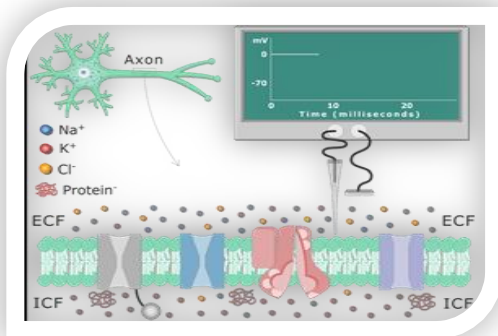


SWAT MEDICAL COLLEGE SWAT

DEPARTMENT OF MEDICAL EDUCATION



FOUNDATION-I



1ST YEAR MBBS

BLOCK: A (PAPER A)

CLASS: 2023-28

DURATION: 06 WEEKS

FROM: FEB 12 TO MARCH 22, 2024

Student Name: _____

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1 Academic Calendar

Tentative Annual Calendar MBBS – 2023-24 Swat Medical College, Swat							
Activity/ Events	Week	Date	1 st Year	2 nd Year	3 rd Year	4 th Year	5 th Year
Orientation Week	1	12 th to 16 th Feb	Foundation-I (6 weeks) 22 nd March, Module Exam	Neurosciences-IA (6 weeks) 22 nd March, Module Exam	Foundation II (5 weeks) 22 nd March, Module Exam	Neurosciences – II (6 weeks) 25 th and 26 th March Block J Exam	Previous 5 th Year Preparatory leaves and annual exam
Regular Classes	2	19 th to 23 rd Feb					
Regular Classes	3	26 th Feb to 1 st March					
Regular Classes	4	4 th to 8 th March					
Regular Classes	5	11 th to 15 th March					
Regular Classes	6	18 th to 22 nd March	Blood & Immunology (5 weeks) 6 th & 7 th May Block A exam	Neurosciences-IB (5 weeks) 13 th & 14 th May Block D	Infection & Inflammation (6 weeks) 6 th May to 7 th May Block G exam	GIT and Hepatobiliary – II (8 weeks) 10 th and 11 th June Block K Exam	Foundation-III (2 weeks) 22 nd March Module Exam Blood & Immunology-III (2 weeks) 5 th April Module Exam
Regular Classes	7	25 th to 29 th March					
Regular Classes	8	1 st to 5 th April					
Spring Break/Eid ul Fitr	9	8 th to 12 th April					
Sports Week	10	15 th to 19 th April					
Regular Classes	11	22 nd to 26 th April	MSK-I (8 weeks) 1 st & 2 nd July Block-B Exam	GIT, Hepatobiliary & Metabolism- (8 weeks) 1 st & 2 nd July	Multisystem (5 weeks) Module Exam 31 st May	Renal – II Module (4 weeks) 1 st and 2 nd July Module Exam	MSK-III (2 weeks) 06 th & 07 th May Block N exam
Regular Classes	12	29 th to 3 rd May					
Regular Classes	13	6 th to 10 th May					
Regular Classes	14	13 th to 17 th May					
Regular Classes	15	20 th to 24 th May					
Regular Classes	16	27 th May to 31 st May	CVS-I (5 weeks) 23 rd August Module Exam	Renal (3 weeks) 12 th to 13 th August Block E	MSK-II (5 weeks) 2 nd Sep 3 rd Sep Block H exam	Endocrine and Reproduction – II (8 weeks) 16 th and 17 th September Block-L exam	Cardiorespiratory-III (5 weeks) 3 rd & 4 th June Block O Exam
Regular Classes	17	3 rd to 7 th June					
Regular Classes	18	10 th to 14 th June					
Eid-ul-Adha Holidays	19	17 th to 21 st June					
Regular Classes	20	24 th to 28 th June					
Summer Vacations	21-23	3 rd to 21 st July	Respiratory-I (4 weeks) 23 rd -24 th SEP Block-C Exam	Endocrine-I (4 weeks) 6 th Sep	CVS-II (3 weeks) 20 th September Module exam	EYE and ENT (6 weeks) 14 th to 18 th Oct Block M1 & M2 Exam	Renal- III Module (2 weeks) 14 th June Module Exam Endocrine & Reproduction-III (3 weeks) 29 th & 30 th July Block P Exam
Regular Classes	24	22 nd to 26 th July					
Regular Classes	25	29 th July to 2 nd Aug					
Regular Classes	26	5 th to 9 th Aug					
Regular Classes	27	12 th to 16 th Aug					
Regular Classes	28	19 th 23 rd Aug	PREPARATORY LEAVES	Reproduction-I (4 weeks) 30 th Sep 1 st Oct	RES-II (4 weeks) 21 st and 22 nd October Block L exam	PREPARATORY LEAVES	Neurosciences – III (3 weeks) 16 th August Module Exam GIT & Hepatobiliary (2 weeks) 6 th Sep Module Exam
Regular Classes	29	26 th to 30 th Aug					
Regular Classes	30	2 nd to 6 th Sep					
Regular Classes	31	9 th to 13 th Sep					
Regular Classes	32	16 th to 20 th Sep					
Regular Classes/ Preparatory Leaves	33	23 rd to 27 th Sep	Annual Exam as per KMU schedule.	Annual Exam as per KMU	Annual Exam as per KMU schedule.	Annual Exam as per KMU schedule.	PREPARATORY LEAVES
Regular Classes/ Preparatory Leaves	34	30 th Sep to 4 th Oct					
Regular Classes/ Preparatory Leaves	35	7 th to 11 th Oct					
Regular Classes/ Preparatory Leaves	36	14 th to 18 th Oct					
Regular Classes/ Preparatory Leaves	37	21 st to 25 th Oct					
Regular Classes/ Preparatory Leaves	38	28 th Oct to 1 st Nov	Winter vacation	Winter vacation	Winter vacation	Annual Exam as per KMU schedule.	PREPARATORY LEAVES
Regular Classes/ Preparatory Leaves	39	4 th to 8 th Nov					
Regular Classes/ Preparatory Leaves	40	11 th to 15 th Nov					
Regular Classes/ Preparatory Leaves	41	18 th to 22 nd Nov					
Regular Classes/ Preparatory Leaves	42	25 th to 29 th Nov					
Regular Classes/ Preparatory Leaves	43	2 nd to 6 th Dec	Winter vacation	Winter vacation	Winter vacation	Annual Exam as per KMU schedule.	PREPARATORY LEAVES
Regular Classes/ Preparatory Leaves	44	9 th to 13 th Dec					
Regular Classes/ Preparatory Leaves	45	16 th to 20 th Dec					
Regular Classes/ Preparatory Leaves	46-49	November 2024					
Regular Classes/ Preparatory Leaves	50-53	December 2024					
Regular Classes/ Preparatory Leaves	54-57	January 2025					
Start of new academic session 2025-26			February 2025	February 2025	February 2025	February 2025	March 2025

Note: The given dates are tentative and may be subject to change as needed/demanded. The KMU will share the annual exam schedule at the end of the current session.

Dear Student

The Department of Medical Education (DME) has successfully conducted faculty training for the curation of study guides. In accordance with the guidelines set by Khyber Medical University, Peshawar, this study guide has been meticulously developed by the respective block coordinator. For any queries or concerns, kindly refer to the "Query and Troubleshooting" section for contact information.

Please be advised that the timetables provided in the study guides are tentative, and the final versions will always be accessible on the official website, notice boards, and social media platforms.

It is crucial to acknowledge that this guide is subject to continuous improvement, aligning with updates to module learning objectives and blueprints by KMU Peshawar. It is noteworthy that the learning objectives and blueprints outlined in this guide represent an enhanced and revised version of those originally provided by KMU.

For more information on modules and examination blueprints, please visit

<https://kmu.edu.pk/examination/guidelines>.

