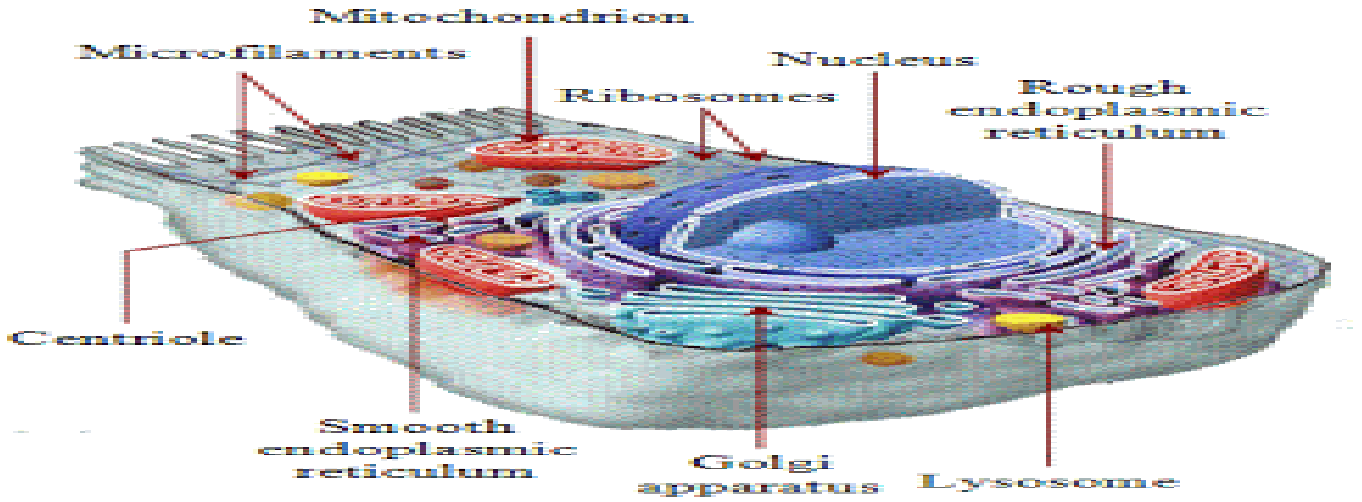
BAQAI MEDICALUNIVERSITY
BAQAI MEDCIAL COLLEGE

FOUNDATION MODULE
FIRST PROFESSIONAL
M.B.B.S.
2024-2025



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LIST OF ABBREVIATIONS

Ana-Lect	Anatomy Lecture	CBL	Case Based Learning
DSL	Directed Self Learning	SDL	Self-directed learning
SGD	Small Group Discussion	DSL	Directed Self learner
PW	Practical Work	OSCE	Objective Structured Clinical Examination
MCQ	Multiple Choice Question	Phy-Lect	Physiology Lecture
BMU	Baqai Medical University	Bio-Lect	Biochemistry Lecture
BMC	Baqai Medical College	Pearls	**P**rofessionalism, **E**thics, **R**esearch, **L**eadership, Communication **S**kills.
LGIF	Large group interactive format	SGIF	Short group interactive format
TS	Teaching strategy		

BAQAI MEDICALUNIVERSITY
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BAQAI MEDICAL UNIVERSITY
VISION STATEMENT

To evolve as a nucleus for higher learning with a resolution to be socially accountable, focused on producing accomplished health care professionals for services in all spheres of life at the national and global level.

BAQAI MEDICAL UNIVERSITY
MISSION STATEMENT

University is dedicated to the growth of competencies in its potential graduates through dissemination of knowledge for patient care, innovation in scholarship, origination of leadership skills, and use of technological advancements and providing.

BAQAI MEDICAL COLLEGE
MISSION STATEMENT

To produce medical graduates, who are accomplished and responsible individuals and have skills for problem solving, clinical judgment, research & leadership for medical practice at the international level and are also aware of the health problems of the less privileged rural and urban population of Pakistan.

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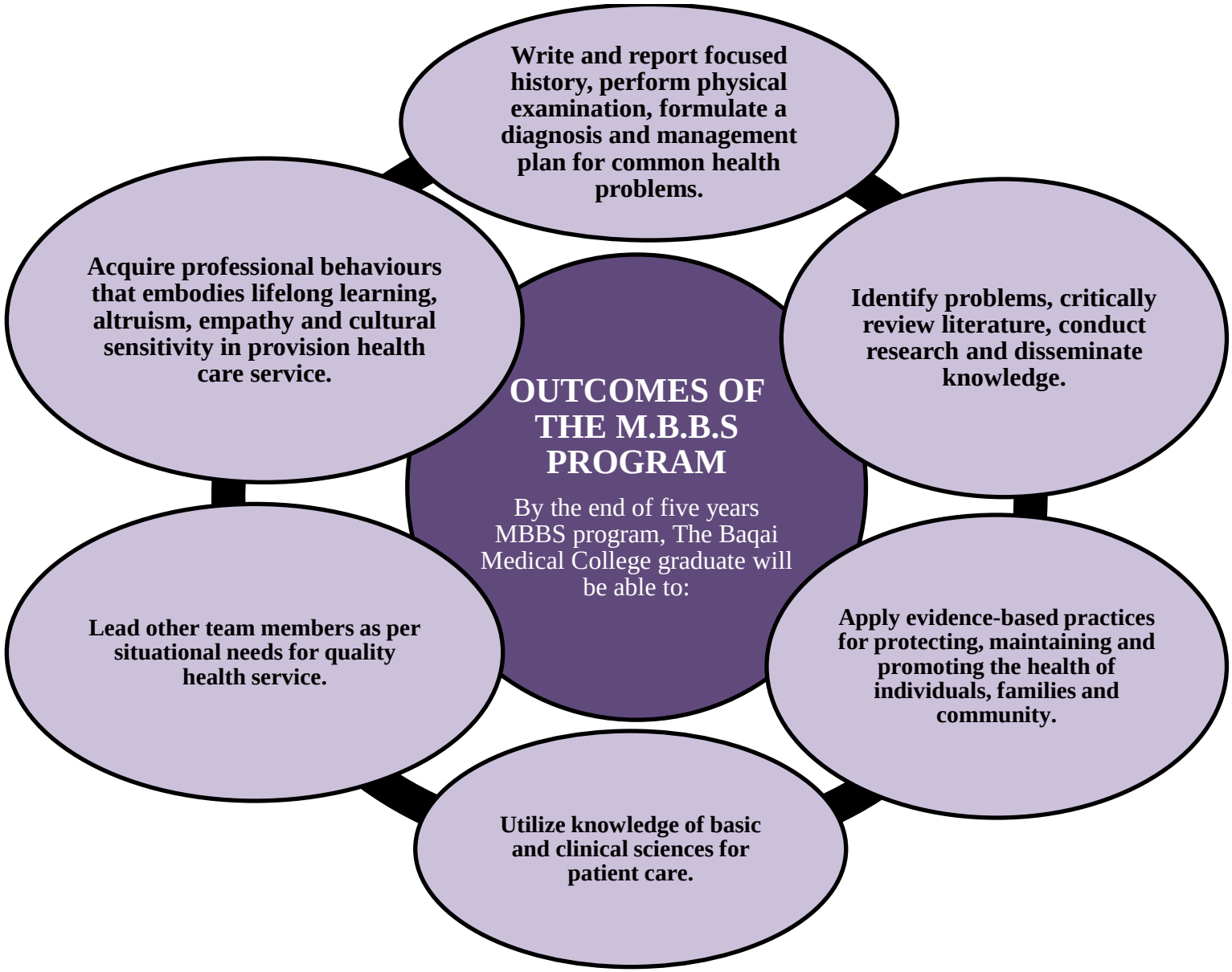

INTRODUCTION:

The Foundation Module is the first module of our Integrated Modular Curriculum for MBBS program. It will give an introduction and awareness about the curriculum in general along with the teaching and learning environment. This module includes basic anatomical, physiological, and biochemical concepts about the human body and its development and is linked with different clinical aspects related to these basic concepts. It also includes the basis of research and orientation about the clinical sciences. The curriculum will be delivered in the form of interactive large and small group formats including lectures, SGDs, practical and DSL.

Duration	**5 weeks (5 + 1 day)**
Dates	**From 13-02-2024 to 18-03-2024**
Placement in Course	**1st Module**
EOA (End of module Assessment)	**18-03-2024**

CURRICULUM COMMITTEE

Chairman Curriculum Committee

1. Prof. Dr Farrukh Naheed, Head, Department. of Obstetrics and Gynecology

Co-Chairman Curriculum Committee

2. Dr Maeesa Sajeel, Associate Professor, Department of Pathology

Secretary of the Curriculum Committee

3. Dr Saadia Akram, Assistant Professor, Department of Gynecology and Obstetrics

BAQAI MEDICALUNIVERSITY
BAQAI MEDCIAL COLLEGE

MBBS SPIRAL 1 HEAD.

