoroscopic procedures & Ba studies.	A3	Breast Examination	A2	counsel a patient with febrile illness

WEEK 22	TUSEDAY	GT System: Enquiry Systemic Inquiry Vomiting, jaundice, pain abdomen, activation diarrhea GPE, Jaundice, Clubbing, Koilonychia, Pallor, Leuconychia, Oedema Examination of Oral Cavit	GIT System Systemic Inquiry Vomiting, jaundice, pain abdomen, actuation diarrhea GPE, Jaundice, Clubbing, Kollonychia, Pallor, Leuconychia, Oedema Examination of Oral Cavit	GTT System Systemic Inquiry Vomiting, jaundice, pain abdomen, acute and chronic diarrhea GPE, Jaundice, Clubbing, Koilonychia, Pallor, Leuconychia, Oedema Examination of Oral Cavit	GIT System Systemic Inquiry Vomiting, jaundice, pain abdomen, acute and chronic diarrhea GPE, Jaundice, Clubbing, Koilonychia, Pallor, Leuconychia, Oedema Examination of Oral Cavit	GIT System Systemic Inquiry Vomiting, jaundice, pain abdomen, acute and chronic diarrhea GPE, Jaundice, Clubbing, Koölonychia, Pallor, Leuconychia, Oedema Examination of Oral Cavit	local examination	local examination	local examination	local examination	local examination		Coagulation Studies, Bone Marrow, Hb Studies, Coomb's Test.	Presentation of cases histories of Substance use Interview with the patient Theoretical aspect of Substance use	CT scan brain: basics	Prostate Examination	3	• counsel a patient with stroke
	WEDNESDAY	Inspection of abdomen, Superficial Palpation of Abdomen	Inspection of abdomen, Superficial Palpation of Abdomen	Inspection of abdomen, Superficial Palpation of Abdomen	Inspection of abdomen, Superficial Palpation of Abdomen	Inspection of abdomen, Superficial Palpation of Abdomen	basic physical signs in detail	hasic physical signs in detail		Grouping, Cross Matching	Presentation of cases histories of Delirium/deme ntia/ organicity by medical students & Theoretical aspects	Basics of ultrasound and observation	revision		counsel a patient with upper GI bleed			
	THURSDAY	Palpation of Liver, Spleen, Kidneys, Pelvic Masses	Palpation of Liver, Spleen, Kidneys, Pelvic Masses	Palpation of Liver, Spleen, Kidneys, Pelvic Masses	Palpation of Liver, Spleen, Kidneys, Pelvic Masses	Palpation of Liver, Spleen, Kidneys, Pelvic Masses	history & examination of lump		Ward test	Evaluation (OCSE + case histories + attendance & Signatures on logbook) & Feedback	Ward assessment(film based)	Test		<ul> <li>counsel a patient with obstructive lung disease</li> </ul>				
	MONDAY	Percussion of Abdominal Viscera, Fluid Thrill, Shifting Dullness, Auscultation of abdomen	Percussion of Abdominal Viscera, Fluid Thrill, Shifting Dullness, Auscultation of abdomen	Percussion of Abdominal Viscera, Fluid Thrill, Shifting Dullness, Auscultation of abdomen	Percussion of Abdominal Viscera, Fluid Thrill, Shifting Dullness, Auscultation of abdomen	Percussion of Abdominal Viscera, Fluid Thrill, Shifting Dullness, Auscultation of abdomen	history & examination of lump		Introductory round of laboratory & benches. Working of Autoclave. & Guidelines of Microbiological specimen collection & transport	History Taking Allotment of Cases and Groups	Chest x ray anatomy	Use of Injections I/M, I/V, Intradermal, subcrtaneous, I/V Cannulation, Arterial Tap		Introduction to ER services regarding triage system. History taking Monitoring of vitals				
WEEK 22	TUSEDAY	GIT System Test ODD Roll Numbers	GIT System Test ODD Roll Numbers	GIT System Test ODD Roll Numbers	GIT System Test ODD Roll Numbers	GIT System Test ODD Roll Numbers	history & examination of ulcer		Culture media (Inoculated & Uninoculated). Antibiotic sensitivity testing. Orientation to Serology & PCR.	Demonstration of History taking and MSE	Chest x ray pathology	Nasogastric Intubation	1	Introduction to medicolegal cases and maintenance of record. Observation of IV cannulas IM injections				
WEEK 23	WEDNESDAY	GIT SystemS Test Even Roll Numbers	GIT SystemS Test Even Roll Numbers	GIT SystemS Test Even Roll Numbers	GIT SystemS Test Even Roll Numbers	GIT SystemS Test Even Roll Numbers	history & examination of Sinus/fistula		Performance & interpretation of Gram & ZN staining. Catalase, Coagulase & Oxidase Tests.	Interview with the patient Theoretical aspect of depression	Bones & joints with fractures	Male & Female catheterization(urine)	ŗ	<ul> <li>Setting of IV drips Nebulization</li> </ul>				
	THURSDAY	Respiratory System Examination Systemic Inquiry. Cough, Sputum, Dyspnea + Cyanosis	Respiratory System Examination Systemic Inquiry. Cough, Sputum, Dyspnea + Cyanosis	Respiratory System Examination Systemic Inquiry. Cough, Sputum, Dyspnea + Cyanosis	Respiratory System Examination Systemic Inquiry. Cough, Sputum, Dyspnea + Cyanosis	Respiratory System Examination Systemic Inquiry. Cough, Sputum, Dyspnea + Cyanosis	history & examination of skin		Urine & Stool Examination, Examination of CSF & Body Fluids	Interview with the patient Theoretical aspect of Dissociation	Plain x ray abdomen & KUB	Endotracheal intubation & tracheostomy	c 7	Insertion of folleys catheter Nasogastric tube				
	MONDAY	Hemoptysis, wheezing, pleuritic chest pain.	Hemoptysis, wheezing, pleuritic chest pain.	Hemoptysis, wheezing, pleuritic chest pain.	Hemoptysis, wheezing, pleuritic chest pain.	Hemoptysis, wheezing, pleuritic chest pain.	history & examination of Neck Swelling	A2	Reception, Sampling Techniques & Phiebotomy, Routine Hematology, Preparation of Blood Smear and Retics, Quality Control	A1 Interview with the patient Theoretical aspect of schezopherenia	Fluoroscopic procedures & Ba studies. A	Breast Examination	A3	• counsel a patient with febrile illness				