Your login link of official website: https://mis.swatmedicalcollege.edu.pk/login/student_login

2 List Of Abbreviations

Anat-SGD	Small Group Discussion in Anatomy	G. Med-L	General Medicine Lecture
Bio-L	Biochemistry Lecture	OSPE	Objectively Structured Practical Examination
Bio-P	Biochemistry Practical	Paeds-L	Pediatrics Lecture
Bio-SGD	Small Group Discussion in Biochemistry	Patho-L	Pathology Lecture
C. Med-L	Community Medicine Lecture	Phar-L	Pharmacology Lecture
DSL	Directed Self Learning	Phy-L	Physiology Lecture
FDT	Film/Demonstration/Tutorial	Phy-P	Physiology Practical
F. Med-L	Forensic Medicine Lecture	Phy-SGD	Small Group Discussion in Physiology
G. Anat-L	Gross Anatomy Lecture	PBL	Problem Based Learning
Histo-P	Histology Practical	SDL	Self-Directed Learning
IT	Information Technology	SL	Skill Lab
LGIS	Large Group Interactive Session	SAQs	Short Answer Questions
MCQs	Multiple Choice Questions	SEQs	Short Essay Questions
Med.Edu-L	Medical Education Lecture	SGDs	Small Group Discussions
PRIME	Professionalism and Communication Skills, Research, Identity Formation, Management and Leadership, Ethics		

3 Module Committee:

s.no	Name	Department	Role
1.	Prof. Dr. Aziz Ahmad	Dean / principal	
2.	Dr. M Junaid Khan	DME	Director
Module Team			
3.	Prof. Dr. Rashid Ahmad	Physiology	MPC-I Chairman
4.	Dr. Obaid Ur Rahman	Biochemistry	Block A Coordinator
5.	Prof. Dr. Muhammad Kahn	Anatomy	Member
6.	Dr. Fiza Iqbal	Physiology	Member
7.	Dr. Amanullah	Physiology	Member
8.	Dr. Humaira Ali	Anatomy	Member
9.	Dr. Sara Maryam	Biochemistry	Member
10.	Dr. Ubaid Ullah	PRIME	Member



4 Recommended List Of Icons



Introduction To Case



For Objectives



Critical Questions



Assessment



Resource Material

5 Mission/ Vision of the College

5.1 Mission:

To train medical students as per international standards, thereby producing doctors who exhibit excellence as professionals, academicians, researchers and adeptly fulfil healthcare needs through the application of ethical and evidence-based practices.

5.2 Vision:

To be a center of excellence in medical education, patient care and research globally.

6 Overview of the Module/ Preface

A very warm welcome to medical students in the Foundation-I Module study guide where the overarching goal is to facilitate effective teaching & efficient learning by assisting in the management of student learning, providing a focus for learning-related student' activities and providing information on the topic of study. Throughout the Foundation-I Module emphasis is placed on integrating theoretical knowledge with practical applications, ensuring a comprehensive educational experience. The core themes of the module including "Orientation", "Cell", "Growth and development of human body" and "Human body tissues, bones & joints" are meticulously designed to foster a deep understanding of the key concepts relevant to the themes. Students will gain hands-on experience through evidence-based teaching in diverse settings such as the hospital and community providing a well-rounded education.

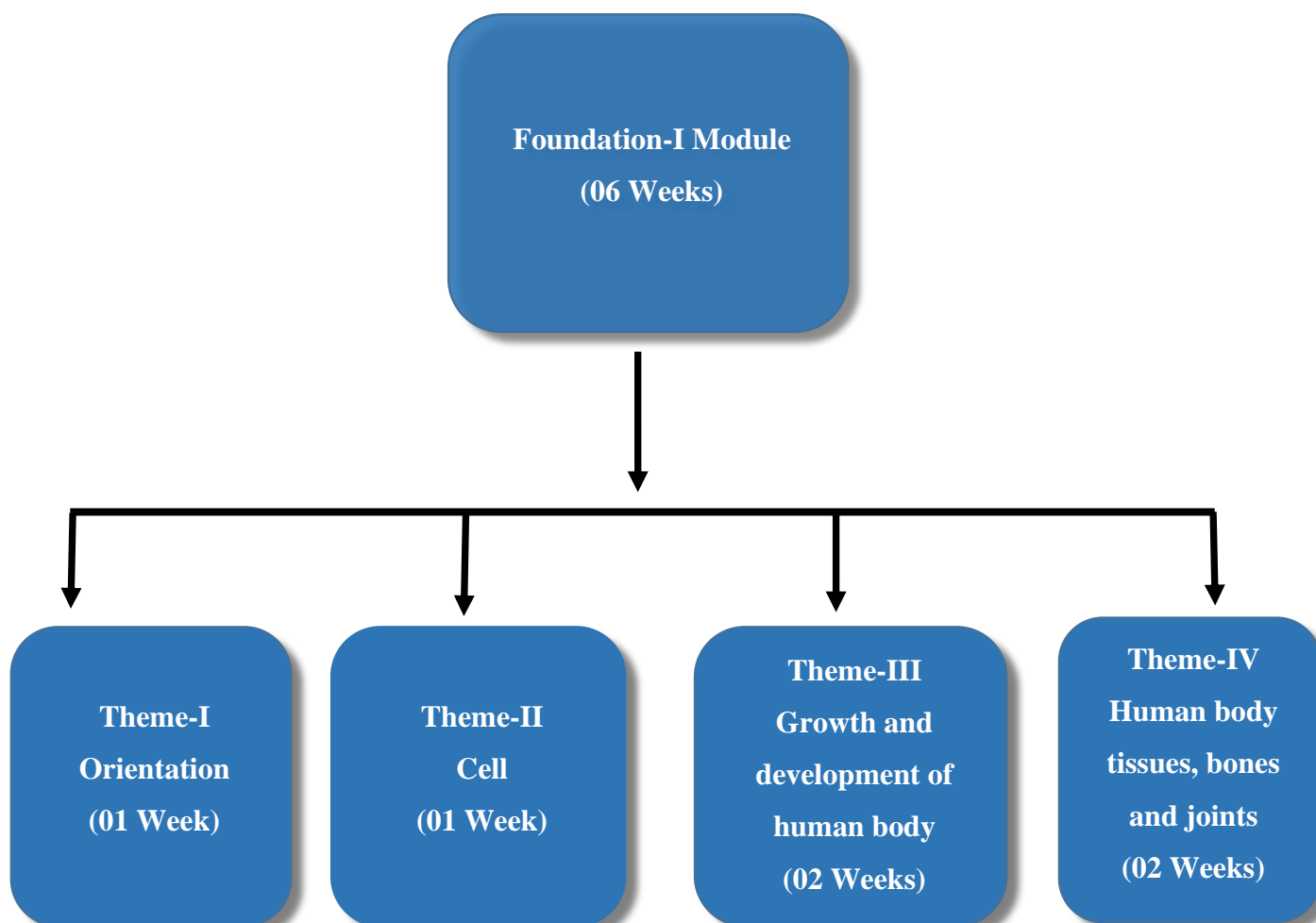
The study guides serve as a crucial reference for assessment and evaluation. It outlines the components that will be assessed such as knowledge, skills and attitude and the corresponding assessment tools, which may include written examinations encompassing Multiple Choice Questions & Short Essay Questions that evaluates students' theoretical knowledge and performance assessments by Objective Structured Practical Examination "OSPE" that assess practical skills. This transparency enables students to align their efforts with the evaluation criteria, promoting a sense of accountability and preparation for success in their academic pursuits. As future medical professionals, graduates can look forward to diverse carrier pathways, from clinical practice to research, with opportunities in the homeland and abroad. In essence, the study guide acts as an indispensable tool for students, offering clarity on module contents, instructional methodologies, faculty guidance and assessment criteria. By actively engaging with the information provided, students can navigate their academic journey with confidence and purpose, maximizing their learning experience in the field of medicine.

7 Introduction/ Organization of Module

7.1 Introduction:

The Foundation Module-I is 6-weeks Module consisting of awareness about the whole curriculum, environment, teaching and learning. It also includes basic anatomical and physiological concepts about the human body and its development. Introduction of Medical Education, PRIME and behavioral sciences are also included in this module.

The module consists of the following themes:



All the themes include the basic science subjects in a horizontal integrated way while clinical subjects are integrated in a spiral fashion. Foundation-I module is a bridge between the knowledge gained in your F. Sc/ HSSC levels and trying to incorporate it with your Professional schooling. Most of the topics taught are familiar to the students and we will try to build up your knowledge on the existing foundation.

The Foundation Module-I has been planned to study the normal structure and functions of the cell in context of clinical problems. This will benefit the students to understand the basic biomedical information in relation to clinical sciences. The cell is the basic structural, functional, and biological unit of all known living organisms. This module explains the structure and organization of the

organelles they contain, physiological properties and transport across membrane and signaling pathways. A sound knowledge of structure, function and understanding of biochemical processes of cell will help medical students to develop better understanding of cell related diseases.

This module will comprehensively cover the general anatomy, gross anatomy of skeleton, and muscle architecture. It will also explain histology of cell along with the early embryogenesis and anomalies during development. The physiology of cell will describe the genetic control, function and transport across cell membrane. The study of biochemistry will help you to learn about the biochemical processes, signal transduction and genetic information in the cell. This knowledge of basic sciences, amicably integrated vertically with Pathology, Community medicine, Forensic Medicine and Pharmacology will help students to learn every aspect of cell in a comprehensive manner. The teaching methods will comprise Interactive Lectures, Role Play, Directed Self-Learning, Self-Directed Learning, Small Group Discussions and Practical Demonstration. Other methods of instructions such as the Flipped Classroom, Role Play, Case-Based Learning, Problem-Based Learning and Team-Based Learning will also be adapted.