PROF DR INAYAT ALI

TEAM MEMBERS

SUBJECT	TEAM MEMBERS
BIOCHEMISTRY	DR IFFAT Coordinator
ANATOMY	DR ANEELA
PHSIOLOGY	DR ALI
BICHEMISTRY	DR FARHAN
PHARMACOLOGY	DR HINA
PATHOLOGY	DR ROZEENA
FORENSIC MEDICINE	DR RAFEY
COMMUNITY MEDICINE	DR AMMARA
MEDICINE	DR MASOODA FATIMA/ DR SAIMA ASKARI
SURGERY	DR DANISH/ DR ABDULLAH
GYNAE/ OBS	DR NIICHAT ASHRAF
RESEARCH	DR MARIA
PEARLS	DR MARIUM IBRAHIM
BEHAVIOR SCIENCES	DR AZRA SHAHEEN,
ORTHOPEADICS	DR DANISH/ DR ABDULLAH
RADIOLOGY	DR MEHWISH

1 ST YEAR MBBS (Coordinator)

DR TAYYABA KAZMI

TIMETABLE AND STUDY GUIDE TEAM

SUBJECT	TEAM MEMBERS
BIOCHEMISTRY	DR IFFAT Coordinator
ANATOMY	DR ANEELA
PHSIOLOGY	DR ALI
BICHEMISTRY	DR FARHAN
PHARMACOLOGY	DR HINA
PATHOLOGY	DR ROZEENA
FORENSIC MEDICINE	DR RAFEY
COMMUNITY MEDICINE	DR AMMARA
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SURGERY	DR DANISH/ DR ABDULLAH
GYNAE/ OBS	DR NIKI-IAT ASHRAF
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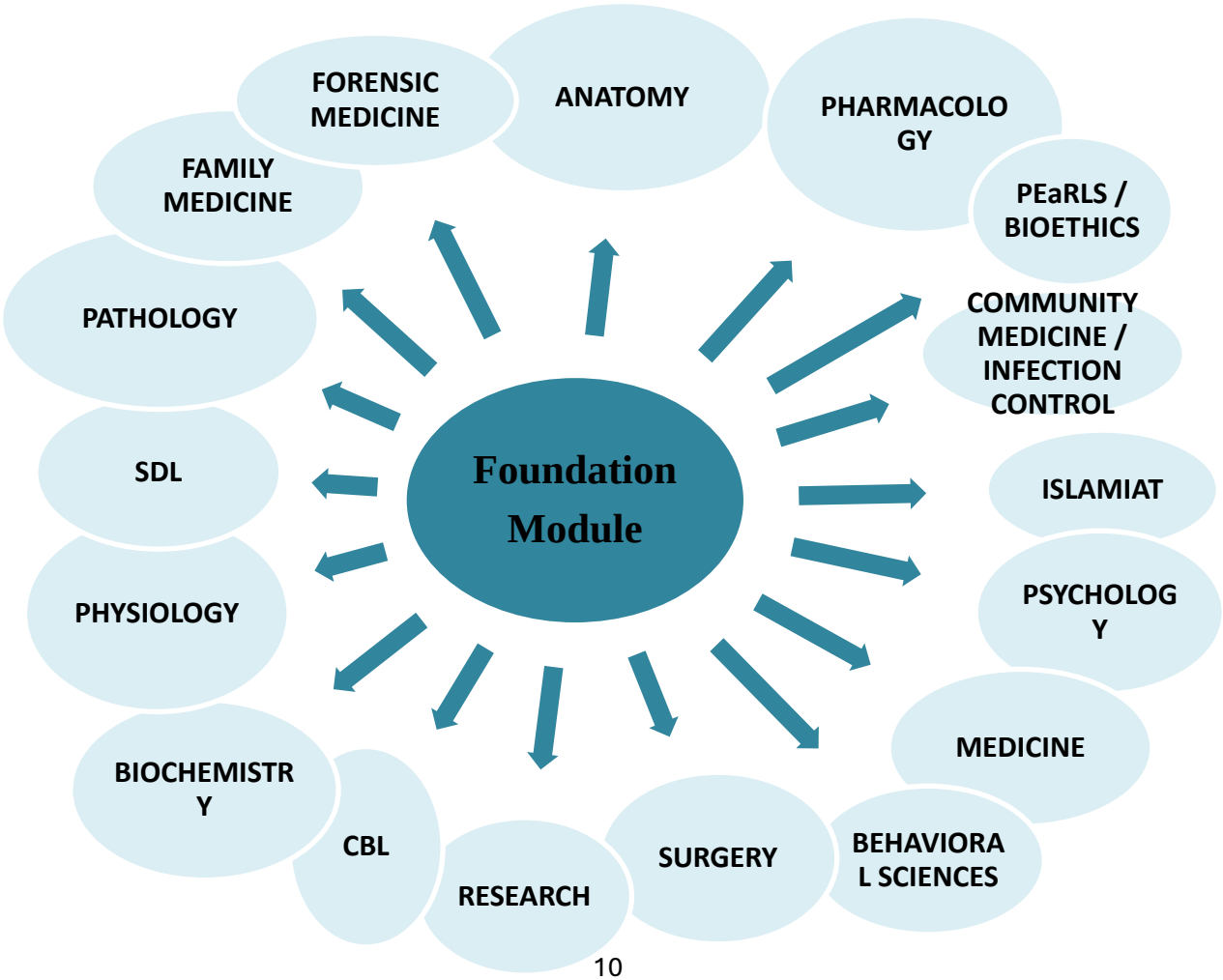

FOUNDATION MODULE OUTCOMES

At the end of the foundation module, 1ST year MBBS students will be able to:

- **1.** Differentiate between physiology, biochemistry & anatomy.
- **2.** Describe the importance of physiology biochemistry & anatomy in human body.
- **3.** Define the different anatomical terms and can differentiate among the various positions and planes of the body.
- **4.** Define carbohydrates and classify carbohydrates.
- **5.** Explain terms related to embryology.
- **6.** Define cell and functional organization of a cell
- **7.** Define the movements occurring at various joints of body (flexion, extension, abduction, adduction, rotation)
- 8. Classify bone based on shapes and region.
- 9. Define glands. And discuss the general feature and structure of exocrine and endocrine glands.
- 10. Define pathology and can describe the different subdivisions of pathology
- 11. Define pharmacology, history of pharmacology, and various branches of pharmacology.
- 12. Define community medicine and discuss disease, health, illness, and well-being.

S.NO	Topics with learning objectives	Subject	Facilitator	Teaching Strategy	Duration	Venue
1	**Anatomy introduction**	**Anatomy**	**Dr. Inayat**	**Lecture**	**60 min:**	**Lecture hall 1**
2	**Biochemistry introduction**	**Biochemistry**	**Dr. Iffat**	**Lecture**	**60 min:**	**Lecture hall 1**
3	**POSITIONS AND PLANES** At the end of session, First Professional M.B.B.S. student will be able to. • Differentiate among the various positions and planes of the body	**Anatomy**	Dr. Saba	Lecture	60 mins	Lecture hall 1
4	**INTRODUCTION TO PHYSIOLOGY:** At the end of session, First Professional M.B.B.S. student will be able to. • Define Physiology & its history. • List the branches of physiology. • Differentiate between physiology, biochemistry & anatomy. • Describe the importance of physiology in human body.	**Physiology**	Dr. Adnan	Lecture	60 mins	Lecture hall 1
5	**ANATOMICAL TERMINOLOGIES-I** At the end of session, First Professional M.B.B.S. student will be able to. • Define the different anatomical terms	**Anatomy**	Dr. Anila Dr. Ayesha Dr. Hina	SGT	90 mins	Lecture hall 1 dissection hall seminar room
6	**INTRODUCTION TO CARBOHYDRATES AND MONOSACCHARIDES AND THEIR DERIVATIVES**	**Biochemistry**	Dr Iffat	Lecture	60 minutes	Lecture Hall 01 Block A,

	At the end of session, First Professional M.B.B.S. student will be able to. • Define carbohydrates and classify carbohydrates with examples of each group. • Describe the biomedical importance of each types of carbohydrate. • Distinguish between aldoderivatives and keto derivatives. • Identify the sugar derivatives of biological importance: deoxysugars, amino sugars, amino sugar acids & glycosides.					
7	**MOLISCH'S TEST (DETECTION OF CARBOHYDRATES PRACTICAL)** At the end of session, First Professional M.B.B.S. student will be able to. • Detect presence of carbohydrate in the given sample of experiment by Molisch's test • Describe the principle of the reaction taking place in the experiment.	**Biochemistry**	Dr Farhan	Practical	120 minutes	Biochemistry Lab, 1st Floor, Block A
8	**BARFOEDS TEST** At the end of session, First Professional M.B.B.S. student will be able to. • Detect the presence of reducing monosaccharides in the given solution by Barfoed's test • Describe the principle of the reaction.	**Biochemistry**	Dr Farhan	Practical	120 minutes	Biochemistry Lab, 1st Floor, Block A

9	**TERMINOLOGY LECTURE- II** At the end of session, First Professional M.B.B.S. student will be able to. • Explain terms related to embryology	**Anatomy**	Dr. Anila Dr. Ayesha Dr. Hina	SGT	60 mins	Lecture hall 1/ dissection hall/ seminar room
10	**LEVEL OF ORGANIZATION OF HUMAN BODY:** At the end of session, First Professional M.B.B.S. student will be able to. • Define Cell. • Describe the functional organization of a cell. • List the level of organization from chemical to human body.	**Physio**	Prof Qamar Aziz	Lecture	60 mins	Lecture hall 1
11	**TERMS OF MOVEMENT - I** At the end of session, First Professional M.B.B.S. student will be able to. • Define the movements occurring at various joints of body (flexion, extension, abduction, adduction, rotation) • Identify movements occurring at specific joints (pronation, supination, inversion, eversion) • Identify the planes at which movements occur	**Anatomy**	Dr. Anila Dr. Ayesha Dr. Hina	SGT	60 mins	Lecture hall 1/ dissection hall/ seminar room.
12	**TERMS OF MOVEMENT II** At the end of session, First Professional M.B.B.S. student will be able to. • Define the movements occurring at various joints of body (flexion, extension, abduction, adduction, rotation) • Identify movements occurring at specific joints (pronation, supination, inversion, eversion)	**Anatomy**	Dr. Anila Dr. Ayesha Dr. Hina	SGT	60 mins	Lecture hall 1/ dissection hall/ seminar room.