WEEK 24	TUSEDAY	GPE; Cyanosis, Clubbing, Pulsus paradoxus, Intercostal in drawing, Tracheal tug Palpation of trachea	history & examination of Neck Swelling		Coagulation Studies, Bone Marrow, Hb Studies, Coomb's Test.		Presentation of cases histories of Substance use Interview with the patient Theoretical aspect of Substance use	CT scan brain: basics		Prostate Examination		counsel a patient with stroke				
	WEDNESDAY	Inspection of chest from front Chest movements, Percussion of front of chest and Auscultation	history & examination of Thyroid		Grouping, Cross Matching		Presentation of cases histories of Delirium/deme ntia/ organicity by medical students & Theoretical aspects	Basics of ultrasound and observation		revision		• counsel a patient with upper Gl bleed				
	THURSDAY	Inspection of back of chest. Chest movements Percussion of back of chest and Auscultation	history & examination of Thyroid		Ward test		Evaluation (OCSE + case histories + attendance & Signatures on logbook) & Feedback	Ward assessment(filn based)	n	Test		counsel a patient with obstructive lung disease				
	MONDAY	Percussion and auscultation of back of chest.	history & examination of , Mouth & tongue Salivary Gland		Introductory round of laboratory & benches. Working of Autoclave. & Guidelines of Microbiological specimen collection & transport		History Taking Allotment of Cases and Groups	Chest x ray anatomy		Use of Injections I/M, I/V, Intradermal, subcutaneous, I/V Cannulation, Arterial Tap		Introduction to ER services regarding triage system.     History taking     Monitoring of vitals				
WEEK 25	TUSEDAY	Resp., System (Even Roll Numbers)	history & examination of Breast & Axillary lymph nodes		Culture media (Inoculated & Uninoculated). Antibiotic sensitivity testing. Orientation to Serology & PCR.		Demonstration of History taking and MSE	Chest x ray pathology		Nasogastric Intubation		Introduction to medicolegal cases and maintenance of record. Observation of IV cannulas IM injections				
	WEDNESDAY	Resp. System (Odd Roll Numbers)	history & examination of Breast & Axillary lymph nodes		Performance & interpretation of Gram & ZN staining. Catalase, Coagulase & Oxidase Tests.		Interview with the patient Theoretical aspect of depression	Bones & joints with fractures		Male & Female catheterization(urine)		• Setting of IV drips Nebulization				
	THURSDAY	CVS Examination Systemic Inquiry Precordial Chest Pain, Palpitation Patient with murmur.	CVS Examination Systemic Inquiry Precordial Chest Pain, Palpitation, Patient with murmur.	CVS Examination Systemic Inquiry Precordial Chest Pain, Palpitation, Patient with murmur.	CVS Examination Systemic Inquiry Precordial Chest Pain, Palpitation, Patient with murmur.	CVS Examination Systemic Inquiry Precordial Chest Pain, Palpitation, Patient with murmur.	history & examination of Acute Abdomen		Urine & Stool Examination, Examination of CSF & Body Fluids		Interview with the patient Theoretical aspect of Dissociation	Plain x ray abdomen & KUB		Endotracheal intubation & tracheostomy		Insertion of folleys catheter Nasogastric tube
	MONDAY	CVS Examination GPE, JVP, Oedema, Clubbing Osler's Nodes, Janeway's Lesions, Splinter harmorrhages.	history & examination of Chronic Abdomen	A3	Reception, Sampling Techniques & Phiebotomy, Routine Hematology, Preparation of Blood Smear and Retics, Quality Control	A2	Interview with the patient A: Theoretical aspect of schezopherenia	Fluoroscopic procedures & Ba studies.	A5	Breast Examination	A4	counsel a patient with febrile illness				

CVS & RESPIRATION	WEEK 26	TUSEDAY	Inspection of precordium location + palpation of apex beat. Right parasternal heave, palpation of base of heart, epigastric pulsations	Inspection of precordium location + palpation of apex beat. Right parasternal heave, palpation of base of heart, epigastric pulsations	Inspection of precordium location + palpation of apex beat. Right parasternal heave, palpation of base of heart, epigastric pulsations	Inspection of precordium location + palpation of apex beat. Right parasternal heave, palpation of base of heart, epigastric pulsations	Inspection of precordium location + palpation of apex beat. Right parasternal heave, palpation of base of heart, pulsations	history & examination of Abdomenal Mass		Coagulation Studies, Bone Marrow, Hb Studies, Coomb's Test.		Presentation of cases histories of Substance use Interview with the patient Theoretical aspect of Substance use		CT scan brain: basics	I	Prostate Xamination		counsel a patient with stroke				
		WEDNESDAY	Examination of Pulse	Examination of Pulse	Examination of Pulse	Examination of Pulse	Examination of Pulse	history & examination of bleeding per rectum		Grouping, Cross Matching		Presentation of cases histories of Delirium/deme ntia/ organicity by medical students & Theoretical aspects		Basics of ultrasound and observation	n	evision		• counsel a patient with upper GI bleed				
		THURSDAY	JVP	JVP	JVP	JVP	JVP	history & examination of hernia		Ward test		Evaluation (OCSE + case histories + attendance & Signatures on logbook) & Feedback		Ward assessment(film based)	т	est		<ul> <li>counsel a patient with obstructive lung disease</li> </ul>				
		MONDAY	1.Auscultation of heart 1. Normal heart sound 2. Effect of respiration on heart sound 3. Murmurs and Thrills	1.Auscultation of heart 1. Normal heart sound 2. Effect of respiration on heart sound 3. Murmurs and Thrills	1.Auscultation of heart 1. Normal heart sound 2. Effect of respiration on heart sound 3. Murmurs and Thrills	1.Auscultation of heart 1. Normal heart sound 2. Effect of respiration on heart sound 3. Murmurs and Thrills	1.Auscultation of heart 1. Normal heart sound 2. Effect of respiration on heart sound 3. Murmurs and Thrills	history & examination of hernia		Introductory round of laboratory & benches. Working of Autoclave. & Guidelines of Microbiological specimen collection & transport		History Taking Allotment of Cases and Groups		Chest x ray anatomy	t I/ Su C T	Jse of Injections M, I/V, Intradermal, abcutaneous, I/V annulation, Arterial ap		Introduction to ER services regarding triage system. History taking Monitoring of vitals				
	WEEK 27	TUSEDAY	CVS Test Even Roll Number	CVS Test Even Roll Number	history & examination of inguino-scrotal swelling		Culture media (Inoculated & Uninoculated). Antibiotic sensitivity testing. Orientation to Serology & PCR.		Demonstration of History taking and MSE		Chest x ray pathology	1 11	Nasogastric ntubation		Introduction to medicolegal cases and maintenance of record. Observation of IV cannulas IM injections							
		WEDNESDAY	CVS Test Odd Roll Number	CVS Test Odd Roll Number	urinogenital system	urinogenital system	urinogenital system	urinogenital system	urinogenital system		Performance & interpretation of Gram & ZN staining. Catalase, Coagulase & Oxidase Tests.		Interview with the patient Theoretical aspect of depression		Bones & joints with fractures	) C	Male & Female atheterization(urine)		• Setting of IV drips Nebulization			
		THURSDAY	NERVOUS SYSTEM : Conscious level, HMF, orientation, speech, memory, intellect, sleep	NERVOUS SYSTEM : Conscious level, HMF, orientation, speech, memory, intellect, sleep	NERVOUS SYSTEM : Conscious level, HMF, orientation, speech, memory, intellect, sleep	NERVOUS SYSTEM : Conscious level, HMF, orientation, speech, memory, intellect, sleep	NERVOUS SYSTEM : Conscious level, HMF, orientation, speech, memory, intellect, sleep	Peripheral vascular system		Urine & Stool Examination, Examination of CSF & Body Fluids		Interview with the patient Theoretical aspect of Dissociation		Plain x ray abdomen & KUB	E ir tr	ndotracheal ntubation & racheostomy		Insertion of folleys catheter Nasogastric tube				
		MONDAY	Headaches ,Numbness, Paresthesias, weakness patterns	Headaches ,Numbness, Paresthesias, weakness patterns	Headaches ,Numbness, Paresthesias, weakness patterns	Headaches ,Numbness, Paresthesias, weakness patterns	Headaches ,Numbness, Paresthesias, weakness patterns	Venous Problems	Venous Problems	Venous Problems	Venous Problems	Venous Problems	Α4	Reception, Sampling Techniques & Phlebotomy, Routine Hematology, Preparation of Blood Smear and Retics, Quality Control	A3	Interview with the patient Theoretical aspect of schezopherenia	A2	Fluoroscopic procedures & Ba studies.	A1	Breast Examination	A5	counsel a patient with febrile illness