7.2 Rationale:

A Student stepping into a medical school requires orientation, and introduction to medical sciences with respect to health & disease. The student also needs certain guidelines to achieve goals to become a successful but ethical doctor in future.

Before students go on to complex issues related to organ systems, it becomes necessary for them to have clear concepts underlying them.

It aims to provide 'foundation' knowledge to the students so that they are able to apply it when they come across more advanced topics. This module hence provides a framework within which learners are expected to build future competencies.

7.3 Organization of the Study guide:

The Foundation-I Module is a theme-based 6 Weeks Module. The "Orientation" is a one-week activity consisting of a welcome address by the dean followed by a white coat ceremony. Then the students are introduced to the faculty. It is followed by orientation of students to all the basic sciences departments. All the basic sciences subjects are introduced and students are told about the recommended books for each subject. The structure & function of Pakistan Medical Council is described & Curriculum Structure, Teaching Strategies, Assessment Tools and the use of Study Guides are explained to the students. Literature Search, importance of IT skills, preparation of assignment on MS Word, preparation of presentation on power point and use of excel sheet are also demonstrated. The "Cell" is also a one-week activity consisting of description of structural and functional organization of cell, cell division, cellular membrane transport mechanism, homeostasis, membrane physiology, buffers, chemistry of nucleic acids, cell injury, cellular basis of receptors, routes of administration of drugs and transmembrane drug transport. The "Growth and development of human body" is a 2-week long theme consisting of explanation of concepts of embryonic and fetal development, chemistry of acids and bases, carbohydrates, importance of surface tension &

viscosity in our body, determinants of health, disease causation, chain of infection and levels of prevention. The “Human body tissues, bones & joints” is also a 2-week activity consisting of description of organization of human body, anatomical terms, introduction to joints, bones, cartilage, skin, fascia, ligaments, membranes, muscles, lymphatic and nervous system. Histology of body tissues, epithelium, connective tissue, surface specialization of epithelia, structure & function of basement membrane are also described. Functions of the autonomic nervous system, structure and function of GAGs, Necrosis, inflammation & medicolegal importance of death are also described here. Contents of the module will be taught in “Large group interactive Sessions”, “Directed Self-Learning”, “Self-Directed Learning”, “Small Group Discussions” and “Practicals Demonstration”.

7.4 Teaching Strategies:

The following teaching/ learning methods are used to promote better understanding:

A. Large Group Formats:

- a. **Interactive Lectures:** In large group, the lecturer introduces a topic or common clinical conditions and explains the underlying phenomena through questions, pictures, videos of patients’ interviews, exercises, etc. Students are actively involved in the learning process.
- b. **Directed Self-Learning:** Directed self-learning is an active learning approach where the learners are provided with predefined learning objectives and some facilitation through the learning process in the form of guidance and supervision. It helps to establish a strong foundation for autonomous and deep learning.
- c. **Self-Directed Learning:** Students’ assume responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from Learning Resource Center, teachers and resource persons within and outside the college. Students can utilize the time within the college scheduled hours of self-study.

B. Small Group Formats:

- a. **Small Group Discussions:** This format helps students to clarify concepts acquire skills or attitudes. Sessions are structured with the help of specific exercises such as patient case, interviews or discussion topics. Students exchange opinions and apply knowledge gained from lectures, tutorials and self-study. The facilitator role is to ask probing questions, summarize, or rephrase to help clarify concepts.
- b. **Practical Demonstration:** Basic science practicals related to anatomy, biochemistry and physiology are scheduled for student learning.

7.5 Assessment strategies

Assessments within the MBBS program at STMC consist of both formative and summative evaluations. These assessments are integral to monitoring student progress and academic performance.

A. Formative Assessment:

Formative assessments, accounting for 10% of the total marks assigned to each block, serve as ongoing evaluations designed to provide feedback and facilitate learning. The allocation of this 10% can be determined in accordance with the blueprint of KMU and further distributed as per the

academic council's recommendations at STMC. Formative assessments are conducted after the completion of each module, ensuring that students receive timely feedback to enhance their understanding and performance.

B. Summative Assessment:

Summative assessments, which comprise the majority of the assessment weighting (90% of all marks), are conducted and overseen by KMU, as part of the annual examination process. The summative annual examination is organized and conducted by KMU, which carries out the evaluation and grading. This summative assessment evaluates students' comprehensive understanding of the curriculum and accounts for a significant portion of their final scores.

C. Assessment Tools:

Various assessment tools are employed to gauge students' knowledge and competencies. These tools include:

- **Written Examinations:** These encompass Multiple Choice Questions (MCQ) and Short Essay Questions (SEQ) that evaluate students' theoretical knowledge.
- **Performance Assessments:** Objective Structured Practical Examinations (OSPE) are used to assess practical skills of the students.
- **Assignments:** Presentations, projects, and self-reflection assignments are included in the assessment process to enhance students' critical thinking and research skills

D. Other:

Continuous assessment of students through punctuality, holding high ethical standards and observing good behavior.

7.6 Feedback mechanism and summary

At the end of each module a “Module Evaluation Form” will be provided to the students whether in hard copies or online and the students will give their opinion regarding the “Course Contents”, “Learning Resources”, “Teaching Methods”, “Engagement & Motivation” and “Assessment Methods”.

8 Table Of Specification

Subject	No. of Hours Allocated in Time table					Percent Distribution	Assessment	
	Large Group Format		Small Group Format		Total		MCQs	OSPE
	Lectures	DSLs	Practicals	SGDs				
Gross Anatomy	11	03	06	04	49	32.88%	12	05
Histology	06						10	
Embryology	19						15	
Physiology	10	03	10	02	25	16.77%	10	02
Biochemistry	13	03	08	04	28	18.79%	14	03
PRIME	10	00	00	00	10	6.71%	05	00
Pharmacology	03	00	00	00	03	2.01%	01	00
Pathology	04	00	02	00	06	4.02%	02	01
Community Medicine	06	00	00	00	06	4.02%	01	00
Forensic Medicine	02	00	00	00	02	1.34%	00	00
IT Skills	05	00	00	00	05	3.35%	00	00
Islamiyat	03	00	00	00	03	2.01%	00	00
SDL	--	--	--	--	12	8.05%	00	00
Total	92	09	26	10	149	100%	70	11



9 Learning Objectives

9.1 General Learning Outcomes

By the end of this module the students would be able to;

Knowledge

1. Familiarize with the MBBS system-based curriculum
2. Recognize the role of different disciplines in studying human body and its diseases.
3. Describe the structure, function and biochemical composition of cell.
4. Describe the cell division, its types and genetic material along with its clinical correlation.
5. Describe the basic organization of human body.
6. Describe the basic tissues of human body
7. Explain the maintenance of homeostatic mechanism.
8. Describe the various stages of embryonic and fetal development and correlate them with various malformations.
9. Describe the importance of buffer and PH system.
10. Describe the biochemistry of carbohydrates, nucleic acids and chemistry of Acids & Bases.
11. Describe pH & Buffer solutions.
12. Explain the importance of Surface tension & Viscosity in our body.
13. Describe various cellular adaptations during cell growth, differentiation and cell injury.
14. Describe the basic concepts of medical ethics, professionalism, clinical research, memory and learning.

Skills

1. Identify the equipment used in the laboratory.
2. Describe the basic laboratory techniques and use of microscope.
3. Identify basic tissues under the microscope.
4. Prepare different solutions
5. Perform biochemical analysis of carbohydrates.

Attitude

1. Follow the basic laboratory protocols.
2. Participate in class and practical work efficiently.
3. Maintain discipline of the college.
4. Follow the norms of the college properly.
5. Communicate effectively in a team with colleagues and teachers.
6. Demonstrate professionalism and ethical values in dealing with patients, cadavers, colleagues and teachers.
7. Communicate effectively in a team with colleagues and teachers.
8. Demonstrate the ability to reflect on the performance.

9.2 Specific Learning Outcomes

Theme-1 (Orientation)

Introduction:

This is a 1-week activity consisting of a white coat ceremony on first day followed by orientation of students in groups where the students will visit each department in the college and hospital and a briefing about the structure and functions of each department will be given by the faculty so that the students are oriented in time. Basic Sciences including anatomy, physiology, biochemistry, pathology, pharmacology, forensic medicine and community medicine will be introduced to the medical students. The structure & function of Pakistan Medical Council, curriculum structure, teaching strategies, assessment tools and the use of study guides will be described. Literature search skills, importance of IT skills, preparation of assignment on MS Word, preparation of presentation on power point and use of excel sheet will also be demonstrated.