	• Identify the planes at which movements occur					
13	**DISACCHARIDES** At the end of session, First Professional M.B.B.S. student will be able to. • List the disaccharides of biological importance. • Briefly describe the chemical properties of three important disaccharides: maltose, lactose, and sucrose	**Biochemistry**	Dr Iffat	Lecture	60 minutes	Lecture Hall 01 Block A,
14	**BENEDICT'S TEST** At the end of session, First Professional M.B.B.S. student will be able to. • Recall the difference between reducing and non-reducing sugars. • Detect the presence of reducing sugars in the given sample by Benedicts test. • Describe the principle of the reaction. • Differentiate between reducing monosaccharide and reducing disaccharide	**Biochemistry**	Dr Farhan	Practical	120 minutes	Biochemistry Lab, 1st Floor, Block A
15	**BONES-I:** At the end of session, First Professional M.B.B.S. student will be able to. • Classify bone based on shapes and region. • Describe the gross structure of young and adult bone.	**Anatomy**	Dr. Anila dr. Ayesha dr. Hina	SGT	60 mins	Lecture hall 1/ dissection hall/ seminar room.
16	**BONES-II:** At the end of session, First Professional M.B.B.S. student will be able to.	**Anatomy**	Dr Anila Dr Aayesha Dr Hina	SGT	60 mins	Lecture hall 1/ dissection hall/ seminar room/.

	• Discuss blood supply of long bones. • Explain the ossification of bone. • Identify the centers of ossification and their significance. • Distinguish between intramembranous and endochondral ossification					
17	**ROLE OF BODY SYSTEMS IN HOMEOSTASIS:** At the end of session, First Professional M.B.B.S. student will be able to. • Define Homeostasis. • Describe the term milieu interior. • Explain the role of body systems. • in maintenance of milieu interior.	**Physio**	Prof. Qamar Aziz	Lecture	90 mins	Lecture hall 1
18	**CARTILAGE** At the end of session, First Professional M.B.B.S. student will be able to. • List the types of cartilage. • Describe the general anatomical features of each type of cartilage with example.	**Anatomy**	Dr. Anila Dr. Aayesha Dr. Hina	SGT	90 mins	Lecture hall 1/ dissection hall/ seminar room
19	**PHYSIOLOGICAL VARIABLES IN HOMEOSTATIC COMPENSATION IN DISEASE:** At the end of session, First Professional M.B.B.S. student will be able to. • List the names of Variables which are tightly regulated in homeostasis.	**Physio**	Dr Adnan	Lecture	60 mins	Lecture hall 1

	• List the names of Variables which are not tightly regulated in homeostasis. • Explain those body's control systems which change throughout the day. • Explain weight and age-related variabilities in different countries. • Differentiate physiological and pathological values among people of different age, sex, ethnicity, and race and understand the importance.					
20	**JOINTS.** At the end of session, First Professional M.B.B.S. student will be able to. • Define joint. • Classify the joints based on structure (uniting material) with example. • Define a synovial joint. • List the features of synovial joint. • Classify Synovial joints based on shape of articulating surfaces and degree of mobility. • Explain the principles of innervation and blood supply of synovial joints	**Anatomy**	Dr Saba	Lecture	60 mins	Lecture hall 1
21	**OLIGOSACCHARIDES** At the end of session, First Professional M.B.B.S. student will be able to. • List the biomedical importance of oligosaccharides.	**Biochemistry**	Dr Iffat	Lecture	60 minutes	Lecture Hall 01 Block A,

	• Identify the function of oligosaccharides in cell membranes					
22	**IODINE TEST (DETECTION OF CARBOHYDRATES PRACTICAL)** At the end of session, First Professional M.B.B.S. student will be able to. • Detect the presence of polysaccharide in the given sample by iodine test. • Describe the principle used and name the reagents used	**Biochemistry**	Dr Farhan	Practical	120 minutes	Biochemistry Lab, 1st Floor, Block A
23	**FEEDBACK SYSTEMS IN HOMEOSTASIS:** At the end of session, First Professional M.B.B.S. student will be able to. • Classify & define feedback mechanisms. • Differentiate between positive & negative feedback mechanisms. • Explain feed forwarding mechanism with its importance. • Discuss the role of feedback mechanism in the maintenance of Homeostasis.	**Physio**	Dr M. Ali	Lecture	90 mins	Lecture hall 1

24	Joint II	**Anatomy**	Dr. Aneela, Dr. Hina & Dr. Ayesha	SGT	60 min:	Lecture hall 1
25	**CELL I** At the end of session, First Professional M.B.B.S. student will be able to. • Identify the structures of cell membrane. • Describe the phospholipid bilayer and its composition. • Explain the Fluid Mosaic Model of cell membrane. • Define cytoplasm. • Discuss components and functions of cytoplasm. • Describe the structure of nuclear membrane. • Explain the component of nucleus and different types of chromatin material. • Describe various cell organelles.	**Anatomy**	Dr Saba	Lecture	90 mins	Lecture hall 1
26	**CELL STRUCTURE AND CELL MEMBRANE:** At the end of session, First Professional M.B.B.S. student will be able to. • Categorize the components of a cell. • Differentiate between protoplasm, cytoplasm & the nucleoplasm. • State the arrangement of cell membrane. • List the channels present in cell membrane with their functions.	**Physio**	Dr M. Ali	Lecture	90 mins	Lecture hall 1

27	**CELL II** At the end of session, First Professional M.B.B.S. student will be able to. • Define Cytoskeleton • Describe the composition and functions of cytoskeleton. • Enumerate the types, distribution, and functions of cytoskeleton. • Describe the details of cytoplasmic filaments and microtubules	**Anatomy**	Dr Saba	Lecture	60 mins	Lecture hall 1
28	**BIOCHEMISTRY OF CELL MEMBRANE** At the end of session, First Professional M.B.B.S. student will be able to. • Describe the chemical composition of the membrane- Lipids, carbohydrates, and proteins in biological cell membrane. • Discuss the functions of carbohydrates in biological membranes. • Identify the formation of lipid bilayer in membranes. • Describe the fluid mosaic model of membrane.	**Biochemisty**	Dr Iffat	Lecture	60 min.	Lecture hall 1.
29	**TRANSPORT MECHANISM-I (ACTIVE TRANSPORT)** At the end of session, First Professional M.B.B.S. student will be able to. • Define active transport. • Differentiate between primary & secondary active transports. • Define the electrogenic nature of "Na+ - K+ Pump".	**Physio**	Prof Qamar Aziz	Lecture	90 min.	Lecture hall 1

	• Explain the role of "Na+ - K+ Pump" in maintaining the cell volume.					
30	**MUSCLES I** At the end of session, First Professional M.B.B.S. student will be able to. • List the components of muscular system. • Classify the muscles according to their fascicular architecture with example	**Anatomy**	Dr Saba	Lecture	60 mins	Lecture hall 1
31	**TRANSPORT MECHANISM-II (PASSIVE TRANSPORT)** At the end of session, First Professional M.B.B.S. student will be able to. • Define passive transport. • List the types of passive transport across the cell membrane. • Differentiate between simple & facilitated diffusion. • Explain the factors that affect diffusion. • Define and differentiate active and passive transport mechanisms. • Discuss the role of electrogenic pump (Na+- K+ ATPase pump) • Define diffusion and list the factors that affect diffusion	**Physio**	Prof Qamar Aziz	Lecture	60 mins	Lecture hall 1
32	**HOMOPOLYSACCHARIDES**-I At the end of session, First Professional M.B.B.S. student will be able to.	**Biochemisty**	Dr, Iffat	Lecture	60 min	Lecture hall 1

	• Define homopolysaccharides. • Differentiate between amylose and amylopectin components of starch in tabular form. • Describe the structure of glycogen. • Identify the building block of inulin. • State the physiological importance of inulin.					
33	**TISSUE PREPARATION AND STAINING** At the end of session, First Professional M.B.B.S. student will be able to. • Describe different stages of tissue preparation. • List various types of stains. • Describe Hematoxylin and Eosin (H&E) staining.	**Anatomy**	Dr Inayat	Lecture	60 mins	Lecture hall 1
34	**EPITHELIUM I** At the end of session, First Professional M.B.B.S. student will be able to. • Describe the structural details of organization of cells in epithelium and other basic tissues of body. • Explain the origin of germinal layer and their derivatives. • Describe the types, locations, and functions of simple epithelium.	**Anatomy**	Dr Inayat	Lecture	60 mins	Lecture hall 1
35	CELL AND ORGANELLES • Identify the structure of cell. • Describe cytoplasm and different organelles present in the cell.	Anatomy	Dr Anila	Practical	120 mins	Histology lab
36	**HOMOPOLYSACCHARIDES-II** At the end of session, First Professional M.B.B.S. student will be able to.	**Biochemisty**	Dr. Iffat	Lecture	90 min	Lecture hall 01