	WEEK 28	TUSEDAY	Cranial nerves. 1 to 6	lymphatic system	lymphatic system	lymphatic system	lymphatic system	lymphatic system	Cognilation Studies, Bone Marrow, Hb Studies, Coomb's Test.	Presentation of cases histories of Substance use Interview with the patient Theoretical aspect of Substance use	CT scan brain: basics	Prostate Examination	• counsel a patient with stroke				
		WEDNESDAY	Cranial nerves. 7 to 12	Cranial nerves. 7 to 12	Cranial nerves. 7 to 12	Cranial nerves. 7 to 12	Cranial nerves. 7 to 12	peripheral nerves	peripheral nerves	peripheral nerves	peripheral nerves	peripheral nerves	Grouping, Cross Matching	Presentation of cases histories of Delirium/deme ntia/ organicity by medical students & Theoretical aspects	Basics of ultrasound and observation	revision	• counsel a patient with upper GI bleed
		THURSDAY	Examination of motor system (bulk, tone, power/ Reflexes.	patient with head injuries	Ward test	Evaluation (OCSE + case histories + attendance & Signatures on logbook) & Feedback	Ward assessment(film based)	Test	• counsel a patient with obstructive lung disease								

	MONDAY	Examination of sensory system	bone lesions & injuries		Introductory round of laboratory & benches. Working of Autoclave. & Guidelines of Microbiological specimen collection & transport	H A G G	istory Taking Ilotment of ases and roups		Chest x ray anatomy	Use of Injections I/M, I/V, Intradermal, subcutaneous, I/V Cannulation, Arterial Tap		Introduction to ER services regarding tringe system. History taking Monitoring of vitals								
WEEK 29	TUSEDAY	Examination of Cerebellar System/ Gait	Joint problems & injuries		Culture media (Inoculated & Uninoculated). Antibiotic sensitivity testing. Orientation to Serology & PCR.	D of ta	emonstration f History Iking and MSE		Chest x ray pathology	Nasogastric Intubation		Introduction to medicolegal cases and maintenance of record. Observation of IV cannulas IM injections								
	WEDNESDAY	CNS Test ODD Roll Numbers	indivisual joints		Performance & interpretation of Gram & ZN staining. Catalase, Coagulase & Oxidase Tests.	li th Ti as de	nterview with ne patient neoretical spect of epression		Bones & joints with fractures	Male & Female catheterization(urine)		• Setting of IV drips Nebulization								
	THURSDAY	CNS Test Even Roll Numbers	Management of pneumothorax		Urine & Stool Examination, Examination of CSF & Body Fluids	In th Ti as D	terview with the patient theoretical spect of issociation		Plain x ray abdomen & KUB	Endotracheal intubation & tracheostomy		Insertion of folleys catheter Nasogastric tube								
	MONDAY	Revision	Revision	Revision	Revision	Revision	trauma primary care	A5	Reception, Sampling Techniques & Phlebotomy, Routine Hematology, Preparation of Blood Smear and Retics, Quality Control	In A4 th Ti as sc	terview with he patient heoretical spect of shezopherenia	A3	Fluoroscopic procedures & Ba studies.	Breast Examination	A1	• counsel a patient with febrile illness				
WEEK 30	TUSEDAY	Final Test ODD Roll Numbers	trauma secondary care		Coagulation Studies, Bone Marrow, Hb Studies, Coomb's Test.	Pr ca of us In th T as Su	resentation of asses histories f Substance se nterview with he patient heoretical spect of ubstance use		CT scan brain: basics	Prostate Examination		• counsel a patient with stroke								
	WEDNESDAY	Final Test Even Roll Numbers	managemnet of limb fracture		Grouping, Cross Matching	Pri ca D nt by st Ti as	resentation of ases histories f elirium/deme tia/ organicity y medical udents & neoretical spects		Basics of ultrasound and observation	revision		• counsel a patient with upper GI bleed								
	THURSDAY	MCQs	MCQs	MCQs	MCQs	MCQs	TEST	TEST	TEST	TEST	TEST		Ward test	Ev (C hi Si Io Fe	valuation DCSE + case istories + ctendance & gnatures on gbook) & eedback		Ward assessment(film based)	Test		counsel a patient with obstructive lung disease

Note :- For Psychiatry to BBH and Radiology to HFH, Skill Lab & E.R (i) Half batch Skill Lab (ii) Half batch E.R alternative

**Vice Chancellor** Rawalpindi Medical University Rawalpindi

No./T-9\_\_\_\_\_RMU/NTB/ Dated: \_\_\_\_\_2018. Copy to all concerned department and official.