S No.	Topic	Learning Objectives	Teaching Strategy	Hours	Assessment Tools
ANATOMY					
1	Anatomy and its sub Branches	Define anatomy and its branches. Describe purpose of study of anatomy and its branches.	LGIS	1	MCQs
PHYSIOLOGY					
2	Physiology and its sub Branches	Enumerate the branches of physiology.	LGIS	1	MCQs
BIOCHEMISTRY					
3	Introduction to biochemistry and its implication in medicine	Define biochemistry. Discuss the role of biochemistry in medicine.	LGIS	1	MCQs
PATHOLOGY					
4	Introduction to pathology and its implication in medicine	Define pathology. Enumerate the different branches of pathology in medicine. Identify different sampling and processing techniques in different branches of pathology.	LGIS	1	MCQs
PHARMACOLOGY					
5	Introduction to Pharmacology and its role in modern Medicine	Define pharmacology and role of pharmacology in medicine. Define the pharmacodynamics and pharmacokinetics.	LGIS	1	MCQs
COMMUNITY MEDICINE					
6	Introduction to Community Medicine and its	Describe Role of community medicine/public health in health care system.	LGIS	1	MCQs

S No.	Topic	Learning Objectives	Teaching Strategy	Hours	Assessment Tools
	implication				
FORENSIC MEDICINE					
7	Introduction to Forensic Medicine and Toxicology	Define Forensic Medicine, forensic pathology and state Medicine. Identify the Branches of Forensic Medicine. Describe the History of Forensic Medicine. Discuss the scope of Forensic Medicine. Identify the essential facilities for medico legal investigation. Define Medical Jurisprudence.	LGIS	1	MCQs
8	Pakistan Medical Council, Consent.	Describe the structure and functions of Pakistan Medical Council.	LGIS	1	Formative
MEDICAL EDUCATION					
9	Curriculum structure Teaching learning strategies	Discuss the curriculum and modules. Describe the use of study guides (not to be assessed). Differentiate between various teaching & learning strategies. Enlist various assessment tools & assessment policy.	LGIS	1	Formative
10	Importance of IT skills	Define IT and its importance.	Demonstration	1	Formative
IT Skills					
11	MS word skills PowerPoint skills Excel sheet	Prepare the assignment on MS word. Prepare the presentation on power point Use the excel sheet.	Demonstration	1	Formative
Library					
12	Literature search and library resources	Literature search skills.	Lecture	1	Formative

Theme-2 (Cell)

Introduction:

This 1-week long theme consists of description of structural and functional organization of cell. Cell division and regulation of different cellular functions is also part of this theme. Membrane Physiology, Homeostasis, chemistry of nucleic acids and buffer solutions will be described here. The contents of this theme will be taught in Lectures, Practicals, SGDs, DSLs and SDLs.

S No.	Topic	Learning Objectives	Teaching Strategy	Hours	Assessment Tools
ANATOMY					

1	Cell structure and its Organelles	Describe the cell as a living unit of body. Describe the structure of cell and its organelles. Describe the structure of cytoplasmic organelles of the cell & correlate it with their functions. Describe cytoplasmic inclusions and secretory granules Explain the cytoskeleton.	LGIS	1	MCQs
2	Nuclear structure & Components	Describe the structure of the nucleus, nucleolus & chromosome and their functions in cell integrity.	LGIS	1	MCQs
3	Cell division Mitosis	Explain the process of cell division. Explain various stages of cell cycle.	LGIS	1	MCQs
4	Meiosis	Explain the process of Meiosis Describe karyotyping. Explain the non-disjunction of chromosomes. Correlate the process of non-disjunction with chromosomal abnormalities.	LGIS	1	MCQs
PHYSIOLOGY					
5	Cell membrane physiology Cell structure and Organization	Explain Intra cellular and extra cellular environment. Correlate cytoplasmic organelles with their functions.	LGIS	1	MCQs
6	Homeostasis	Define homeostasis. Describe the Homeostatic mechanism of major functional systems. Describe the characteristics of control systems with examples.	LGIS	2	MCQs/SEQs Viva
7	Membrane potential Membrane physiology	Define membrane potential. Describe ionic conc. differences across cell membrane. Explain the Nernst equation. Explain origin of normal resting membrane potential.	LGIS	1	MCQs/SEQs Viva
8	Movements of cell	Explain the amoeboid movement of cells. Describe the ciliary movements.	LGIS	1	MCQs

9	Depolarization & Repolarization	Explain the role of voltage gated Na ⁺ and K ⁺ channels in action potentials. Discuss the changes in conductance of Na and K channels with changes in membrane potentials.	LGIS	1	MCQs/SEQs Viva
BIOCHEMISTRY					
10	Biochemical structure of cell Bio chemical structure of Mitochondria	Explain the Bio-chemical composition of cell organelles and cytoplasm. Describe the chemical structure of mitochondrial membrane. Explain the biochemical importance of mitochondrial membrane.	LGIS	1	MCQs
11	Nuclear Membrane	Describe Bio-chemical structure of nuclear membrane and its functions.	LGIS	1	MCQs
12	RNA & DNA	Define and explain nucleotides and nucleosides. Describe the components of nucleotides. Describe the functions of Nucleotides. Describe the types of nucleic acids. Differentiate between RNA and DNA.	LGIS	1	MCQs/SEQs Viva
13	Buffer	Define Buffer and its role in maintenance of body PH. Define colloidal state and Henderson Hassel Balch equation. Define adsorption and how it occurs. Explain ion exchange resin.	LGIS	1	MCQs/Viva
14	Cellular membrane transport mechanism	Explain membrane transport. Discuss passive diffusion, active transport, and facilitated transport via a channel or carrier. Describe and evaluate the role of ion gradients, co transporters, and ATP in active transport mechanisms.	LGIS	2	MCQs
PATHOLOGY					
15	Cell injury	Classify the various causes of cell injury. Describe the response of a normal cell to stimuli.	LGIS	1	MCQs

		Describe the mechanism of cell injury. Describe mechanisms of cellular adaptations.			
PHARMACOLOGY					
16	Routes of administration of drugs	Enlist the routes of administration of a drug.	LGIS	1	MCQs
17	Transmembrane Drug Transport	Explain how drugs are transported across cell membrane and factors affecting it.	LGIS	1	MCQs
18	Receptor and cellular basis	Enlist the types of drug receptors.	LGIS	1	MCQs
LAB WORK					
HISTOLOGY					
19	The Microscope	Identify parts of microscope. Demonstrate operation of microscope. Describe the method of focusing slide at different magnifications. Follow the specified norms of lab work.	Demonstration /Practical	2	OSPE
PHYSIOLOGY					
20	Lab Equipment	Introduction to lab techniques. Identify the equipment used in lab work.	Demonstration /Practical	2	OSPE
BIOCHEMISTRY					
21	PH and buffer solutions	Define normal solution Define standard solution. Prepare 0.1N solution of NaOH and HCL. Measure the PH of given solution	Demonstration /Practical	2	OSPE
Small Group Discussions (SGDs)					
ANATOMY					
22	Anatomical nomenclature	Explain the basics of Anatomical Nomenclature	SGD	2	MCQs/SEQs
PHYSIOLOGY					
23	Review of functions of Cell Organelles	Describe the functions of Mitochondria, Endoplasmic Reticulum, Golgi complex and Lysosomes	SGD	2	MCQs/SEQs
BIOCHEMISTRY					
24	Ion Exchange Resin, Adsorption	Describe ion exchange resins, and adsorption.	SGD	2	MCQs
DIRECTED SELF LEARNING (DSL)					
ANATOMY					

25	Cell structure and its Organelles	Describe the structure of cell and its organelles. Describe the structure of cytoplasmic organelles of the cell & correlate it with their functions.	LGIS	1	MCQs
26	Cell Division	Explain the process of cell division and various stages of cell cycle.	LGIS	1	MCQs
PHYSIOLOGY					
27	Cell Membrane Physiology	Explain Intra cellular and extra cellular environment. Correlate cytoplasmic organelles with their functions.	LGIS	1	MCQs
28	Membrane potential	Describe ionic conc. differences across cell membrane Explain the Nernst equation. Explain origin of normal resting membrane potential	LGIS	1	MCQs
BIOCHEMISTRY					
29	Adsorption Ion exchange resin	Define adsorption and how it occurs. Explain ion exchange resin	LGIS	1	MCQs

Theme-3 (Growth and development of human body)

Introduction:

This 2-week long theme consists of explanation of concepts of embryonic and fetal development. Biochemistry includes chemistry of acids and bases, importance of surface tension & viscosity in our body and carbohydrates.

The contents of this theme will be taught in Lectures, Practicals, SGDs, DSLs and SDL.