	• Describe 'Roughage 'value of cellulose. • Differentiate between the Dextrin and Dextran. • Discuss the use of dextran as plasma expander in treating hypovolemic shock					
37	**EPITHELIUM II** At the end of session, First Professional M.B.B.S. student will be able to. • Describe the types, locations, and functions of stratified epithelium	**Anatomy**	Dr Inayat	Lecture	90 mins	Lecture hall 1
38	SIMPLE EPITHELIUM At the end of session, First Professional M.B.B.S. student will be able to. • Describe the structural details of organization of cells in epithelium and other basic tissues of body. • Explain the origin of germinal layer and their derivatives. • Describe the types, locations, and functions of simple epithelium. • Identify slides of simple epithelium	Anatomy	Dr Anila	Practical	120 mins	Histology lab
39	**INTRODUCTION TO ENZYMES AND CO-ENZYMES (ENZYME CHEMISTRY)** At the end of session, First Professional M.B.B.S. student will be able to. • Define enzymes. • Describe the catalytic activity of enzymes. • Classify enzymes according to International Union of Biochemistry (IUB).	**Biochemisty**	Dr Kehkashan	Lecture	60 min	Lecture hall 01,

	• Define co-enzymes and classify them. • Recognize the role of metal ions in enzymes (co-factors).					
40	EPITHELIUM III At the end of session, First Professional M.B.B.S. student will be able to. To discuss the location of simple and stratified epithelium	Anatomy	Dr. Inayat	Lecture	60 min	Lecture hall 1
41	**STRATIFIED EPITHELIUM** • Describe the types, locations, and functions of stratified epithelium. • Identify the stratified epithelium under microscope	Anatomy	Dr Anila	Practical	120 mins	Histology lab
42	**GLANDS** At the end of session, First Professional M.B.B.S. student will be able to. • Define glands. • Discuss the general feature and structure of exocrine glands. • Classify exocrine glands based on number of cells, their structure & types of secretions	**Anatomy**	Dr Inayat	Lecture	60 min	Lecture hall 1
43	**TRANSPORT MECHANISM-III (OSMOSIS, OSMOTIC PRESSURES):** At the end of session, First Professional M.B.B.S. student will be able to. • Define osmosis. • Explain the terms osmolality, osmolarity & tonicity of body fluids. • Explain the factors that affects osmosis.	**Physio**	Dr. M. Ali	Lecture	90 mins	Lecture hall 1

	• Summarize the role of osmotic pressure in transport of a substance across cell membrane.					
44	**COATS AND VESICULAR TRANSPORT** At the end of session, First Professional M.B.B.S. student will be able to. • Define vesicular transport. • Differentiate between endo & exocytosis. • Summarize the mechanism of other vesicular transport.	**Physio**	Dr. M. Ali	Lecture	60 mins	Lecture hall 1
45	**INTRODUCTION TO PATHOLOGY:** At the end of session, First Professional M.B.B.S. student will be able to. • Define Pathology • Describe the different Subdivisions of Pathology • Integration of Pathology and other Basic Sciences.	**Patho**	Dr Naseema	Lecture	60 mins	Lecture hall 1
46	**CELL ORGANELLES- i.e., GOLGI APPARATUS, LYSOSOMES AND PEROXISOMES:** At the end of session, First Professional M.B.B.S. student will be able to. • List membranous & non-membranous cell organelles. • Explain the role of each organelle in normal functioning of a cell. • Define function of Endoplasmic Reticulum • Explain the functions of Golgi Apparatus • Define function of Lysosomes • Define function of Peroxisomes	**Physio**	Dr Saba Abrar	Lecture	90 mins	Lecture hall 1

47	**CELL ORGANELLES II, MITOCHONDRIA & CYTOSKELETON:** At the end of session, First Professional M.B.B.S. student will be able to. • Define function of mitochondria • Explain the variation in number of mitochondria in different organs. • Explain ATP production by the mitochondria. • Explain self-replication of mitochondria. • Explain chemiosmotic mechanism in ATP formation. • Name uses of ATP in three major cellular functions • Name the filaments and tubular structures in the cell. • Summarize the functions of microtubules in a cell	**Physio**	Prof Qamar Aziz	Lecture	60 mins	Lecture hall 1
48	**CELL RECEPTORS, 2ND MESSENGER & GROWTH FACTORS** At the end of session, First Professional M.B.B.S. student will be able to. • Define receptor. • Classify the types of receptors. • Interpret the mechanism of stimulation of receptor with the types of stimulus. • Explain 2nd messenger system. • Define and identify the second messengers. • Classify different second messengers.	**Physio**	Prof Qamar Aziz	Lecture	90 mins	Lecture hall 1

	• Explain the function with mechanism of each maize the role of growth factor in cellular growth.					
49	**PATHOLOGICAL TERMINOLOGIES** At the end of session, First Professional M.B.B.S. student will be able to. • Define different pathological terms. • Define cell death. • List the two patterns of cell death. • Describe necrosis and apoptosis. • List examples of necrosis and apoptosis	**Patho**	Dr. Naseema	Lecture	90 mins	Lecture hall 1
50	**CELL DIVISION** At the end of session, First Professional M.B.B.S. student will be able to. • List steps of cell division during mitosis • Explain the significance of mitosis. • Define Meiosis • List the steps of meiosis. • Differentiate first and second meiotic divisions. • State the phases of meiotic divisions. • Justify the importance of meiosis in both sexes. • Differentiate between mitosis and meiosis	**Anatomy**	Dr Tayyaba	Lecture	60 mins	Lecture hall 1
51	**CELL INJURY - I** At the end of session, First Professional M.B.B.S. student will be able to. • Define inflammation. • List the hall marks of inflammation.	**Patho**	Dr. Naseema	Lecture	60 mins	Lecture hall 1

	• List the types of inflammation					
52	**ENZYME INHIBITION AND FEEDBACK REGULATION (ENZYME CHEMISTRY)** At the end of session, First Professional M.B.B.S. student will be able to. • Define and classify enzyme inhibition. • Generalize the characteristics of competitive inhibition. • Give examples of competitive inhibition in biological system and as clinically used drugs. • Generalize the characteristics of non-competitive inhibition reversible and irreversible. • Describe feedback regulation mechanism of enzyme activity.	**Biochemistry**	Dr Kehkashan	Lecture	90 min	Lecture hall 01.
53	**MECHANISM OF ACTION OF ENZYMES (ENZYME CHEMISTRY)** At the end of session, First Professional M.B.B.S. student will be able to. • Define specificity of enzymes • classify the different types of specificity. • Describe the enzyme functions by lowering the activation energy. • Describe the Lock and Key theory and induced fit theory of mechanism of action of enzymes. • List various factors that affect the activity of enzyme	**Biochemistry**	Dr Kehkashan	Lecture	60 min	Lecture hall 1,

54	**OVERVIEW OF PHARMACOLOGY & ITS BRANCHES** At the end of session, First Professional M.B.B.S. student will be able to. • Define Pharmacology. • Discuss the history of Pharmacology. • List the various branches of Pharmacology. • Define Pharmacokinetics and Pharmacodynamics. • Define a drug. • List the major sources of drugs with examples.	**Pharma**	Dr Faraz	Lecture	60 mins	Lecture hall 1
55	**Introduction to medical education**	**medical education**	Dr. Shams Nadeem	Lecture	60 mins	Lecture hall 1
56	**INTRODUCTION TO REPRODUCTIVE ORGANS** At the end of session, First Professional M.B.B.S. student will be able to. • Identify the male & female reproductive organs. • Describe ovarian cycle. • Relate ovarian cycle with uterine cycle. • Describe the cyclical changes occurring in uterus, preparation of uterus for implantation.	**Anatomy**	Dr. Tayyaba	Lecture	60 mins	Lecture hall 1
57	**CELLULAR ADAPTATION** At the end of session, First Professional M.B.B.S. student will be able to. • Define Cellular Adaptation • Define the following conditions with few examples for each:	**Patho**	Dr. Naseema	Lecture	90 mins	Lecture hall 1

	• Hyperplasia • Atrophy / Hypertrophy • Metaplasia / Dysplasia					
58	**ACTIVITY ON TRANSPORT MECHANISM+CELL RECEPTORS** At the end of session, First Professional M.B.B.S. student will be able to. • Show videos on different types of transport. • SEQ on transport mechanisms. • MCQ practice on transport mechanism and receptors.	**Physio**	Dr. Saleemullah	Lecture	90 min	Lecture hall 1
59	**ENZYMES OF CLINICAL IMPORTANCE** At the end of session, First Professional M.B.B.S. student will be able to. • Enzymes used for estimation of biomolecules. • Identify important enzymes used for therapeutic purposes. • Outline the sources of enzymes: plasma derived, and cell derived.	**Biochemistry**	Dr Kehkashan	Lecture	60 min	Lecture hall 1.
60	**OVERVIEW OF DRUG RECEPTORS** At the end of session, First Professional M.B.B.S. student will be able to. • Explain major types of drug receptors with examples. • Explain signal transduction pathway.	**Pharma**	**Dr. Sehrish**	Lecture	60 mins	Lecture hall 1
61	**INTRODUCTION TO MEDICINE** At the end of session, First Professional M.B.B.S. student will be able to. • Define medicine and its allied subjects.	**Medicine**	Dr. Masooda	Lecture	60 mins	Lecture hall 1