#### TIME TABLE 3<sup>rd</sup> YEAR MBBS CLASS MBBS (SESSION 2016-2017) Start w.e.f From 05-11-2018 ENDING 10-08-2019

ACTIVITY	CLASS ROLL NO	MONDAY	TUESDAY	WEDNESDA Y	THURSDAY	FRIDAY	SATURDAY
INTERACTIVE TEACHING PROBLEM BASE LEARNING		8:00am to 9:00 am	8:00am to 9:00 am	8:00am to 9:00 am	8:00am to 9:00 am		
WARDS		9:00am to 11:00 am	9:00am to 11:00 am	9:00am to 11:00 am	9:00am to 11:00 am		
LECTURES							
MEDICINE	ODD					8:00 am to 8:45 am	8:00 am to 8:45 am
MEDICAL SPECIALTY	EVEN					8:00 am to 8:45 am	8:00 am to 8:45 am
SURGERY	ODD					8:45 am to 9:30	8:45 am to 9:30
SURGICAL SPECIATLY	EVEN					8:45 am to 9:30	8:45 am to 9:30
PHARMACOLOGY	ODD	11:00am to 12:00nm	11:00am to 12:00pm	11:00am to 12:00pm	11:00am to 12:00pm	9:30am to	9:30am to
PHARMACOLOGY	EVEN	11:00am to 12:00pm	11:00am to 12:00pm	11:00am to 12:00pm	11:00am to 12:00pm	9:30am to 10:15am	9:30am to 10:30am
							Break 10:30am to 11:00am
FORENSIC MEDICINE	ODD					10:15am to 11:00am	12:00 to 1:00pm
FORENSIC MEDICINE	EVEN					10:15am to 11:00am	12:00 to 1:00pm
PATHOLOGY	ODD				12:00 pm to 1:00pm 1:00pm to 2pm	11:00am to 12:00pm	11:00 pm to 12:00pm 1:00pm to 2pm
PATHOLOGY	EVEN				12:00 pm to 1:00pm 1:00pm to 2pm	11:00am to 12:00pm	11:00 pm to 12:00pm 1:00pm to 2pm
PRACTICAL		12:00 to 2:00pm	12:0 to 2:00pm	12:00 to 2:00pm			
PHARMACOLOGY		Batch - A	Batch - B	Batch -C			
FORENSIC MEDICINE		Batch - B	Batch - C	Batch - A			
PATHOLOGY		Batch - C	Batch - A	Batch - B			

Note:

1. Interactive PBL will be held in respective wards. Department of Medical Education in RMU, NTB will coordinate.

 Out
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 Monday to Thursday
 No. Section 1
 Even Roll No. Section 2

 Demonstratio
 Demonstratio
 Demonstration

 Market of the section 1
 Even Roll No. Section 2

 Friday to Saturday
 No. Section 1
 Even Roll No. Section 2

 Lecture Hall
 Lecture Hall No. 2
 No. 1

No T-9/ \_\_\_\_\_\_RMU, RWP. Dated \_\_\_\_\_/2018. Copy to all Concerned Departments Annexure 2 c

MEDICINE CLINICAL ROTATIONS THIRD YEAR MBBS 2022

Sr #	Dav	Specialty	Торіс	s	PECIFIC LEARNING OJECTIVES (SLO)		(	Cognitic	'n	Pysco	motor	Att	itude	MOT/MIT	моа
_				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
	-		·		1st WEEK	-									
1	MONDAY	INTRODUCTION	General introduction to the field of medicine. Medical ethics	Student will be able to: a)Recognize importance of clinical medicine and context for theoretical learning so that one can see how learning about body system and social sciences are applied to care of patient. b)Recognize and evaluate different ethical problems including gap block, priority setting, moral dilemma and resolving conflict.Analyse different ethical problems and knows different approaches. c) Recognize importance of	Student will be able to: Take detailed history	Student will be able to: Take Consent for History			*		*		~	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD
2	TUESDAY	HISTORY TAKING	History Taking, Importance of history, Contents of history, Presenting Complaint, History of Present illness	Student will be able to: Demonstrate art of history taking including all components of history, Presenting complaint, History of presenting illness indetail and in chronological order.	Student will be able to: Take detailed history	Student will be able to: Take Consent for History			~		~		~	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD
3	WEDNESDAY	HISTORY TAKING	Systemic Inquiry, Past Medical History	Students will be able to: Demonstrate systemic inquiry in detail and past medical history	Students will be able to: Take detailed history	Students will be able to: Take Consent for History			~		~		~	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD

Sr #	Day	Specialty	Торіс	s	SPECIFIC LEARNING OJECTIVES (SLO)			Cognitic	m	Pysco	motor	Atti	tude	MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
4	THURSDAY	HISTORY TAKING	Family History, Occupational History, Personal History, Developmental+ Obstetrics History. General physical examination. Pulse, BP, Temp. Resp Rate	Students will be able to: a)Describe different components of history like Family History, Occupational History, Personal History, Developmental+ Obstetrics History b)Recall causes of bradycardia,tachycardia,fever,h ypothermia and tachypnea	Students will be able to: Take history and perform GPE and can pick findings and relate them with different diseases.	Students will be able to: Take Consent for History and Clinical Examination			~		~		*	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD
	•		ł	ł	2nd WEEK		1							ł	ļ
5	MONDAY	HISTORY TAKING	EVEN ROLL NO TEST												MINICEX
6	TUESDAY	HISTORY TAKING	ODD ROLL NO TEST												MINICEX

Sr #	Dav	Specialty	Торіс	s	PECIFIC LEARNING OJECTIVES (SLO)		0	Cognitic	m	Pysco	motor	Atti	tude	MOT/MIT	моа
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
7	WEDNESDAY	RESPIRATORY SYSTEM	Systemic Inquiry,Cough,Sputum,D yspnea,Cyanosis	Students will be able to: a)Recall causes of cough and how to differentiate between dry and productive cough. b)Know causes of dyspnea,grading of dyspnea and how to differtentiate between dyspnea,orthopnea and PND. c)Retell causes of cyanosis and difference between central and peripheral cyanosis	Students will be able to: Take detailed history of cough,sputum,dyspnea and cyanosis and able to make differential diagnosis related to above symptoms.	Students will be able to: Take Consent for History and Clinical Examination.			*		*		*	BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD
8	THURSDAY	RESPIRATORY SYSTEM	Hemoptysis, wheezing, pleuritic chest pain.	Students will be able to: Explain causes of hemoptysis,wheezing and pleuritic chest pain.	Students will be able to: Take detailed history of hemoptysis,heezing and chest pain and able to make differential diagnosis related to these symptoms.	Students will be able to: Take Consent for History and Clinical Examination			~		~		~	BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD
1					3rd WEEK										

Sr	# Day	Specialty	Торіс	s	PECIFIC LEARNING OJECTIVES (SLO)			Cognitio	on	Pysco	motor	Atti	itude	MOT/MIT	MOA
	-			Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
9	MONDAY	RESPIRATORY SYSTEM	GPE; Cyanosis, Clubbing, Pulsus paradoxus, Intercostal in drawing, Tracheal tug Palpation of trachea	Students will be able to: a)Recall causes and types of cyanosis. b)Retell causes of clubbing and its gradinding. c)Describe pulsus paradoxus,intercostal indrawing and tracheal tug and their causes. d)Describe different methods to palpate trachea and different causes of tracheal deviation.	Students will be able to: a)Take history and perform GPE relavant to respiratory system and able to pick these signs on examination. b) perform palapation of trachea	Students will be able to: Take Consent for History and Clinical Examination			*		*		~	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD
10	TUESDAY	RESPIRATORY SYSTEM	Inspection of chest from front Chest movements, Percussion of front of chest and Auscultation	Students will be able to: a)know types of respiration,chest deformaties,different scar marks and their significance,different types of apex beat,causes of displaced apex beat,causes of decreased chest movements,importance of accessary muscles use in resoiration and etc etc b)able to describe abormal percussion notes and their causes c) Recall types of normal and other	Students will be able to: Take history and perform Respiratory system examination including inspection,palpation,percussion and auscultation of front of chest & relevant clinical examination according to cause	Students will be able to: Take Consent for History andClinical Examination			~		~		~	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD
11	WEDNESDAY	RESPIRATORY SYSTEM	Inspection of back of chest. Chest movements Percussion of back of chest	Students will be able to: a)know types of respiration,chest deformaties,different scar marks and their significance,causes of decreased chest movements,importance of	Take history and perform Respiratory system examination including	Students will be able to: Take Consent for History and Clinical Examination.			~		~		~	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD

5	ör #	Dav	Specialty	Τορίς	S	PECIFIC LEARNING OJECTIVES (SLO)		0	Cognitic	n	Pysco	motor	Atti	tude	мот/міт	МОА
					Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		-
	12	THURSDAY	RESPIRATORY SYSTEM	Auscultation of back OF chest	respiration and etc etc b)Describe abormal percussion and their causes. c) Recall types of normal and other breating patterns and causes of increased and decreased vocal resonance and corelate the findings with cause.	auscultation of back of chest & relevant clinical examination according to cause	Students will be able to: Take Consent for History and Clinical Examination.			*		*		*	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE, MINICEX, CBD
			•			4th WEEK	·									
	13	MONDAY	RESPIRATORY SYSTEM	EVEN ROLL NO TEST												MINICEX

Sr #	Dav	Specialty	Τορίς	s	PECIFIC LEARNING OJECTIVES (SLO)		0	ognitio	'n	Pysco	motor	Atti	tude	мот/міт	MOA
			•	Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
	TUESDAY	RESPIRATORY SYSTEM	ODD ROLL NO TEST												MINICEX
15	WEDNESDAY	GIT	Systemic Inquiry Vomiting, jaundice, pain abdomen, acute and chronic diarrhea	Students will be able to: a) Recall different causes of vomiting b) Explain causes and types of jaundice c) Retell different causes of generalized and localized abdominal pain d) Recall different causes of acute and chronic diarrhea and differentiate between two on the basis of history	Students will be able to: can take detailed history of vomiting,jaundice,abdominal pain and diarrhea and able to make differential diagnosis related to these symptoms.	Students will be able to: Take Consent for History and Clinical Examination.			1		✓		~	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD

Sr #	Day	Specialty	Торіс	s	PECIFIC LEARNING OJECTIVES (SLO)		(	Cognitic	'n	Pysco	motor	Atti	tude	мот/міт	MOA
			-	Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2	-	
16	THURSDAY	GIT	GPE, Jaundice, Clubbing, Koilonychia, Pallor, Leuconychia, Oedema Examination of Oral CavitY	Students will be able to: a) Recall different causes of jaundice,clubbing,koilonychia,p allor,leuconychia and odema. b) retell causes of oral ulcerS,macroglossia,hypertroph y of gums	Students will be able to: a) Take history and perform GPE relavant to abdominal examination and able to pick these signs on examination. b)can perform examination of oral cavity	Students will be able to: Take Consent for History and Clinical Examination.			*		*		*	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD
					5th WEEK										•
17	MONDAY	GIT	Inspection of abdomen, Superficial Palpation of Abdomen	Students will be able to: a)Recall different causes of distended abdomen,significance of prominent veins and scar marks,.Can differentiate different shapes of umbilicus and their position. b) Retell causes of abdominal tenderness	Students will be able to: Take history and perform inspection and superficial palpation of abdomen and relavant clinical examination.	Students will be able to: Take Consent for History and Clinical Examination.			~		~		~	AMBULATORY TEACHING / SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD

Sr #	Day	Specialty	Торіс	s	SPECIFIC LEARNING OJECTIVES (SLO)		0	Cognitic	on	Pysco	motor	Atti	tude	мот/міт	MOA
		. ,	•	Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
18	TUESDAY	GIT	Palpation of Liver, Spleen, Kidneys, Pelvic Masses	Students will be able to: a)Recall different causes of hepatomegaly,splenomegaly,ca uses of palpabale kidneys and other abdminal masses b)differentiate between kidney and spleen on examination	Students will be able to: Take history and perform abominal examination to pick visceromegaly and other masses and relavant examination.	Students will be able to: Take Consent for History and Clinical Examination .			*		¥		*	AMBULATORY TEACHING / SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD
19	WEDNESDAY	GIT	Percussion of Abdominal Viscera, Fluid Thrill, Shifting Dullness, Auscultation of abdomen	Students will be able to: a) Recall causes of abnormal percussion notes of abdomen b)Retell causes of positive fluid thrill and shifting dullness. C) Describe different causes of absent bowl sounds	Students will be able to: Take history and perform abdominal examination including percussion auscultation and relavant examination.	Students will be able to: Take Consent for History and Clinical Examination.			1		~		~	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE, MINICEX, CBD
20	THURSDAY	GIT	EVEN ROLL TEST												MINICEX
					6th WEEK										
21	MONDAY	GIT	ODD ROLL NO TEST												MINICEX

s	r #	Day	Specialty	Торіс	5	SPECIFIC LEARNING OJECTIVES (SLO)			Cognitio	on	Pysco	motor	Att	tude	MOT/MIT	МОА
				•	Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
	22	TUESDAY	CNS	Conscious level, HMF, orientation, speech, memory, intellect, sleep	Students will be able to: a) Recall higher mentel functions and Glassgow coma scale. b) differentiate betwwen long term and short term memory c)differentiate between narcolepsy and somnolence	Students will be able to: a) Take history and perform relavant clinical examination.	Students will be able to: a) Take Consent for History and Clinical Examination			*		*		*	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD
:	23	WEDNESDAY	CNS	Headaches ,Numbness, Paresthesias, weakness patterns	Students will be able to: Recall causes and types of headache ,causes of numbness and paresthesias.Retell different pattern of weakness	Students will be able to: Take history and perform relavant clinical examination	Students will be able to: Take Consent for History and Clinical Examination			*		~		~	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD
	24	THURSDAY	CNS	Cranial nerves. 1 to 6	Students will be able to: Recall anatomy and functions of cranial nerves, retell causes of lesion of cranial nerves 1 to 6	Students will be able to: Take History and perform examination of cranial nerves from 1 to 6 and able to pick abnormal findings.	Students will be able to: Take Consent for History and Clinical Examination			~		~		~	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE, MINICEX, CBD