S No.	Topic	Learning Objectives	Teaching Strategy	Hours	Assessment Tools
EMBRYOLOGY					
1	Introduction to Embryology	Describe the developmental periods. Discuss embryologic terminology. Explain significance of embryology.	LGIS	1	MCQs
2	Spermatogenesis	Describe the process of spermatogenesis. Enlist the differences between spermiogenesis and spermatogenesis. Describe the morphological changes during maturation of	LGIS	1	MCQs/SEQs Viva

		gametes.			
3	Oogenesis	Describe oogenesis and its correlation with meiosis. Compare the male and female gametes.	LGIS	1	MCQs/Viva
4	Transport of Gametes	Discuss the transport of gametes. Describe the transport of sperms. Describe the oocyte transport. Explain the maturation of sperms.	LGIS	1	MCQs
5	Female Reproductive Cycle	Describe the ovarian cycle. Discuss the process of follicular development. Explain the process of ovulation. Correlate with the phases of menstrual cycle.	LGIS	1	MCQs/Viva
6	Fertilization – Events	Define fertilization. Describe the process of fertilization. Explain assisted reproductive technologies like In-vitro fertilization (IVF), assisted IVF and intra cytoplasmic sperm injection (ICSI).	LGIS	1	MCQs/Viva
7	Fertilization – Clinical Correlates Cleavage & Blastocyst Formation	Discuss the clinical correlation of the fertilization. Describe the process of cleavage of zygote. Discuss the formation of blastocyst. Summarize the events of first week of development.	LGIS	1	MCQs/SEQs Viva
8	Implantation & Its Abnormalities	Discuss the process of implantation. Enumerate the sites of implantation. Discuss clinical correlations of the implantation process.	LGIS	1	MCQs
9	Amniotic cavity	Describe the formation of amniotic cavity. Discuss the development of embryonic disc. Discuss the development of umbilical vesicle. Explain the development of Chorionic sac.	LGIS	1	MCQs

10	Events of 2 nd Week of Development	Summarize the events of second week of development. Discuss the clinical correlates of the second week of development.	LGIS	1	MCQs/SEQs Viva
11	Formation of notochord	Explain the process of formation of notochord.	LGIS	1	MCQs/Viva
12	Events of 3 rd Week of Development	Describe the process of gastrulation. Explain the process of Neurulation. Explain the development of somites.	LGIS	1	MCQs/SEQs Viva
13	Derivatives of germ layers	Describe briefly derivatives of germ layers.	LGIS	1	MCQs
14	Further development of Trophoblast and Neurulation	Describe the process of development of Trophoblast and Neurulation.	LGIS	1	MCQs
15	Fetal membranes	Describe the formation of fetal membranes.	LGIS	1	MCQs
16	4th week: Folding of embryo	Describe the process and types of folding of embryo.	LGIS	1	MCQs/SEQs Viva
17	Highlights of 4-8 weeks	Enlist the events occurring in 4-8 weeks of development.	LGIS	1	MCQs/SEQs Viva

BIOCHEMISTRY

18	Chemistry of Acids and Bases	Define acids, bases. Describe strong acids and weak acids. Describe strong bases and weak bases. List different types and sources of acids and bases in our body Describe the mechanism of their normal balance and biochemical importance	LGIS	2	MCQs/Viva
19	Importance of surface tension and viscosity in our body	Explain surface tension, viscosity, vapor pressure, normal boiling point and capillary action.	LGIS	1	MCQs
20	Carbohydrates -I	Describe carbohydrates and give their Bio-chemical importance. Classify Carbohydrates. Explain carbohydrate and its Bio-chemical structure. Describe the different isomers of	LGIS	2	MCQs/SEQs Viva

		monosaccharides. e.g. Galactose, mannose, fructose, dextrose. Describe the role of dextrose in I/V infusion. Describe the role of mannitol in cerebral edema.			
21	Carbohydrates - II	Describe the structure of disaccharides and oligosaccharides.	LGIS	1	MCQs/SEQs Viva
22	Carbohydrates - III	Relate the structure of polysaccharides with its clinical importance. List the functions of carbohydrates in cell membrane, energy provision and nutrition supply to different parts of body.	LGIS	1	MCQs/SEQs Viva

COMMUNITY MEDICINE

23	Determinants of health	Define Health. Describe the Determinants of Health.	LGIS	1	MCQs
24	Disease causation	Describe Spectrum of Disease. Explain Natural History of Disease. Explain Theories of Disease Causation. Differentiate between Disease Elimination and Eradication.	LGIS	1	MCQs
25	Chain of infection	Describe reservoirs of infection & chain of infection.	LGIS	1	MCQs
26	Levels of prevention	Discuss Levels of Prevention.	LGIS	1	MCQs

LAB WORK

PATHOLOGY

27	Sterilization	Explain the process of sterilization Enumerate the different methods of sterilization Observe the process of autoclaving in the laboratory	Demonstration /Practical	2	OSPE
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PHYSIOLOGY

28	Capillary Blood Sampling	Obtain capillary blood sample for hematological investigations through prick method	Demonstration /Practical	2	OSPE
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		Identify the sites for obtaining blood sample with different methods and list the indications for their use.			
BIOCHEMISTRY					
29	Detection of Monosaccharides	Define Monosaccharides Discuss their structure and types Perform the sequence of tests to identify the monosaccharides in a given solution	Demonstration /Practical	2	OSPE
30	Detection of Reducing and non-reducing Sugars	Define reducing sugars. Discuss structure and types of reducing sugars Perform Benedicts test	Demonstration /Practical	2	OSPE
31	Detection of Polysaccharides in a given Solution	Define Polysaccharides. Discuss structures and types of Polysaccharides Perform the sequence of tests to identify the polysaccharides in a given solution	Demonstration /Practical	2	OSPE
SMALL GROUP DISCUSSIONS					
ANATOMY					
32	Study of embryology models	Describe the changes occurring during the first 3 weeks of development	SGDs	2	MCQs/Viva
PHYSIOLOGY					
33	Cell membrane and Different types of Action Potentials	Describe the structure and functions of cell membrane Describe the genesis of resting membrane potential Describe phases and types of action potential	SGDs	2	MCQs/Viva
BIOCHEMISTRY					
34	GAGs	Describe the structure and functions of GAGs..	SGDs	2	MCQs/Viva
DIRECTED SELF LEARNING					
ANATOMY					
35	Fertilization – Events	Define fertilization & describe its process. Explain assisted reproductive technologies like In-vitro fertilization (IVF), assisted IVF and intra cytoplasmic sperm injection (ICSI).	DSL	1	MCQs
PHYSIOLOGY					
36	Physiological	Describe the functions of	DSL	1	MCQs

	Anatomy of Autonomic Nervous system	the autonomic nervous system. Compare and contrast the functions of sympathetic and para sympathetic nervous system. Classify autonomic receptors.			
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Theme-4 (Human Body Tissues, Bones and Joints)

Introduction:

This 2-week long theme consists of explanation of concepts regarding structure of Human body, tissues and Joints. It also includes Physiological Anatomy of Autonomic Nervous System., Structure and Functions of GAGs, Necrosis & Inflammation, Stages & Medicolegal importance of death.

The contents of the theme will be taught in Lectures, Practicals, SGDS, DSLs and SDL.

S No.	Topic	Learning Objectives	Teaching Strategy	Hours	Assessment Tools
GROSS ANATOMY					
1	Organization of human body	Describe the levels of organization of human body.	LGIS	1	MCQs/Viva
2	Classification of Bones	Describe the structure and function of bone. Classify bones on the basis of length and shape. Identify the markings on bone.	LGIS	1	MCQs/Viva
3	Cartilage	Describe cartilage. Classify and describe the types of cartilage.	LGIS	1	MCQs/Viva
4	Introduction to Joints	Classify joints on the basis of structure. Describe the mechanism of movements of joint.	LGIS	1	MCQs/Viva
5	Muscles	Describe various muscle types along with structure.	LGIS	1	MCQs/Viva
6	Skin / Integumentary system Skin (dermis & epidermis) Skin creases, Nails, Hairs, Glands (Sebaceous & sweat) Shift to histology	Discuss the anatomical structures of Skin / Integumentary system.	LGIS	1	MCQs/Viva