	• Discuss significance of subject of medicine in clinical practice • Employ the relation of basic health sciences with subject of medicine					
62	**INTRODUCTION TO COMMUNITY MEDICINE** At the end of session, First Professional M.B.B.S. student will be able to. • Define Community Medicine • Discuss Disease, Health, Illness and Well-Being	**Community Medicine**	Dr Nazia Jameel	Lecture	60 mins	Lecture hall1
63	**OOGENESIS** At the end of session, First Professional M.B.B.S. student will be able to. • Define gametogenesis (oogenesis & Spermatogenesis) • Describe the process of oogenesis. • Differentiate between primary and secondary oocytes. Compare the male and female gametes.	**Anatomy**	Dr Tayyaba	Lecture	90 mins	Lecture hall 1
64	**SPERMIOGENESIS** At the end of session, First Professional M.B.B.S. student will be able to. • Describe the sequence events of spermatogenesis. • Discuss the importance of mitosis & meiosis in spermatogenesis. • List the steps in spermatogenesis. • Differentiate between spermatogenesis & spermatogenesis	**Anatomy**	Dr Tayyaba	Lecture	60min	Lecture hall 1
65	**DEFECTIVE OOGENESIS AND SPERMATOGENESIS**	**Gynae**	Dr. Nikhat	Lecture	60min	Lecture hall 1

	At the end of session, First Professional M.B.B.S. student will be able to. • Define Oogenesis and Spermatogenesis • List the common factors producing defects in oogenesis and spermatogenesis. • Understand the implications of disorders in gametogenesis in affecting reproductive health and fertility. • Identify the common birth defects in numerical abnormalities of chromosomes.					
66	**NERVOUS SYSTEM- I:** SOMATIC NERVOUS SYSTEM AND TYPICAL SPINAL. At the end of session, First Professional M.B.B.S. student will be able to. • List the basic divisions of Nervous system. • Define the various components of Central and Peripheral nervous systems (CNS and PNS) • Describe the structure of Neuron. • Classify neurons on the basis of number of processes and length of fibers. • Define a nerve and its coverings. • Differentiate between myelinated and unmyelinated fibers. • List various types of Neuroglia. • State their functions. • Define a spinal nerve. • Enumerate the spinal nerves in different regions.	**Anatomy**	Dr Saba	Lecture	90 min	Lecture hall 1

	• Identify their location and site of emergency. • Identify various components of a typical spinal nerve. • Describe the fate of rami. • Describe the distribution of gray rami.					
67	**INTERCELLULAR COMMUNICATIONS** At the end of session, First Professional M.B.B.S. student will be able to. • Define intercellular communication. • Describe the process of intercellular communication. • List cell adhesion molecules. • Classify the types of cellular connections. • List and describe the ways by which cells communicates with each other.	**Physio**	Prof Qamar Aziz	Lecture	60 mins	Lecture hall 1
68	**NERVOUS SYSTEM-II:** AUTONOMIC NERVOUS SYSTEM (ANS) At the end of session, First Professional M.B.B.S. student will be able to. • Describe the anatomical components of ANS. • Differentiate between sympathetic and parasympathetic systems based on gross structure and distribution	**Anatomy**	Dr. Saba	Lecture	90 min	Lecture hall 1
69	**TRANSPORTATION OF OVUM, FERTILIZATION & 1ST WEEK OF DEVELOPMENT** At the end of session, First Professional M.B.B.S. student will be able to. • Explain transportation of sperm and ovum.	**Anatomy**	Dr Tayyaba	Lecture	60 min	Lecture hall 1

	• Define fertilization. • Discuss phases and results of fertilization. • Discuss the clinical aspects of fertilization. • Discuss the formation of zygote. • Explain the transport of zygote from ampulla of fallopian tube to the uterine cavity. • Discuss initial stages of development by the process of cleavage. • Explain the formation of blastocyst.					
70	**CLINICAL HISTORY TAKING** At the end of session, First Professional M.B.B.S. student will be able to. • Record biodata of the patient who approach the physician to get treated. • Recall basic units of clinical history required to be asked from patient or attendants. • Interpret significance of clinical history in diagnosis and management of disease	**Medicine**	**Dr. Masooda Fatima**	Lecture	90 min	Lecture hall 1
71	**TYPES OF INTERCELLULAR COMMUNICATIONS** At the end of session, First Professional M.B.B.S. student will be able to. • Categorize intercellular communication. • Explain the function of each.	**Physio**	Dr. M. Ali	Lecture	90 mins	Lecture hall 1
72	**CAMS & CELLS CONNECTIONS**	**Physio**	Dr Saba Abrar	Lecture	90 mins	Lecture hall 1

	At the end of session, First Professional M.B.B.S. student will be able to. • Name the cell adhesion molecules. • Categorize the cellular connections. • List the importance of intercellular connections.					
73	**ABNORMAL IMPLANTATION OF FERTILIZED OOCYTE (EMBRYO)** At the end of session, First Professional M.B.B.S. student will be able to. • Define Implantation. • Explain the stages of implantation. • Define abnormal implantation. • Discuss the etiopathology of abnormal implantation. • List the risk factors causing abnormal implantation. • Memorize the disorders caused by abnormal implantation.	**Gynae**	Dr. Nikhat	Lecture	60 min	Lecture hall 1
74	**CELL JUNCTIONS** At the end of session, First Professional M.B.B.S. student will be able to. • Define cell junction. • Name the junctions along the lateral and basal surfaces of cells. • Discuss the structure and functions of the five main types of cell junction. • List the sites of distribution & components of junctional complex.	**Anatomy**	Dr. Inayat	Lecture	90 min	Lecture hall 1

75	**LOCOMOTION OF CELLS** At the end of session, First Professional M.B.B.S. student will be able to. • Define amoeboid movement. • Define Ciliary movement. • Name those cells which exhibit amoeboid movements. • Explain the mechanism of amoeboid locomotion. • Summarize Chemotaxis	**PHYSIO**	Dr. Saba Abrar	Lecture	60 min	Lecture Hall 1
76	**2ND WEEK OF DEVELOPMENT I** At the end of session, First Professional M.B.B.S. student will be able to. • Define implantation. • Explain the formation of outer and inner cell masses. • Discuss the further development of outer cell mass (trophoblast) • Differentiate syncytiotrophoblast and cytotrophoblast with its microscopic appearance. • Describe the process of implantation (day by day changes)	**Anatomy**	Dr Tayyaba	Lecture	60 min	Lecture hall 1
77	**CLINICAL EXAMINATION** At the end of session, First Professional M.B.B.S. student will be able to. • Describe importance of clinical examination in diagnosis and treatment of patients • Memorize types of clinical examination done by the physicians to treat the patient	**Medicine**	Dr. Masooda	Lecture	60 min	Lecture hall 1

78	**INTEGUMENTARY SYSTEM** At the end of session, First Professional M.B.B.S. student will be able to. • Define the term integumentary system. • Discuss the functions of the skin. • Differentiate between epidermis and dermis. • Discuss the significance of tension lines	**Anatomy**	Dr Saba	Lecture	60 min	Lecture hall 1
79	**3RD WEEK OF DEVELOPMENT I: GASTRULATION, PRIMITIVE STREAK AND NOTOCHORD** At the end of session, First Professional M.B.B.S. student will be able to. • Define gastrulation (formation of three germ layers) • Discuss the development of primitive streak & related congenital anomalies (Sacrococcygeal Teratoma) • Describe the development of notochordal process, notochord canal, prechordal plate and cloacal membrane. • Describe the location of allantois and its importance. • Discuss the formation of secondary and tertiary chorionic villi. • Describe the development of intra-embryonic coelom.	**Anatomy**	Dr Tayyaba	Lecture	90 min	Lecture hall 1
80	**NUCLEUS AND INTRODUCTION TO GENETICS** At the end of session, First Professional M.B.B.S. student will be able to. • Define nucleus. • List functions of nucleus	**PHYSIO**	Prof. Qamer Aziz	Lecture	60 min	Lecture Hall 1

	• Define nuclear membrane and pores. • Explain nucleoli and formation of ribosomes. • Explain the function of genes.					
818 2	**Iceberg Phenomenon** At the end of session, First Professional M.B.B.S. student will be able to. • Describe the iceberg phenomenon. • Explain the natural history of disease	**Community Medicine**	Dr Nazia Jameel	Lecture	60 mins	Lecture hall 1
83	**NUCLEOTIDES (NUCLEIC ACID CHEMISTRY)** At the end of session, First Professional M.B.B.S. student will be able to. • Describe the formation of nucleotide by esterification of sugar molecule of nucleoside with phosphoric acid group. • Differentiate between nucleosides and nucleotides. • List the various biologically important nucleotides.	**Biochemistry**	Dr Benish	Lecture	60 min	Lecture hall 1
84	**SKIN** At the end of session, First Professional M.B.B.S. student will be able to. • Discuss the main determinant of skin color. • Identify the appendages of the skin. • Differentiate between superficial & deep fascia. • Identify different layers of skin under the microscope	**Anatomy**	Dr. Anila/ Dr. Ayesha/ Dr. Hina	SGT	60 min	Lecture hall 1/dissection hall/seminar room
85	**NUCLEOSIDES (NUCLEIC ACID CHEMISTRY)** • List the different types of purine and pyrimidine bases that occur in a nucleotide.	**Biochemistry**	Dr. Benish	Lecture	60 min	Lecture hall 1