Sri	# Dav	Specialty	Торіс		SPECIFIC LEARNING OJECTIVES (SLO)			Cognitic	on	Pysco	motor	Att	itude	MOT/MIT	MOA
	,			Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
	•				7th WEEK										
25	5 MONDAY	CNS	Cranial nerves. 7 to 12	Students will be able to: Recall anatomy and functions of cranial nerves,can retell causes of lesion of cranial nerves 7 to 12	Students will be able to: Take History and do examination of cranial nerves from 7 to 12 and can pick abnormal findings.	Students will be able to: Take Consent for History and Clinical Examination			4		1		*	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD
26	5 TUESDAY	CNS	Examination of motor system (bulk, tone, power/ Reflexes.	Students will be able to: Recall motor tracts,causes of hypo and hypertrophy of muscles,grading of power,causes of hypo and hypertonia. Can differentiate between hypo and hyper reflexia and clonus	Students will be able to: Take History and perform motor system examination and able to pick abnormal findings	Students will be able to: Take Consent for History and Clinical Examination			✓		✓		<b>√</b>	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD

Sr #	Day	Specialty	Торіс	5	SPECIFIC LEARNING OJECTIVES (SLO)		0	Cognitic	on	Pysco	motor	Atti	tude	MOT/MIT	MOA
		. ,	•	Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
27	WEDNESDAY	CNS	Examination of sensory system	Students will be able to: Recall different sensory tracts and retell causes of abnormal sensation of touch,pain,temperature,propioc eption and vibration	Students will be able to: Take History and perform sensory system examination keeping in mind etiology	Students will be able to: Take Consent for History and Clinical Examination			~		~		~	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE, MINICEX, CBD
28	THURSDAY	CNS	Examination of Cerebellar System/ Gait	Students will be able to: a) Recall normal functions of cerebellum and causes of abnormal cerebellar signs. b) Retell different types of gaits and their cause	Students will be able to: Take History and can perform cerebellar examination keeping in mind etiology.	Students will be able to: Take Consent for History and Clinical Examination			~		~		~	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD
			•	•	8th WEEK	-								•	
29	MONDAY	CNS	EVEN ROLL NO TEST												MINICEX
30	TUESDAY	CNS	ODD ROLL NO TEST				1	1	1	1	I	1	1		MINICEX

Sr #	Day	Specialty	Торіс	s	PECIFIC LEARNING OJECTIVES (SLO)		0	Cognitic	m	Pysco	motor	Atti	itude	MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
31	WEDNESDAY	CVS Examination	Systemic Inquiry Pericardial Chest Pain, Palpitation, Patient with murmur.	Students will be able to: Recall causes of precordial chest pain palpitation and etiology of valvular heart diseases	Students will be able to: Take History and perform examination keeping in mind etiology and complications of disease	Students will be able to: Take Consent for History and Clinical Examination			4		4		*	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	OSPE, MINICEX, CBD
32	THURSDAY	CVS Examination	GPE, JVP, Oedema, Clubbing Osler's Nodes, Janeway's Lesions, Splinter haemorrhages.	Students will be able to: a) Recall causes of raised JVP,clubbing,osler's nodes,janeway's lesion and splinter haemorrhages. b) Differentiate between pitting and non pitting odema and their various causes	Students will be able to: Take History and perform GPE examination relavant to Cardiovascular system and can pick these signs.	Students will be able to: Take Consent for History and Clinical Examination			¥		*		*	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	OSPE,MINICEX, CBD
					9th WEEK										

Sr	# Day	Specialty	Торіс	s	PECIFIC LEARNING OJECTIVES (SLO)		c	Cognitic	n	Pysco	motor	Atti	tude	MOT/MIT	MOA
				Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2	-	
3:	3 MONDAY	CARDIOLOGY	Inspection of precordium location + palpation of apex beat. Right parasternal heave, palpation of base of heart, epigastric pulsations	Students will be able to: a) Recall causes of prominent veins on chest, can pick scar marks on precordium and know their significance. b)Retell causes of displaced apex beat, right parasternal heave and epigastric pulsations. c)Describe causes of palpable heart sounds and thrills	Students will be able to: Take History and perform inspection and palpation of precordium.	Students will be able to: Take Consent for History and Clinical Examination			*		*		v	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE,MINICEX, CBD
34	4 TUESDAY	CARDIOLOGY	Examination of Pulse	Students will be able to: a) Recall causes of braycardia,tachycardia,radioradi al nd radiofemoral delay. Retell causes of low, high volume pulse and irregular pulse. Differentiate between different characters of pulse.	Students will be able to: Take History and palpate all peripheral pulses and able compare them bilaterally.	Students will be able to: Take Consent for History and Clinical Examination			~		~		*	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds)	OSPE, MINICEX, CBD
3!	5 WEDNESDAY	CVS Examination	JVP	Students will be able to: a) Recall different waves and descents of JVP and their significance. b) Retell causes of raised JVP. C)Describe hepatojuglar reflex and its significance d)Differentiate berween arterial and venous pulsations in neck	Students will be able to: Take History and examine JVP and able to measure it.	Students will be able to: Take Consent for History and Clinical Examination			~		~		~	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	OSPE, MINICEX, CBD

Sr #	Day	Specialty	Topic	S	PECIFIC LEARNING OJECTIVES (SLO)		C	Cognitic	n	Pysco	motor	Atti	tude	MOT/MIT	MOA
			-	Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
36	THURSDAY	CVS Examination	<ol> <li>Auscultation of heart</li> <li>Normal heart sound</li> <li>Effect of respiration on heart sound</li> <li>Murmurs and Thrills</li> </ol>	Students will be able to: a) Recall causes of loud and soft \$1,52,retell causes of \$3 and \$4. b) Describe normal and abnormal splitting of \$2. c)Differentiate between different systolic and diastolic murmers and thrills and describe their causes.	Students will be able to: Take History and perform auscultation of precardium	Students will be able to: Take Consent for History and Clinical Examination			*		*		*	SGD / BED SIDE SESSIONS (Grand Ward Rounds, Teaching Ward Rounds) / LAB WORK	OSPE, MINICEX, CBD
			-		10th WEEK										
37	MONDAY	CVS Examination	EVEN ROLL NO TEST												MINICEX
38	TUESDAY	CVS Examination	ODD ROLL NO TEST												MINICEX

Sr #	Day	Specialty	Торіс	S	PECIFIC LEARNING OJECTIVES (SLO)		C	ognitic	m	Pysco	motor	Atti	tude	мот/міт	МОА
	-			Cognition	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
39	WEDNESDAY	REVISION													
40	THURSDAY	END BOCK EXAM													MCQs,OSPE,MI NICEX



# EMERGENCY MEDICINE CLERKSHIP PROGRAMME/ LEARNING OBJECTIVES OF THIRD YEAR MBBS RMU AND ALLIED HOSPITALS

A two-week clinical teaching programme that will enable students to get insight into cases that present in medical emergency, their diagnosis, management, and patient counselling.