	Section				
7	Lymphatic system	Describe the lymphatic system. Explain the functions of lymphatic system. Describe the organization of lymphatic system. Explain the mechanisms for the movement of lymph in the body.	LGIS	1	MCQs/Viva
8	Nervous system Divisions (central & peripheral and somatic & autonomic)	Define the organization of nervous system. Describe the divisions of nervous system. Describe the divisions of nervous system. And concept of dermatome. and myotome Describe the formation of nerve plexus.	LGIS	1	MCQs/Viva
9	Autonomic Nervous System	Describe the organization of autonomic nervous system. Differentiate between sympathetic and parasympathetic nervous system on the basis of structure.	LGIS	1	MCQs/SEQs Viva
10	Membranes Mucous membranes Serous membranes	Describe the structure of membranes of human body.	LGIS	1	MCQs/Viva
11	Fascia, ligaments and raphe	Describe the anatomy and significance of fascia, ligaments and raphe.	LGIS	1	MCQs/Viva
12	Radiological anatomy	Identify various anatomical landmarks on radiography. Describe commonly used radiographs. Describe various view used for obtaining radiographs.	LGIS	1	MCQs/Viva
HISTOLOGY					
13	Basic Body Tissue Definition of tissue Epithelial tissue Connective tissue Muscular tissue	Define tissue and describe the basic tissues in human body.	LGIS	1	MCQs/Viva

	Nervous tissue				
14	Epithelial tissues Classification of epithelium General characteristics and Functions of epithelium	Classify epithelium. Describe the general features of epithelium. Explain the specialized functions of different types of epithelial cells. Describe the structure of main types of cell junctions.	LGIS	1	MCQs/SEQs Viva
15	Glandular Epithelium	Enlist glandular epithelia. Classify them on the basis of morphology, nature of secretion and mode of secretion. Differentiate between exocrine & endocrine glands on the basis of structure and function.	LGIS	1	MCQs/SEQs Viva
16	Epithelial Cell Surface Specialization	Describe the surface specialization of epithelia. Correlate their structure, with their location and function.	LGIS	1	MCQs/Viva
17	Structure & Function of Basement Membrane	Describe the structure of basement membrane & correlate it with its function.	LGIS	1	MCQs/Viva
18	Connective tissue	Define connective tissue. Classify connective tissues. Explain the different types of Connective tissues proper.	LGIS	1	MCQs/SEQs Viva
PHYSIOLOGY					
19	Autonomic Nervous system	Describe the functions of the autonomic nervous system. Compare and contrast the functions of sympathetic and para sympathetic nervous system. Classify autonomic receptors.	LGIS	1	MCQs/SEQs Viva
BIOCHEMISTRY					
20	Structure and function of GAGS	Describe the structure and function of GAGS and its clinical importance.	LGIS	1	MCQs/SEQs Viva

PATHOLOGY					
21	Necrosis	Discuss the Process of necrosis Explain the process of apoptosis Differentiate between apoptosis and necrosis.	LGIS	1	MCQs
22	Inflammation	Describe acute inflammation. Describe events of acute inflammation. Describe chronic inflammation. Differentiate between acute and chronic inflammation.	LGIS	1	MCQs
FORENSIC MEDICINE					
23	Death	Define death. Describe stages of death. Describe medico legal importance of stages of death.	LGIS	1	MCQs
LAB WORK					
PATHOLOGY					
24	Tissue Processing	Describe the process of tissue processing for histopathological examination.	Demonstration / Practical	2	OSPE
ANATOMY					
25	Anatomical terms	Demonstrate anatomical terms for planes, position and movements. Demonstrate standard anatomical position and its application.	Demonstration / Practical	2	OSPE
HISTOLOGY					
26	H& E staining	Perform H & E staining of tissue slides under supervision in the laboratory	Demonstration / Practical	2	OSPE
27	Simple Epithelia	Identify and describe simple epithelia under microscope	Demonstration / Practical	2	OSPE
28	Stratified Epithelia	Identify and describe stratified epithelia under microscope	Demonstration / Practical	2	OSPE
29	Glands	Identify different types of glands under microscope	Demonstration / Practical	2	OSPE
PHYSIOLOGY					

30	Smear preparation	Prepare a blood smear.	Demonstration / Practical	2	OSPE
SMALL GROUP DISCUSSIONS					
ANATOMY					
31	Anatomical terms	Demonstrate anatomical terms for planes, position and movements. Demonstrate standard anatomical position and its application.	SGDs	2	MCQs/Viva
PHYSIOLOGY					
32	Autonomic Nervous system	Describe the functions of the autonomic nervous system. Compare and contrast the functions of sympathetic and para sympathetic nervous system.	SGDs	2	MCQs/SEQs
BIOCHEMISTRY					
33	Structure and function of GAGS	Describe the structure and function of GAGS.	SGDs	2	MCQs/SEQs
DIRECTED SELF LEARNING					
ANATOMY					
34	Organization of human body	Describe the levels of organization of human body	DSL	1	MCQs/Viva
35	Anatomical terms	Describe the anatomical terms for planes, position and movements	DSL	1	MCQs/Viva
PHYSIOLOGY					
36	Functions of Autonomic Nervous system (ANS)	Describe the functions of the ANS Compare the functions of sympathetic and para sympathetic nervous system.	DSL	1	MCQs/SEQs
37	Inflammation	Describe the physiological characteristics of inflammation	DSL	1	MCQs



a. Instruction (if any)

- b. Books:**

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graph TD
    FOA((FORMATIVE Ongoing Assessment))
    SA((SUMMATIVE ASSESSMENT))
    SA --- SA1[Self Assessment]
    SA --- SA2[Peer Assessment]
    SA --- SA3[Portfolio]
    SA --- SA4[Rubrics]
    SA --- SA5[Standardized tests]
    SA --- SA6[Submissions]
  
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11 Examination and Methods of Assessment:

a. Instruction:

- Students must arrive the examination venue at least 15 minutes before the scheduled start time. Late comers 15 minutes after the start of exam, will not be allowed to enter the examination hall and if permitted, they will not receive extra time.
- Students without College ID Card and Lab Coat will not be allowed to sit in the exam.
- In case of an emergency such as a medical emergency, students should inform the examination supervisor.
- Students are required to submit prohibited items such as mobile phones, smartwatches, electronic devices, books, notes, or any other unauthorized materials before entering the examination hall.
- Students must maintain complete silence within the examination hall. They should refrain from communicating with fellow students.
- Students must mark their attendance properly and strictly follow invigilator instructions.
- No student will be allowed to leave the examination hall before half the time is over and paper should be properly handed to the examiner.
- Violation of these guidelines may lead to disqualification from the examination.

b. The Distribution of Internal Assessment Score (10% Marks):

The distribution of Internal Assessment Score for 1st Year MBBS will be as follows:

- Total Marks for 1st Year MBBS= 700 & Internal Assessment Marks=70 (10%)
- 50 % of the Internal Assessment Marks will be given to Block Exams
- 50 % of the Internal Assessment marks will be given to Class Test/ End of Module Exam, Assignments and Presentations.
- Biochemistry department is responsible to maintain the attendance record for BLOCK –A in coordination with all the concerned departments.
- Anatomy department is responsible to maintain the attendance record for BLOCK – B in coordination with all the concerned departments.
- Physiology department is responsible to maintain the attendance record for BLOCK –C in coordination with all the concerned departments.

- **Distribution of 20 Marks for Block Papers for First Year MBBS will be as under:**

Block	Block A	Block B	Block C	Total
Marks	07	6.5	6.5	20

- **Distribution of 15 Marks for Block OSPE will be as under:**

Block	Block A	Block B	Block C	Total
Marks	05	05	05	15

- **Distribution of 20 marks for Class Test/ End of Module Exam & Assignments for 1st Year MBBS will be as under:**

Subject (Theory)	Block A	Block B	Block C	Total
Class Test/ End of Module Exam	04	3.5	3.5	11
Assignments	03	03	03	09
Total	07	6.5	6.5	20

- **Distribution of 15 marks for Presentations, Attitude/ Behavior for 1st Year MBBS will be as under:**

Subject (OSPE)	Block A	Block B	Block C	Total
Presentations	03	03	03	09
Attitude/ Behavior	02	02	02	06
Total	05	05	05	15

c. UNIVERSITY EXAM: Exam has 90% Marks

- To appear in any university examination, more than 75% attendance in all disciplines is mandatory for the students.
- The Paper A will be comprised of 120 MCQs. The distribution of 90% Marks for Paper A Written Exam will be as under:

Blueprint for Theory Paper A			
Subject	Foundation-I Module	Blood & Immunology-I Module	Total MCQs
Gross Anatomy	12	01	13
Histology	10	04	14
Embryology	15	00	15
Physiology	10	22	32
Biochemistry	14	12	26
Pathology	02	04	06
Pharmacology	01	01	02
Community Medicine	01	02	03
Forensic Medicine	00	01	01
PRIME	05	03	08
Total	70	50	120

- The distribution of OSPE stations for Paper A Practical Exam will be as under:

Blueprint for OSPE Paper A

Specialty	Practical	No. of Stations
Foundation Anatomy	Operating The Microscope Anatomical terms H& E staining Histology of Simple Epithelia Histology of Stratified Epithelia Histology of Glands	5
Foundation Biochemistry	PH and buffer solutions Detection of Polysaccharides in a given Solution Detection of Monosaccharide's Detecting of Reducing and non-reducing Sugars	3
Foundation Physiology	Lab Equipment's Oral temperature Capillary Blood Sampling	2
Foundation Pathology	Sterilization Tissue Processing	1
Blood Physiology	Hb determination Blood count TLC and DLC determination Bleeding time & Clotting time determination Prothrombin time determination Blood grouping	5
Blood Anatomy	Blood histology Histology of lymph nodes	1
Blood biochemistry	Estimation of plasma proteins in serum Preparation of protein free filtrate	1
Total		18

12 Timetables

SWAT MEDICAL COLLEGE
DEPARTMENT OF MEDICAL EDUCATION
TIME TABLE FOR FOUNDATION MODULE (1st Year MBBS) SESSION 2023-24
WEEK-1
THEME 1: ORIENTATION

Days	8:00 to 11:00 am			11:00 am to 1:00 pm		1:00 pm
Monday 12/02/24	Reception/ Registration of students			Welcome address by the Principal White Coat Ceremony Introduction to Faculty		Refreshment
Tuesday 13/02/24	8:00 to 9:00am	9:00 to 10:00am	10:00 to 11:00am	11:00 am to 12:00 pm	12:00 pm to 1:00 pm	1:30 to 2:30 pm
	Orientation to Anatomy Department & Faculty	G. Anat-L1 Introduction to Anatomy (Subject/ Branches / Recommended Books) Prof. Dr.	Orientation to Physiology Department & Faculty	Phy-L1 Introduction to Physiology (Subject/ Branches / Recommended Books) Prof. Dr.	PRIME-L1 Introduction to PRIME Dr.	IT Skills Importance of IT Skills. Introduction to MIS Engr.
Wednesday 14/02/24	Orientation to Biochemistry Department & Faculty	Bio-L1 Introduction to Biochemistry (Subject/ Branches / Recommended Books) Prof. Dr.	Orientation to Pathology Department & Faculty	Patho-L1 Introduction to Pathology (Subject/ Branches / Recommended Books) Prof. Dr.	Orientation to Forensic Medicine Department & Faculty	F. Med-L1 Introduction to Forensic Medicine (Subject/ Branches / Recommended Books)
Thursday 15/02/24	Orientation to Pharmacology Department & Faculty	Pharma-L1 Introduction to Pharmacology (Subject/ Branches / Recommended Books) Prof. Dr.	Med. Edu-L1 Introduction to Medical Education Department Dr.	Orientation to Community Medicine Department & Faculty	C. Med-L1 Introduction to Community Medicine (Subject/ Branches / Recommended Books) Prof. Dr.	PRIME-L2 Study Skills (Teaching/ Learning Strategies) Dr.
Friday 16/02/24	8:00 to 10:00 am		Med. Edu-L2 Curriculum & Modules/ Study Guide Dr.	Pakistan Medical & Dental Council, Consent Prof. Dr.	IT Skills Excel Sheet MS Word Skills Power Point Skills Engr.	Orientation to Learning Resources /Literature search skills
	Hospital Visit					

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SWAT MEDICAL COLLEGE
DEPARTMENT OF MEDICAL EDUCATION
TIME TABLE FOR FOUNDATION MODULE (1st Year MBBS) SESSION 2023-24
WEEK-2
THEME 2: CELL

Days	8:00 to 10:00 am		10:00 to 11:00 am	11:00am to 12:00 pm	12:00 to 1:00 pm	P R A Y E R S B R E A K	1:30 to 2:30 pm
Monday 19/02/24	PRACTICALS: Batch A: Phy Dr. Batch B: Histo Dr. Batch C: Bio Dr.		G. Anat-L2 Cell structure and its Organelles Dr.	Phy-L2 Cell membrane physiology Prof Dr.	Bio-L2 Biochemical structure of cell Dr.		Anat-DSL Dr.
Tuesday 20/02/24	PRACTICALS: Batch A: Bio Dr. Batch B: Phy Dr. Batch C: Histo Dr.		Bio-L3 Biochemical structure of Mitochondria Dr.	G. Anat-L3 Nuclear structure & components Dr.	Bio-L4 Nuclear membrane Dr.		Phy-DSL Dr.
Wednesday 21/02/24	PRACTICALS: Batch A: Histo Dr. Batch B: Bio Dr. Batch C: Phy Dr.		Phy-L3 Homeostasis Dr.	Bio-L5 DNA & RNA Dr.	Phy-L4 Membrane potential Prof Dr.		Phy-L5 Movement of Cell Prof Dr.
Thursday 22/02/24	8:00 to 9:00 am IT Skills Introduction to Computer Engr.	09:00 to 10:00 am Emb-L1 Mitosis Dr.	Phy-L6 Depolarization & Repolarization Prof Dr.	Bio-L6 Buffer Mr.	Bio-L7 Cellular membrane transport mechanism Dr.		Phy-L7 Cellular membrane transport mechanism Dr.
Friday 23/02/24	Islamiyat Revelation Definition & Importance Mr.	Emb-L2 Meiosis Prof Dr.	Patho-L2 Cell injury Prof Dr.	Pharma-L 2 Routes of administration of drugs Receptor and cellular basis Prof Dr.	Pharma-L3 Transmembrane drug transport Dr.		SDL (SLRC/Library)

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SWAT MEDICAL COLLEGE
DEPARTMENT OF MEDICAL EDUCATION
TIME TABLE FOR FOUNDATION MODULE (1st Year MBBS) SESSION 2023-24
WEEK-3

THEME 3: GROWTH & DEVELOPMENT OF HUMAN BODY

Days	8:00 to 10:00 am		10:00 to 11:00 am	11:00am to 12:00 pm	12:00 to 1:00 pm	1:30 to 2:30 pm
Monday 26/02/24	<u>PRACTICALS/ SGDs:</u> Batch A: Phy-P Dr. Batch B: Anat-SGD Dr. Batch C: Bio-P Dr.		Emb-L3 Introduction to Embryology Prof. Dr.	Bio-L8 Chemistry of Acids and Bases I Dr.	Emb-L4 Spermatogenesis Prof. Dr.	Anat-DSL Cell Division Dr.
Tuesday 27/02/24	<u>PRACTICALS/ SGDs:</u> Batch A: Bio-P Dr. Batch B: Phy-P Dr. Batch C: Anat-SGD Dr.		Emb-L5 Oogenesis Dr.	Bio-L9 Chemistry of Acids and Bases II Dr.	Emb-L6 Transport of Gametes Prof. Dr.	Phy-DSL Membrane Potential Dr.
Wednesday 28/02/24	<u>PRACTICALS/ SGDs:</u> Batch A: Anat-SGD Dr. Batch B: Bio-P Dr. Batch C: Phy-P Dr.		Emb-L7 Fertilization – Events Prof. Dr.	Bio-L10 Importance of surface tension and viscosity in our body Mr.	Emb-L8 Female reproductive cycle Prof. Dr.	Bio-DSL Adsorption Ion exchange resin Dr.
Thursday 29/02/24	8:00 to 09:00 am Emb-L9 Fertilization – Clinical Correlates Cleavage & Blastocyst Formation Dr.	9:00 to 10:00 am PRIME-L3 Health and behavioral sciences Dr.	Bio-L11 Structure, Classification, Properties of Carbohydrates I Prof Dr.	PRIME-L2 Bio-Pscho-Social model of health care Dr.	Emb-L10 Implantation & Its Abnormalities Prof. Dr.	Phy-L8 Physiological Anatomy of Autonomic Nervous system Dr.
Friday 01/03/24	Islamiyat Fundamental Beliefs of Islam Mr.	Emb-L11 Amniotic cavity Dr.	Bio-L12 Structure, Classification, Properties of Carbohydrates II Prof Dr.	Bio-L13 Mono-, Di-, & Homopolysaccharides Prof Dr.	Emb-L12 Events of 2 nd Week of Development Prof. Dr.	SDL (SLRC/Library)

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SWAT MEDICAL COLLEGE**DEPARTMENT OF MEDICAL EDUCATION****TIME TABLE FOR FOUNDATION MODULE (1st Year MBBS) SESSION 2023-24****WEEK-4****THEME 3: GROWTH & DEVELOPMENT OF HUMAN BODY**