	• Identify the purine and pyrimidine nucleus and the positions of C and N atoms present in the nucleus. • Define a nucleoside. Describe the formation of 'glycosidic linkage' in nucleosides.					
86	**FETAL MEMBRANES AMNION, CHORION, UMBILICAL CORD & YOLK-SAC, DISORDERS OF AMNIOTIC FLUID.** At the end of session, First Professional M.B.B.S. student will be able to. • List the fetal membranes. • Describe the structure of amnion & chorion. • Describe the formation, circulation, and function of amniotic fluid. • Discuss the development of chorion and its complications. • Discuss the disorder related to amniotic fluid volume. • Describe the relationship of twinning (multiple pregnancies) with fetal membranes. • Describe the umbilical cord (morphology, composite structures, positioning, and fate) • Discuss the fate of umbilical vesicle (yolk sac)	**Anatomy**	Dr. Tayyaba	Lecture	90 min	Lecture hall 1
87	**Connective Tissue** At the end of session, First Professional M.B.B.S. student will be able to. • Discuss the Composition of CT	**Anatomy**	Dr. Inayat	Lecture	60 min	Lecture hall 1

88	**ABNORMAL IMPLANTATION OF FERTILIZED OOCYTE(EMBRYO)** At the end of session, First Professional M.B.B.S. student will be able to. • Define implantation. • Explain the stages of implantation. • Define abnormal implantation. • Discuss the etiopathology of abnormal implantation. • List the risk factors causing abnormal implantation. • Memorized the disorders caused by abnormal implantation.	**Gynae**	Dr. Nazish	Lecture	60 min	Lecture hall 1
89	**LEVEL OF PREVENTION** At the end of session, First Professional M.B.B.S. student will be able to. • Enumerate the level of prevention. • Describe the level of prevention.	**Community Medicine**	Dr Nazia Jameel	Lecture	45 mins	Lecture hall 1
90	**NUCLEIC ACID (NUCLEIC ACID CHEMISTRY)** At the end of session, First Professional M.B.B.S. student will be able to. • Classify the types of nucleic acid. • Identify the phosphodiester linkage formed between the nucleotides. • Describe in detail the structural characteristics of DNA- "Watson and Crick Model of Double Helix." • Briefly describe the structural organization of Eukaryotic genome.	**Biochemistry**	Dr Benish	Lecture	60 min	Lecture hall 1

	• Classify the types of RNA molecules and their salient features					
91	**FETAL MEMBRANES AMNION, CHORION, UMBILICAL CORD & YOLK-SAC, DISORDERS OF AMNIOTIC FLUID.** At the end of session, First Professional M.B.B.S. student will be able to. • List the fetal membranes. • Describe the structure of amnion & chorion. • Describe the formation, circulation and function of amniotic fluid. • Discuss the development of chorion and its complications. • Discuss the disorder related to amniotic fluid volume. • Describe the relationship of twinning (multiple pregnancies) with fetal membranes. • Describe the umbilical cord (morphology, composite structures, positioning, and fate) • Discuss the fate of umbilical vesicle (yolk sac)	**Anatomy**	Dr. Tayyaba	Lecture	90 min	Lecture hall 1
92	**PLACENTA & PRENATAL DIAGNOSIS** At the end of session, First Professional M.B.B.S. student will be able to. • Describe the changes in the maternal endometrium with formation of decidua and decidual reaction. • Describe the different types of chorionic villi.	**Anatomy**	Dr. Tayyaba	Lecture	60 min	Lecture hall 1

	• Explain the development of placenta, both the fetal and maternal part • Describe the placental circulation and barrier. • Describe the functions of placenta. • Discuss prenatal diagnosis. • List the types of prenatal diagnosis. • Differentiate between amniocentesis, chorionic villus sampling, cordocentesis, • Ultrasonography, maternal AFP levels in terms of indication, time of performance and technique • Describe the indications and goals of prenatal diagnosis.					
93	**PLACENTAL ABNORMALATIES** At the end of session, First Professional M.B.B.S. student will be able to. • Define placenta. • Briefly discuss the development of normal placenta. • Understand the gross anatomy of normal placenta. • Describe various types of placental abnormalities. • Describe the various functions of the placenta. • Discuss each type of placental abnormalities individually and its clinical presentation	**Gynae**	Dr. Nikhat	Lecture	60 min	Lecture hall 1

BIOCHEMISTRY PRACTICALS/LAB:

S.NO	Topics with learning objectives	Subject	Facilitator	Teaching Strategy	Duration	Venue
01	**SELIWANOFF'S TEST** At the end of session, First Professional M.B.B.S. student will be able to. • Identify the difference between keto and Aldo sugar and detect the presence of these sugars by seliwanoff test. • Describe the principle of the reaction.	**Biochemistry**	Dr Farhan	Practical	120 minutes	Biochemistry Lab, 1st Floor, Block A
02	**OSAZONE TEST** At the end of session, First Professional M.B.B.S. student will be able to. • Identify the specific reducing sugar by phenyl hydrazine test via formation of characteristic osazone crystals. • Identify the type of crystals formed by different sugars	**Biochemistry**	Dr Farhan	Practical	120 minutes	Biochemistry Lab, 1st Floor, Block A

PYSIOLOGY PRACTICALS/LAB:

S.NO	Topics with learning objectives	Subject	Facilitator	Teaching Strategy	Duration	Venue
1.	**INTRODUCTION AND SIGNIFICANCE OF PHYSIOLOGY** At the end of session, First Professional M.B.B.S. student will be able to. • Introduce Dept. of Physiology • Explain the importance of Physiology with the help of examples of normal BP, ECG, functions of insulin & upper & lower motor neurons	Physiology	Dr. M Ali	Practical	120 minutes	Physiology Lab, 1st Floor, Block A
2.	**INTRODUCTION OF PHYSIOLOGY PRACTICALS** At the end of session, First Professional M.B.B.S. student will be able to. • Introduce Physiology practical with relevant instruments. • Introduce hematology practical with relevant apparatus	Physiology	Dr. M Ali	Practical	120 minutes	Physiology Lab, 1st Floor, Block A
3.	**STUDY OF MICROSCOPE** At the end of session, First Professional M.B.B.S. student will be able to. • Demonstrate introduction, history, magnification & resolving power of microscope. • Describe parts of microscope & their functions • Arrange practice for students to identify different parts of microscope	Physiology	Dr. M Ali	Practical	120 minutes	Physiology Lab, 1st Floor, Block A

4.	**STUDY OF KYMOGRAPH** At the end of session, First Professional M.B.B.S. student will be able to. • Demonstrate different types of kymograph & their uses. • Identify different parts of student's kymograph & recall their functions	Physiology	Dr. M Ali	Practical	120 minutes	Physiology Lab, 1st Floor, Block A
5.	**INTRODUCTION TO POWER LAB** At the end of session, First Professional M.B.B.S. student will be able to. • Demonstrate analogue, hardware & computer of power lab. • Generate their own IDs on power lab:	Physiology	Dr. M Ali	Practical	120 minutes	Physiology Lab, 1st Floor, Block A

ANATOMY PRACTICALS/LAB:

1.	MICROSCOPE AND ITS PARTS. • Identify different parts of microscope. • Demonstration of different stages of tissue preparation & staining • Identify the cell and its organelles under microscope. • Identify various types of simple epithelium under microscope. • Identify various types of stratified epithelium under microscope. • Identify various glands under microscope.	Anatomy	Dr Anila	Practical	120 mins	Histology lab

REFERENCES BOOKS AND OTHER READING RESOURCES

Gross Anatomy	BD Chaurasia's **Handbook of GENERAL ANATOMY** 1. Chapter-1--Introduction-Page 1-28 2. Chapter-2—Skeleton- Page 29-57 3. Chapter-3---Joints –Page 58-82 4. Chapter-4—Muscles—Page 83-100 **Netter Atlas of Human Anatomy**
Embryology	**Langman's Embryology** 1. Chapter-2—Gametogenesis-Page 12-29 2. Chapter-3—First week of Development-Page 30-43 3. Chapter-4—2nd week of development--Page 44-53 4. Chapter-5—3rd week of development-Page 54-65 5. Chapter-6—3rd week to birth-Page 66-87Chapter-7—Placenta-Page 92-101
Histology	**Laiq Hussain Histology** 1. Chapter-1-introduction—Page 1-10 2. Chapter-2-Epithelium—Page 11-30 3. Chapter-3-Glands—Page 31-38Chapter-4-Connective tissue—Page 39-60
Physiology	Guyton and Hall. "Textbook of Medical Physiology"-13th edition Ganong`s "Review Of Medical Physiology"-25th Edition