Dr. Saima Ambreen (ASSOCIATE PROFESSOR MEDICAL UNIT-1 HOLY FAMILY HOSPITAL RWP)

Sr #	Day	Specialty	Торіс		SPECIFIC LEARNING OJECTIVES (SLO)		Cogn	ition		Psycho	motor	Attit	ude	мот/міт	MOA
				Knowledge	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2		
1.	MONDAY	EMERGENCY MEDICINE	<ol> <li>Introduction to ER services regarding triage system.</li> <li>History taking and examination.</li> <li>Monitoring of vitals</li> </ol>	<ol> <li>Should be able to describe the components of triaging system in ER and its importance in differentiating stable vs sick patients.</li> <li>Should be able to describe the importance and components of vitals.</li> </ol>	<ol> <li>Should observe how the HCW does triaging.</li> <li>Students should be able to; take a quick history and perform relevant clinical examination under guidance of HCW.</li> <li>Student should be able to check the vitals including pulse, blood pressure, temperature, and respiratory rate with proper method.</li> </ol>	Students will be able to Take Consent for History, Clinical Examination and Procedures		1		✓			*	SGD / BED SIDE SESSIONS	OSPE/MCQs
2.	TUESDAY	EMERGENCY MEDICINE	<ol> <li>Introduction to medicolegal cases and maintenance of record.</li> <li>Observation of IV cannulas and IM injections</li> </ol>	<ol> <li>Students should be able to describe the importance of record keeping and documentation.</li> <li>Should be able to describe indications and complications of IV and IM injections.</li> </ol>	<ol> <li>Students will be able to observe and assist HCW about record keeping and the importance of documentation.</li> <li>Student should observe and assist HCW in IV and IM canulation.</li> </ol>	Students will be able to 1. Take consent for history and examination 2. Take consent for IM and IV injections and explain procedure to the patient.		1		V			*	SGD / BED SIDE SESSIONS	OSPE/MCQs

Sr	Day	Specialty	Торіс		SPECIFIC LEARNING OJECTIVES (SLO)		Cognition		Cognition		Cognition		Psychomotor		Psychomotor Attitude		мот/міт	MOA
Ħ				Knowledge	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2					
3.	WEDNESDAY	EMERGENCY MEDICINE	1. Setting of IV drips 2. Nebulization	<ol> <li>Should be able to describe the indications of types of IV drips and rate of setting.</li> <li>Should be able to describe different types of drugs being used as nebulizer medications and their indications</li> </ol>	Students will be able to: 1.Observe HCW regarding setting of IV drips 2. Observe how to set up a nebulizer	Students will be able to: 1.Counsel the patient regarding use of IV drips in a particular setting and its benefits and side effects. 2. Counsel the patient for nebulization.		*		*			✓	SGD / BED SIDE SESSIONS	OSPE/MCQ			
				T	FIRST WEEK				1	1		1						
4.	THURSDAY	EMERGENCY MEDICINE	1. Insertion of foley's catheter 2. Insertion of Nasogastric tube	<ol> <li>Should be able to describe the indications and contraindications of Foley Catheter, types, uses.</li> <li>Should be able to describe the indications and contraindications of Nasogastric tubes, types, uses.</li> </ol>	Student will be able to; 1. Observe and assist HCW in inserting a foley catheter. 2. Observe and assist HCW in inserting a Nasogastric tube	Students will be able to: 1. Counsel the patient regarding foley catheter insertion and guide about its pros and cons. 2. Counsel the patient regarding NG tube insertion and guide about its pros and cons.		V		V			✓	SGD / BED SIDE SESSIONS	OSPE/MCQ			

Sr	Day	Specialty	Торіс		SPECIFIC LEARNING OJECTIVES (SLO)		Cognition		nition Psychomotor		Cognition Psychomo		Psychomotor		Psychomotor		sychomotor		ude	мот/міт	MOA
#				Knowledge	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2								
5.	MONDAY	EMERGENCY MEDICINE	Approach to a patient with febrile illness	Should be able to describe causes of febrile illness and the importance of different steps of history taking and clinical examination in a febrile patient	SECOND WEEK Student will be able to Take History of a febrile patient and do clinical examination	Students will be able to: Counsel the patient regarding possible causes of fever and do relevant examination after informed consent.		v			*		*	SGD / BED SIDE SESSIONS	OSPE/MCQ						
6.	TUESDAY	EMERGENCY MEDICINE	Approach to a patient with stroke	Should be able to describe types of stroke and possible risk factors	Students will be able to: Take History of a patient with stroke and do clinical examination	Students will be able to: Counsel the patient regarding stroke and its possible types and causes under guidance of HCW.		V			√		~	SGD / BED SIDE SESSIONS	OSPE/MCQ						

Sr #	Day	Specialty	Торіс		SPECIFIC LEARNING OJECTIVES (SLO)		Cognition		nition Psychomo		Cognition Psychomo		Cognition Psychomotor		Cognition Psychomotor Att		r Attitude MOT/MIT		MOA
				Knowledge	Skill	Attitude	C1	C2	C3	P1	P2	A1	A2						
7.	WEDNESDAY	EMERGENCY MEDICINE	Approach to a patient with chest pain	Should be able to describe causes of chest pain and different presentations of a patient with cardiac chest pain.	Student will be able to: Should be able to take History of a patient with chest pain under HCW guidance and do quick relevant examination	Students will be able to: Counsel the patient regarding chest pain and possible cause under guidance of HCW		√			*		~	SGD / BED SIDE SESSIONS	MCQ/SEQ				
8.	THURSDAY Clinical teaching/ WARD TEST	EMERGENCY MEDICINE	Approach to a patient with Upper GI bleed	<ol> <li>Should be able to describe causes of upper GI bleed</li> <li>Should be able to identify whether patient is in hypovolemic shock or not.</li> </ol>	Student will be able to: 1. Take History of a patient with upper GI bleed and do clinical examination under HCW guidance. 2. Should take vitals esp. pulse, blood pressure, should look for postural drop and urine output as a marker of hypovolemic shock.	Students will be able to: Counsel the patient regarding cause of upper GI bleed under guidance of HCW		✓			√		*	SGD / BED SIDE SESSIONS	MCQ/SEQ				

# **Learning Objectives Clinical Rotation of 3<sup>rd</sup> Year Pathology** At the end of session 3<sup>rd</sup> Year MBBS student will be able to