Days	8:00 to 10:00 am		10:00 to 11:00 am	11:00am to 12:00 pm	12:00 to 1:00 pm	P R A Y E R S B R E A K	1:30 to 2:30 pm	
Monday 04/03/24	<u>PRACTICALS:</u> Batch A: Phy Dr. Batch B: Patho Dr. Batch C: Bio Dr.		Emb-L13 Formation of Notochord Prof. Dr.	C.Med-L2 Role of Public Health in Health Care System Dr.	Emb-L14 Events of 3rd Week of Development I Prof. Dr.		Anat-DSL Fertilization – Events Dr.	
Tuesday 05/03/24	<u>PRACTICALS:</u> Batch A: Bio Dr. Batch B: Phy Dr. Batch C: Patho Dr.		Bio-L14 Heteropolysaccharides Prof Dr.	Emb-L15 Events of 3rd Week of Development II Prof. Dr.	C.Med-L3 Determinants of health Dr.		PRIME-L3 Attitude Dr.	
Wednesday 06/03/24	<u>PRACTICALS:</u> Batch A: Patho Dr. Batch B: Bio Dr. Batch C: Phy Dr.		Emb-L16 Derivatives of germ layers Dr.	Emb-L17 Further development of trophoblast and Neuralization Prof. Dr..	C.Med-L4 Disease causation Dr.		Phy-DSL Physiological Anatomy of Autonomic Nervous system Dr.	
Thursday 07/03/24	8:00 to 9:00 am	09:00 to 10:00 am	Emb-L19 Folding of embryo Highlights of 4-8 weeks Dr.	PRIME-L4 Communicating with administration Dr.	C.Med-L5 Chain of infection Dr.		Bio-DSL Role of Dextrose & Mannitol Dr.	
	IT Skills Software Engr.	Emb-L18 Fetal Membranes Prof. Dr.						
Friday 08/03/24	Islamiyat Belief in Here After Mr.	C.Med-L7 Levels of prevention Dr.	G. Anat-L4 Organization of human body Dr.	Histo-L1 Basic tissues in human body Dr.	G. Anat-L5 Anatomical terms Dr.		SDL (SLRC/Library)	

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SWAT MEDICAL COLLEGE
DEPARTMENT OF MEDICAL EDUCATION
TIME TABLE FOR FOUNDATION MODULE (1st Year MBBS) SESSION 2023-24
WEEK-5
THEME 4: HUMAN BODY TISSUES, BONES & JOINTS

Days	8:00 to 10:00 am	10:00 to 11:00 am	11:00am to 12:00 pm	12:00 to 1:00 pm	P R A Y E R S B R E A K	1:30 to 2:30 pm
Monday 11/03/24	<u>PRACTICALS:</u> Batch A: Phy Dr. Batch B: Anat Dr. Batch C: Bio Dr.	G. Anat-L6 Muscles Dr.	G. Anat-L7 Classification of Bones Dr.	PRIME-L5 Introduction to Research Dr.		Anat-DSL Organization of human body Dr.
Tuesday 12/03/24	<u>PRACTICALS:</u> Batch A: Bio Dr. Batch B: Phy Dr. Batch C: Anat Dr.	Histo-L2 Classification, General characteristics & Functions of Epithelium Dr.	G. Anat-L8 Cartilage Dr.	G. Anat-L9 Joints (Structural Classification/ mechanism of movements) Dr.		Bio-DSL Structure & Functions of GAGs Dr.
Wednesday 13/03/24	<u>PRACTICALS:</u> Batch A: Anat Dr. Batch B: Bio Dr. Batch C: Phy Dr.	Histo-L3 Glandular Epithelium Dr.	Phy-L9 Functions of Autonomic Nervous system -II Prof. Dr.	G. Anat-L10 Integumentary system Dr.		Phy-DSL Functions of Autonomic Nervous system -III Dr.
Thursday 14/03/24	<u>SGDs:</u> Batch A: Phy Dr. Batch B: Anat Dr. Batch C: Bio Dr.	Histo-L4 Epithelial Cell Surface Specialization Dr.	G. Anat-L11 Lymphatic system Dr.	PRIME-L6 Types of Research Dr.		IT Skills Data Communication Engr.
Friday 15/03/24	<u>SGDs:</u> Batch A: Bio Dr. Batch B: Phy Dr. Batch C: Anat Dr.	10:00 am to 12:00 pm <u>SGDs:</u> Batch A: Anat Dr. Batch B: Bio Dr. Batch C: Phy Dr.		Histo-L5 Structure & Function of Basement Membrane Dr.		SDL (SLRC/Library)

Note: the timetables are tentative and final versions are always shared before the start of the module

SWAT MEDICAL COLLEGE
DEPARTMENT OF MEDICAL EDUCATION
TIME TABLE FOR FOUNDATION MODULE (1st Year MBBS) SESSION 2023-24
WEEK-6
THEME 4: HUMAN BODY TISSUES, BONES & JOINTS

Days	8:00 to 10:00 am	10:00 to 11:00 am	11:00am to 12:00 pm	12:00 to 1:00 pm	P R A Y E R S B R E A K	1:30 to 2:30 pm
Monday 18/03/24	PRACTICALS/SGDs Batch A: Phy-P Dr. Batch B: Histo-P Dr. Batch C: Bio-SGD Dr.	Hist-L6 Connective tissue Dr.	G. Anat-L12 Nervous system/ANS Dr.	PRIME-L7 Formulation of Research Question Dr.		G. Anat-L13 Radiological anatomy Dr.
Tuesday 19/03/24	PRACTICALS/SGDs Batch A: Bio-SGD Dr. Batch B: Phy-P Dr. Batch C: Histo-P Dr.	G. Anat-L14 Structure of membranes of human body Dr.	G. Anat-L15 Fascia, ligaments and raphe Dr.	Phy-L10 Depolarization and Repolarization Dr.		PRIME-L8 Research objectives Hypothesis-I Dr.
Wednesday 20/03/24	PRACTICALS/SGDs Batch A: Histo-P Dr. Batch B: Bio-SGD Dr. Batch C: Phy-P Dr.	Patho-L3 Necrosis Prof. Dr.	Patho-L4 Inflammation & Repair Prof. Dr.	F. Med-L2 Definition, Stages & medicolegal importance of death. Prof. Dr.		SDL (SLRC/Library)
Thursday 21/03/24	Self-Study SDL (SLRC/Library)					
Friday 22/03/24	Foundation Module-I Written Exam					

Note: the timetables are tentative and final versions are always shared before the start of the module

13. For inquiry and troubleshooting



Please contact.

Associate Professor Dr. Obaid Ur Rahman 0344-1467799 or dr.obaid421@gmail.com

Department of Biochemistry

Swat Medical College

14. Module Evaluation Form

This is an example of feedback form and real-time feedback will be obtained through an electronic link and/or your LMS.

MBBS Year: _____ Block: _____ Module: _____

Date: _____

1. (Unsatisfactory) 2 (Fair) 3 (Satisfactory) 4 (Good) 5 (Excellent)

Category: Course Contents

No.	Question	1	2	3	4	5
1	To what extent did the course contents align with the stated learning objectives of the module?					
2	How clear and comprehensive were the course materials provided in this module?					
3	Were the core topics adequately covered, ensuring a well-rounded understanding of the subject?					
4	How current and up-to-date were the course contents in reflecting recent advancements?					
5	Did the module incorporate real-world applications and case studies effectively?					
Category: Learning Resources						
6	Were the learning resources (e.g., textbooks, online materials, laboratory facilities) readily available and easily accessible?					
7	How helpful were additional learning resources such as supplementary readings or multimedia content?					
8	Did the module offer adequate support for research and independent study?					
9	Were digital resources and online platforms effectively utilized to enhance the learning experience?					
10	Were there sufficient opportunities for hands-on practice and practical application of knowledge?					
Category: Teaching Methods						
11	How well did instructors engage with students and create a supportive learning environment?					
12	Were diverse teaching methods (e.g., lectures, group discussions, simulations) effectively employed?					
13	How responsive were instructors to questions, concerns, and feedback from students?					
14	To what extent did instructors provide timely and constructive feedback on assignments and assessments?					
15	Were opportunities for collaborative learning and peer-to-peer interactions encouraged and facilitated?					
Category: Engagement and Motivation						
16	To what extent did the module use real-world examples and practical applications to engage students?					
17	How well were active learning techniques (e.g., problem-solving, case studies) integrated into the curriculum?					
18	Did the module provide opportunities for students to pursue their individual interests within the subject matter?					

19	Were assessments designed to challenge and motivate students to excel in their studies?					
Category: Inclusivity and Diversity						
20	How well did the module accommodate different learning styles and preferences among students?					
21	Were efforts made to include diverse perspectives, cultures, and backgrounds in the curriculum?					
22	How effectively were accommodations provided for students with varying levels of prior knowledge?					
Category: Overall						
No.	Question	1 (Very Poor)	2 (Poor)	3 (Fair)	4 (Good)	5 (Excellent)
23	How would you rate the overall quality of this module?					

15.Students Diary/Notes

[illegible]

PROGRESS: _____

ACHIEVMENT: _____