Biochemistry	Lippincott Illustrated Reviews: Biochemistry. Harpers illustrated Biochemistry. Textbook of Medical Biochemistry by MN Chatterjee & Rana Shinde. DM Vasudevan – Textbook of Biochemistry.
Pharmacology	Basic and Clinical Pharmacology by Bertram Katzung, 14th Edition. Katzung and Trevor's Pharmacology Examination and Board Review, 14th Edition. Lippincott's illustrated review of Pharmacology. 7th Edition.
Pathology	Robin`s Basic Pathology-10th Edition
Community Medicine	Ilyas M, Public Health and Community Medicine, 7th Edition, Karachi, Pakistan, Time Publisher, 2007. Maxcy-Rosenau-Last, public Health and Preventive Medicine, 13th Edition, USA, Prentice-Hall International Inc, 1992. K.Park, Preventive and Social Medicine, 20th Edition, Jabalpur (India), M/s Banarsidas Bhanot, Publisher, 2009.
Medicine	Davidson`s Principles and Practice of Medicine-22nd Edition
Clinical Examination	Talley and O'Connor's Clinical Examination-6th Edition
Surgery	Bailey And Love Short Practice Of Surgery, 27th Edition Last's anatomy 12th edition Snell's anatomy by regions 10thedition
Research	Introduction to Research in Health Sciences- Stephen Polgar, Shane A. Thomas. Biomedical Research Proposal Writing- Syed Sharaf Ali Shah, Zarfshan Tahir, Rozina Karmaliani. Epidemiology - Leon Gordis; Fifth Edition.
PEARLs	https://www.mededportal.org/publication/10610/
PAEDS	Nelson Textbook of Pediatric 21st edition. Textbook of Pediatrics (PPA) Fifth edition. Basis of Pediatrics (Pervez Akbar Khan) 10th edition

ASSESSMENT METHODS:

THEORY:

❖ **Essay Questions- Short Essay Questions (SEQs)** are used to assess objectives covered in each module.

- 6 SEQs are given (no choice).
- Time duration 90 minutes.
- Students write their answers in an answer sheet.

❖ **Best Choice Questions (BCQs)** also known as MCQs (Multiple Choice Questions) are used to assess objectives covered in each module.

- A BCQ has a statement or clinical scenario followed by four options (likely answer).
- Students after reading the statement/scenario select ONE, the most appropriate response from the given list of options.
- Correct answer carries one mark, and incorrect 'zero mark'. There is no negative marking.
- Students mark their responses on specified computer-based/OMR sheet designed for BMC, BMU.

❖ **OSPE/OSCE: Objective Structured Practical/Clinical Examination:**

- Each student will be assessed on the same content and have the same time to complete the task.
- Comprised of 12-25 stations.
- Each station may assess a variety of clinical tasks; these tasks may include history taking, physical examination, skills and application of skills and knowledge.
- Stations are observed, unobserved, interactive and rest stations.
- Observed and interactive stations will be assessed by internal or external examiners.
- Unobserved will be static stations in which there may be an X-ray, Labs reports, pictures, clinical scenarios with related questions for students to answer.
- A rest station is a station where there is no task given and, in this time, student can organize his/her thoughts.

INTERNAL EVALUATION:

- Students will be assessed to determine achievement of module objectives through the following: o **Module Examination:** will be scheduled on completion of each module. The method of examination comprises theory exam which includes BCQs and OSPE (Objective Structured Practical Examination).

- **Graded Assessment of students by Individual Department**: Quiz, viva, practical, assignment, small group activities such as CBL, online assessment, ward activities, examination, and Practical journals.
- Marks of both modular examination and graded assessment will constitute 20% weightage which will be added to Annual Examination.

FORMATIVE ASSESSMENT:

- Individual departments may hold quiz or short answer questions to help students assess their own learning.
- The marks obtained are not included in the internal evaluation.

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TIMETABLE FOR 1st YEAR MBBS 2024
FOUNDATION MODULE
(13th Feb- 16th Feb 2024) Week 1

DAYS	8:30-9:30	9:30-10:30	10:30-11:00	11:00-12:00	12:00-1:00	1:00-1:30	1:30-3:00	3:00-4:30
Monday 12-02-24				DAY 1				
Tuesday 13-02-24	**ANATOMY** Anatomy Introduction **(Prof Inayat)**	**BIOCHEM** Introduction to Biochemistry **(Dr. Iffat)**	Tea break	**ANATOMY** Planes and position of the body **Dr Saba**	**PHYSIO** Introduction to Physiology **(Dr. Adnan)**	Lunch and Prayer	**ANATOMY** Anatomical Terminologies-I SGT **(Dr Aneela, Dr Hina, Dr Ayesha)**	**LAB INTRODUCTON** Anatomy+ Physiology+ Biochemistry **(Dr.Ali, Dr.Farhan, Dr.Aneela)**
Wednesday 14-02-24	**BIOCHEM** Intro to carbohydrates and Monosaccharides and derivatives **(Dr. Iffat)**	**ANATOMY** Anatomical Terminologies-II **SGT (Dr Aneela, Dr Hina, Dr Ayesha)**		**PHYSIO** Level of Organization of Human Body **(Dr. Qamer Aziz)**	**ANATOMY** Terms of Movements I SGT **(Dr Aneela, Dr Hina, Dr Ayesha)**		**SDL**	**ANATOMY** Terms of Movements II SGT **(Dr Aneela, Dr Hina, Dr Ayesha)**
Thursday 15-02-24	**BIOCHEM** Disaccharides **(Dr. Iffat)**	**ANATOMY** Bones-I: SGT **(Dr Aneela, Dr Hina, Dr Ayesha)**		**ANATOMY** Bone-II SGT **(Dr Aneela, Dr Hina, Dr Ayesha)**	**SDL**		**PHYSIO** Role of Body System in Homeostasis **(Dr. Qamer Aziz)**	**ANATOMY** Cartilage SGT **(Dr Aneela, Dr Hina, Dr Ayesha)**
Friday 16-02-24	**PHYSIO** Physiological Variables In Homeostatic Compensation In Disease **(Dr. Adnan)**	**ANATOMY** Joint: I SGT **(Dr Aneela, Dr Hina, Dr Ayesha)**		**BIOCHEM** Oligosaccharides **(Dr. Iffat)**	12:30-1:00 **ISLAMIAT**		**SDL**	**PHYSIO** Feedback Mechanism in homeostasis **(Dr. M.Ali)**

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(19th Feb- 23rd Feb 2024) **Week 2**

DAYS	8:30-9:30	9:30-10:30	10:30-11:00	11:00-01:00	1:00-1:30	1:30-3:00	3:00-4:30
Monday 19-2-24	ANATOMY Joint: II SGT (Dr Aneela, Dr Hina, Dr Ayesha)	SDL	Tea break	PRACTICAL A,B & C Anatomy Microscope and its parts (Histology)	Lunch & Prayer	ANATOMY Cell I DR SABA	PHYSIO Cell structure and Cell Membrane (Dr. M. Ali)
Tuesday 20-2-24	ANATOMY Cell II DR SABA	BIOCHEM Biochemistry of Cell Membrane (Dr.Iffat)		PRACTICAL A,B & C Biochemistry Introduction of carbohydrates scheme		SDL	PHYSIO Transport Mechanism-I (Active transport) (Dr. Adnan)
Wednesday 21-2-24	ANATOMY Muscle DR SABA	PHYSIO Active & Passive Transports (Dr. Qamer Aziz)		PRACTICAL A,B & C Physiology Introduction of Physiology Practicals		ANATOMY Classification of Muscle DR SABA	PHYSIO Transport Mechanism-OSPE based Activity (Dr. M. Ali)
Thursday 22-2-24	BIOCHEM Homopolysachrides-I (Dr.Iffat)	ANATOMY HISTOLOGY Tissue Preparation and Staining (Prof Inayat)		SDL 11:00-12:00 / 12:00-1:00 ANATOMY Histology Epithelium-I (Prof Inayat)		BIOCHEM Homopolysachrides-II (Dr.Iffat)	ANATOMY Histology Epithelium-II (Prof Inayat)
FRIDAY 23-2-24	BIOCHEM Introduction to enzymes and Coenzymes (Dr.kahkashan)	ANATOMY Histology Epithelium-III (Prof Inayat)		11:00-12:00 ANATOMY HISTO Gland I (Prof Inayat) / 12:00-1:00 ISLAMIAT		SDL	PHYSIO Transport Mechanism-III (Osmosis, osmotic pressure) (Dr. Adnan)

Dr. Adil Khan
MBBS, MCPS, FCPS
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Baqai Medical College

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TIMETABLE FOR 1st YEAR MBBS 2024
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(26th Feb- 1st March 2024) Week 3