#### **Microbiology: 04 Days**

ΤΟΡΙϹ	KNOWLEDGE	SKILL	ATTITUDES	MOA
Day 1		•	•	
Introductory round of	Students will know about different sectarians of			
laboratory & Bench's	lab. (Smear formation staining, microscopy.)			
Autoclave	Parts, Principle, & Quality. Control of Autoclave	How to operate autoclave.		EOSA/OSPE/
	(Q/C)			Ward Test
	Material to be sterilized in autoclave.			
Specimen collection	How to collect the specimen.	Labeling Techniques		EOSA/OSPE/
	Timings of collection			Ward Test
	<ul> <li>Previous clinical notes/related to patient</li> </ul>			
	history			
	Transportation & Handling of specimen			
Day 2		1		1
Culture Media	Knowledge about Basic/specific culture	Media Preparation		EOSA/OSPE/
	media.	Methods of storage		Ward Test
	Uses & Specification	Inoculation Techniques		
Antibiotic Sensitivity	<ul> <li>Knowledge about different groups of</li> </ul>	Antibiotic sensitivity testing methods.		EOSA/OSPE/
Testing	antibiotic for different organisms.	Measurement of Zone of sensitivity.		Ward Test
Orientation of Serology	Principle& uses of ELISA, PCR &	Performance of all tests		EOSA/OSPE/
	Aggintinations			Ward Test
Day 3				
Microbiology	Performance of interpretation of Gram	<ul> <li>Steps of gram staining &amp; ZN staining &amp; its</li> </ul>		EOSA/OSPE/
	Staining & ZN staining	Principles.		Ward Test
		Perform Gram ,ZN staining , catalase, coagulase,		
		Oxidase test		
		How to interpret the test.		
		• Principles of catalase, coagulase & Oxidase test.		
		Uses of different biochemical tests.		
Day 4		1	- F	
Urine & STOOL	Urine & stool Examination	• How to collect the Specimen (Urine & stool) & CSF &	Preparation of slide.	EOSA/OSPE/
Examination		Body fluid.		Ward Test
		Pre requisites of specimen collection		
		Physical /Chemical & microscopic examination.	Microscopy of urine &	
		Identification of positive findings.	stool slides.	
CSF Examination	CSF Examination	How to collect CSF (K)	Preparation of slide	EOSA/OSPE/
		Pre requisites of Specimen Collection & Microscopic	Microscopy of slide	Ward Test
		Examination	Staining techniques	
			Physical and chemical	
			examination.	

### Hematology: 03 Days

	ΤΟΡΙΟ	KNOWLEDGE	SKILL	ATTITUDES	MOA
Day 5			·		
1.	Sampling technique & phlebotomy	<ul> <li>Describe the procedure of phlebotomy</li> <li>Explain pre-requisites for phlebotomy</li> <li>Appropriate /inappropriate sample</li> <li>How to discard inappropriate sample</li> <li>timeline for the transfer and storage of sample</li> </ul>	Perform phlebotomy as per SOP	Counsel patient before phlebotomy	EOSA/OSPE/ Ward Test
2.	Blood C/P ESR	<ul> <li>Explain different anticoagulant used in hematology with their uses</li> <li>Minimum time required for each step</li> <li>Interpret end result</li> <li>Different methods of performing blood C/P and ESR</li> <li>Timeline for storage of blood C/P and ESR sample</li> </ul>	<ul> <li>Perform blood C/P on analyzes</li> <li>Perform ESR</li> <li>Interpret the result of blood C/P and ESR</li> </ul>	Counsel patient	EOSA/OSPE/ Ward Test
3.	Preparation of blood smears' & reties	<ul> <li>Explanation the step of blood smears preparation</li> <li>Quality of a good smears</li> <li>Different stains used for peripheral smears and retics with principle</li> <li>Timeline for storage of samples</li> </ul>	Prepare good quality blood smear		EOSA/OSPE/ Ward Test
4.	Quality control	<ul> <li>Explain role of quality control in laboratory</li> <li>Important of internal and external Q C</li> </ul>	Assess daily quality control of different analyzes.		EOSA/OSPE/ Ward Test
Day 6			1	1	
1.	Coagulation studies	<ul> <li>Enumerate different coagulation tests</li> <li>Explain principles of different coagulation studies</li> <li>Discuss role of different coagulation test</li> <li>timeline for the transfer and storage of samples</li> </ul>	<ul> <li>Perform coagulation studies</li> <li>Interpret the result of coagulation studies</li> </ul>	Counsel patient / attendant in case of diagnosis of diseases e.g. Bleeding disorder	EOSA/OSPE/ Ward Test
2.	Bone marrow studies	<ul> <li>enumerate uses of bone marrow aspirate and trephine biopsy</li> <li>explain the procedure of bone marrow biopsy</li> <li>explain role of bone marrow in hematological disorder</li> </ul>	<ul> <li>Identify different bone marrow aspirate and trephine needles</li> <li>Interpret the result of bone marrow studies</li> </ul>	Counsel the patient before bone marrow biopsy	EOSA/OSPE/ Ward Test
3.	Hb studies & coombs test	<ul> <li>explain principle of hemoglobin electrophoresis &amp; Coombs test</li> <li>describe uses of hemoglobin studies and Coombs test</li> <li>describe procedure of Hb electrophoresis &amp; coombs test</li> </ul>			EOSA/OSPE/ Ward Test
Day 7					
Blood gro matching	ouping and cross	<ul> <li>explain the procedure the blood grouping</li> <li>describe different blood groups e.g. ABO&amp; Rh</li> <li>timeline for the storage of samples</li> </ul>	<ul> <li>perform forward blood grouping</li> <li>interpret result of blood grouping and cross matching</li> </ul>		EOSA/OSPE/ Ward Test

S. No.	Day	Radiology				
1 Monday		Chest x ray anatomy				
2	Tuesday	Chest x ray pathology				
3 Wednesday		Bones & joints with fractures				
4 Thursday		Plain x ray abdomen & KUB				
5 Monday		Fluoroscopic procedures & Ba studies.				
6 Tuesday		CT scan brain: basics				
7 Wednesday		Basics of ultrasound and observation				
8 Thursday Ward asses		Ward assessment(film based)				

## Clerkship Model of Radiology

**Dr Nasir Khan** Chairperson of Radiology Department RMU & Allied Hospitals

### Clinical Teaching Program for Third Year Psychiatry Ward Duration: 2 Weeks

	Day	8:30-9:00	9:00-10:30	2:00-5:00 pm	Facilitator
				(Evening rotation)	
Day l	Monday	Introduction of the Institute Introduction to the clinical attachment Distribution of the history books	History Taking Allotment of Cases and Groups	Clinical work History taking of Allotted cases	Dr. Mohammad Kashif
Day 2	Tuesday	History taking Mental State Examination	Demonstration of History taking and MSE	Clinical work	Dr. Mohammad Kashif
Day 3	Wednesday	Presentation of cases histories of <b>depression</b> by medical students	Interview with the patient Theoretical aspect of depression	Clinical work	Dr. Mohammad Kashif
Day 4	Thursday	Presentation of cases histories of <b>dissociative disorder</b> by medical students	Interview with the patient Theoretical aspect of Dissociation	Clinical work	Dr. Mohammad Kashif
Day5	Monday	Presentation of cases histories of <b>Schizophrenia</b> by medical students	Interview with the patient	Clinical work	Dr. Mohammad Kashif
Day 6	Tuesday	Presentation of cases histories of <b>Su</b> Interview with the patient Theoretical aspect of Substance use	bstance use	Clinical work	Dr. Mohammad Kashif
Day7	Wednesday	Presentation of cases histories of <b>Del</b> medical students & Theoretical aspec	<b>irium/dementia/ organicity</b> by ets	Clinical work	Dr. Mohammad Kashif
Day8	Thursday	Ward Test: OSCE (conducted by	Evaluation (OCSE + case histories + attendance & Signatures on logbook) & Feedback		Ward Test