DAYS	8:30-9:30	9:30-10:30	10:30-11:00	11:00-01:00		1:00-1:30	1:30-3:00	3:00-4:30
Monday 26-2-24	**PHYSIO** Coats and vesicular transport **Dr. M. Ali**	**PATHOLOGY** Introduction to Pathology **Dr. Nasima**	Tea break	**PRACTICAL A, B & C** **Anatomy:** cell and organelles**(Histology)** **Biochemistry:** Detection of carbohydrates (Molisch,S Test/Iodine Test **Physiology:** Introduction of Microscope **Dr.M.Ali**		Lunch & Prayer	**SDL**	**PHYSIO** Cell organelles-i e, Golgi apparatus, lysosomes and peroxisomes **Dr. Saba Abrar**
Tuesday 27-2-24	**PHYSIO** Cell organelles-II, mitochondria, cytoskeleton **Dr. Qamer Aziz**	**ISLAMIAT** **Miss. Uzma**		**PRACTICAL A, B & C** **Anatomy: (Histology)** **Biochemistry:** Detection of carbohydrates (Molisch,S Test) **Physiology:** Introduction of Microscope **Dr.M.Ali**			**PHYSIO** Cell Receptors, 2nd Messenger & Growth Factors **Dr. Qamer Aziz**	**PATHOLOGY** Pathological Terminologies **Dr. Nasima**
Wednesday 28-2-24	**ANATOMY** **Cell division** **Dr. Tayyaba**	**PATHOLOGY** Cell Injury **Dr. Nasima**		**PRACTICAL A, B & C** **Anatomy: (Histology)** **Biochemistry:** Detection of carbohydrates (Molisch,S Test) **Physiology:** Introduction of Microscope **Dr.M. Ali**			**SDL**	**BIOCHEM** Enzyme Inhibition and Feedback Regulation (Enzyme Chemistry) **Dr. Kahkashan**
Thursday 29-2-24	**BIOCHEM** Mechanism of Action of Enzymes (Enzyme Chemistry) **Dr. Kahkashan**	**PHARMA** Overview of Pharmacology & its branches **Dr. Faraz**		**11:00-12:00** **MEDICAL EDUCATION** Introduction to medical education **Dr. Shams Nadeem**	**12:00-1:00** **ANATOMY** Introduction to Reproductive Organs **Dr. Tayyaba**		**PATHOLGY** Cellular Adaptation **Dr. Nasima**	**PHYSIO** Activity on Transport Mechanism+ Cell Receptors **Dr. Saleem**
FRIDAY 01-3-24	**BIOCHEM** Enzymes of Clinical Importance **Dr. Kahkashan**	**PHARMA** Overview of Drug receptors **Dr. Sehrish**		**11:00-12:00** **MEDICINE** **Introduction to medicine** **Dr. Masooda**	**12:00-1:00** **COM. MEDICINE** Introduction to Community Medicine **Dr. Nazia Jameel**		**SDL**	**ANATOMY** **Oogenesis** **Dr.Tayyaba**

Prepared by, **MBBS-I Timetable Team** (Dr. Tayyaba Kazmi, Dr. Saba Abrar, Dr. Iffat Ara)

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FOUNDATION MODULE

(4th March- 1st March 2024) **Week 4**

DAYS	8:30-9:30	9:30-10:30	10:30-11:00	11:00-01:00	1:00-1:30	1:30-3:00	3:00-4:30
Monday 4-3-24	ANATOMY spermatogenesis Dr. Tayyaba	GYNE Defects In Oogenesis and Spermatogenesis Dr. Nikhat	Tea Break	PRACTICAL A, B & C **Anatomy:** simple epithelium **Biochemistry:** Detection of Benedict,s Test/Barfed's test **Physiology:** Study of Kymograph. Dr.M.Ali	Lunch & Prayer	SDL	ANATOMY Nervous system – SomaticNS Dr. Saba
Tuesday 5-3-24	PHYSIO intercellular communication Dr. Qamer Aziz	ISLAMIAT Miss. Uzma		PRACTICAL A, B & C **Anatomy:** simple epithelium **Biochemistry:** Detection of Benedict,s Test/Barfed's test **Physiology:** Study of Kymograph. Dr.M.Ali		SDL	ANATOMY Nervous system – ANS Dr. Saba
Wednesday 6-3-24	ANATOMY Fertilization & 1st week of development Dr. Tayyaba	SDL		PRACTICAL A, B & C **Anatomy:** simple epithelium **Biochemistry:** Detection of Benedict,s Test/Barfed's test **Physiology:** Study of Kymograph. Dr.M.Ali		MEDICINE History Taking Dr. Masooda	PHYSIO Types of Intercellular communication Dr.M.Ali
Thursday 7- 3-24	PHYSIO Cams & Cells Connections Dr. Saba Abrar	GYNE Abnormal implantation of fertilized oocyte Dr. Nikhat		11:00-12:00 ANATOMY Cell Junctions Prof. Inayat 12:00-1:00 PHYSIO Locomotion of Cells Dr. Saba brar		SDL	CBL
FRIDAY 8-3-24	ANATOMY 2nd week of development Dr. Tayyaba	RESEARCH		11:00-12:00 MEDICINE clinical examination 12:00-1:00 ANATOMY integumentary system Dr. Saba		SDL	ANATOMY 3rd week of development Dr. Tayyaba

Prepared by, **MBBS-I Timetable Team** (Dr. Tayyaba Kazmi, Dr. Saba Abrar, Dr. Iffat Ara)

Prof. Khalid Ahmed
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TIMETABLE FOR 1st YEAR MBBS 2024
FOUNDATION MODULE

(4th March- 1st March 2024) **Week 4**

DAYS	8:30-9:30	9:30-10:30	10:30-11:00	11:00-01:00	1:00-1:30	1:30-3:00	3:00-4:30
Monday 4-3-24	ANATOMY spermatogenesis Dr. Tayyaba	GYNE Defects In Oogenesis and Spermatogenesis Dr. Nikhat	Tea Break	PRACTICAL A, B & C **Anatomy:** simple epithelium **Biochemistry:** Detection of Benedict,s Test/Barfed's test **Physiology:** Study of Kymograph. Dr.M.Ali	Lunch & Prayer	SDL	ANATOMY Nervous system – SomaticNS Dr. Saba
Tuesday 5-3-24	PHYSIO intercellular communication Dr. Qamer Aziz	ISLAMIAT Miss. Uzma		PRACTICAL A, B & C **Anatomy:** simple epithelium **Biochemistry:** Detection of Benedict,s Test/Barfed's test **Physiology:** Study of Kymograph. Dr.M.Ali		SDL	ANATOMY Nervous system – ANS Dr. Saba
Wednesday 6-3-24	ANATOMY Fertilization & 1st week of development Dr. Tayyaba	SDL		PRACTICAL A, B & C **Anatomy:** simple epithelium **Biochemistry:** Detection of Benedict,s Test/Barfed's test **Physiology:** Study of Kymograph. Dr.M.Ali		MEDICINE History Taking Dr. Masooda	PHYSIO Types of Intercellular communication Dr.M.Ali
Thursday 7-3-24	PHYSIO Cams & Cells Connections Dr. Saba Abrar	GYNE Abnormal implantation of fertilized oocyte Dr. Nikhat		11:00-12:00 ANATOMY Cell Junctions Prof. Inayat / 12:00-1:00 PHYSIO Locomotion of Cells Dr. Saba brar		SDL	CBL
FRIDAY 8-3-24	ANATOMY 2nd week of development Dr. Tayyaba	RESEARCH		11:00-12:00 MEDICINE clinical examination / 12:00-1:00 ANATOMY integumentary system Dr. Saba		SDL	ANATOMY 3rd week of development Dr. Tayyaba

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FOUNDATION MODULE

(11th March- 15th March 2024) Week5Ramadan

DAYS	8:30-9:30	9:30-10:30	10:30-12:30	12:30-1:15	1:15-1:30	1:30-3:30	3:30-4:30
Monday 11-3-24	PHYSIO Nucleus and Introductionto Genetics DR. QAMER AZIZ	COMMUNITY. MED Iceberg Phenomenon DR NAZIA JAMEEL	PRACTICAL A, B & C Anatomy: stratified epithelium Biochemistry: Detection of SeliwanoffTest/Osazone test Physiology: Introduction to power lab Dr.M.Ali	SDL	Prayer	BIOCHEM Nucleotides (NucleicAcid Chemistry) DR BENISH	ANATOMY SGT- SKIN (DR ANEELA, DR HINA, DRAYESHA)
Tuesday 12-3-24	BIOCHEM Nucleosides (NucleicAcid Chemistry) DR BENISH	ISLAMIAT Miss. Uzma	PRACTICAL A, B & C Anatomy: stratified epithelium Biochemistry: Detection of SeliwanoffTest/Osazone test Physiology: Introduction to powerlab Dr.M.Ali	SDL		ANATOMY Fetal membranes DR TAYYABA IN CASE OF RAMADAN CLASS END AT 2-30	FORMATIVE ASESSMENT
Wednesday 13-13-3-24	ANATOMY Connective Tissues Prof. Inayat	GYNE Abnormal implantation of fertilized oocyte Dr. Nazish	PRACTICAL A, B & C Anatomy: stratified epithelium Biochemistry: Detection of SeliwanoffTest/Osazone test Physiology: Introduction to power lab . Dr.M.Ali	COM. MED Levels of prevention DR NAZIA JAMEEL		1:30-2:30 BIOCHEM Nucleic Acid(NucleicAcid Chemistry) DR BENISH	
Thursday 14- 3-24	ANATOMY Placenta & prenataldiagnosis DR TAYYABA	GYNE Placental Abnormalities DR NIKHAT	11:00-12:30 SDL / 11:00-12:00 ANATOMY LRC MODEL DR SABA	SDL		1:30-2:30 CBL	
FRIDAY 15-3-24	BIOCHEM REVIEW CLASS DR KAHKASHAN/DR IFFAT		ANATOMY REVIEW CLASS (DR ANEELA, DR HINA, DRAYESHA)	SDL		1:45-2:30 PHYSIO REVIEW CLASSDR. M.ALI	
MONDAY 18-3-24	FOUNDATION MODULE EXAM						

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