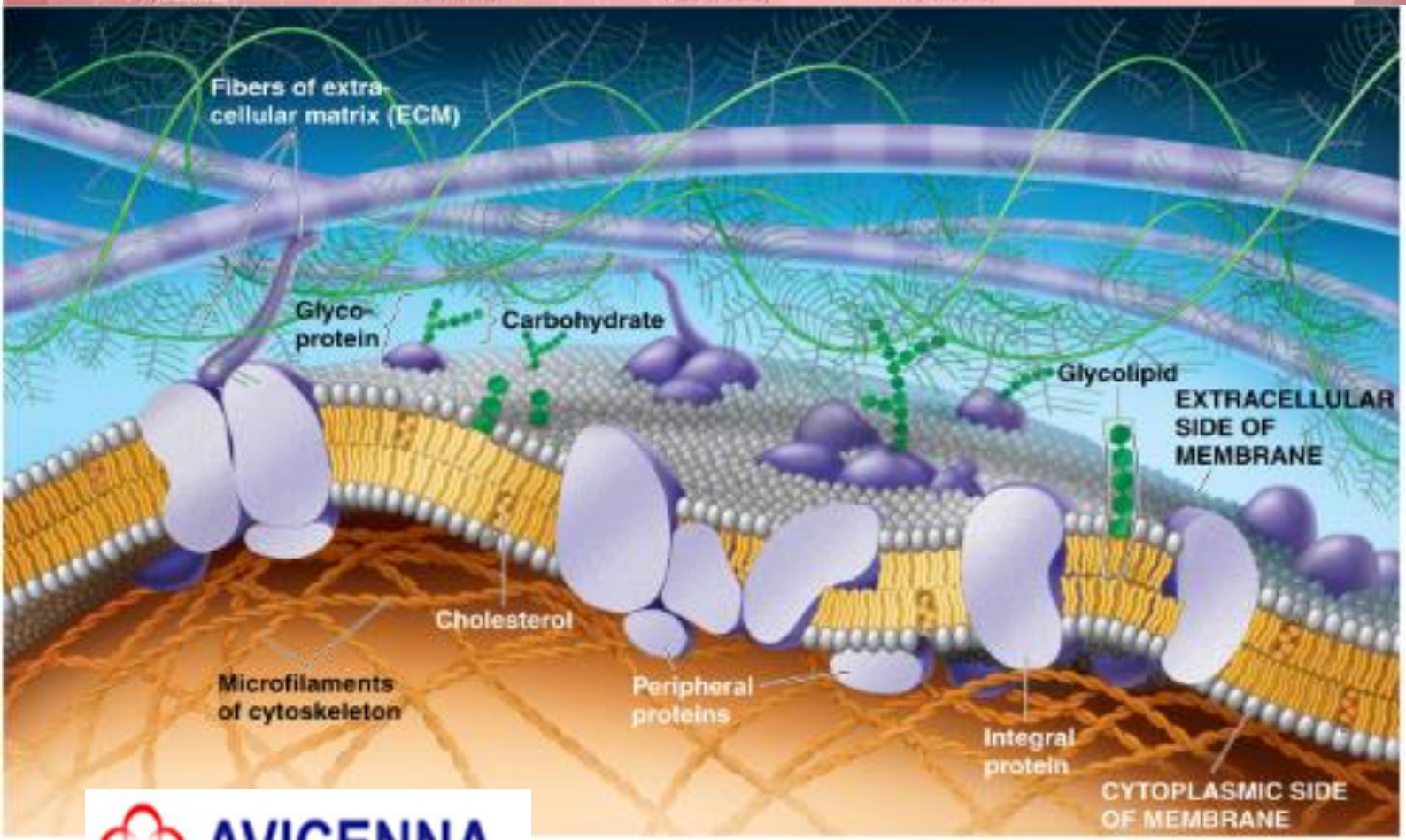
STUDYGUIDE (FOUNDATION MODULE-1)

1ST YEAR M.B.B.S





AVICENNA MEDICAL COLLEGE

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INTRODUCTION

WHAT IS A STUDY GUIDE?

It is an aid to:

- Inform students how the academic program for each module in a block-wise manner is organized.
- Help students organize and manage their studies throughout the module
- Guide students on assessment methods, rules and regulations

THE STUDY GUIDE:

- Communicates information on organization and management of the module. This will help the student to contact the right person in case of any difficulty.
- Defines the learning objectives which are expected to be achieved at the end of the module.
- Identifies the learning strategies such as lectures, small group teachings, clinical skills, practical, tutorial, case based learning and problem-based learning that will be implemented to achieve the module objectives.
- Provides a list of learning resources such as book references with page numbers, computer assisted learning programs, videos, web- links, and journals for students to consult in order to maximize their learning.
- Provides information on the assessment methods for formative (module exams) and summative assessment (block exams) of the module and Block examinations.
- Highlights the criteria for the student's overall performance.
- Focuses on information pertaining to examination policy, rules and regulations of Avicenna Medical College and the University of Health Sciences (UHS).
- **CURRICULUM FRAMEWORK**

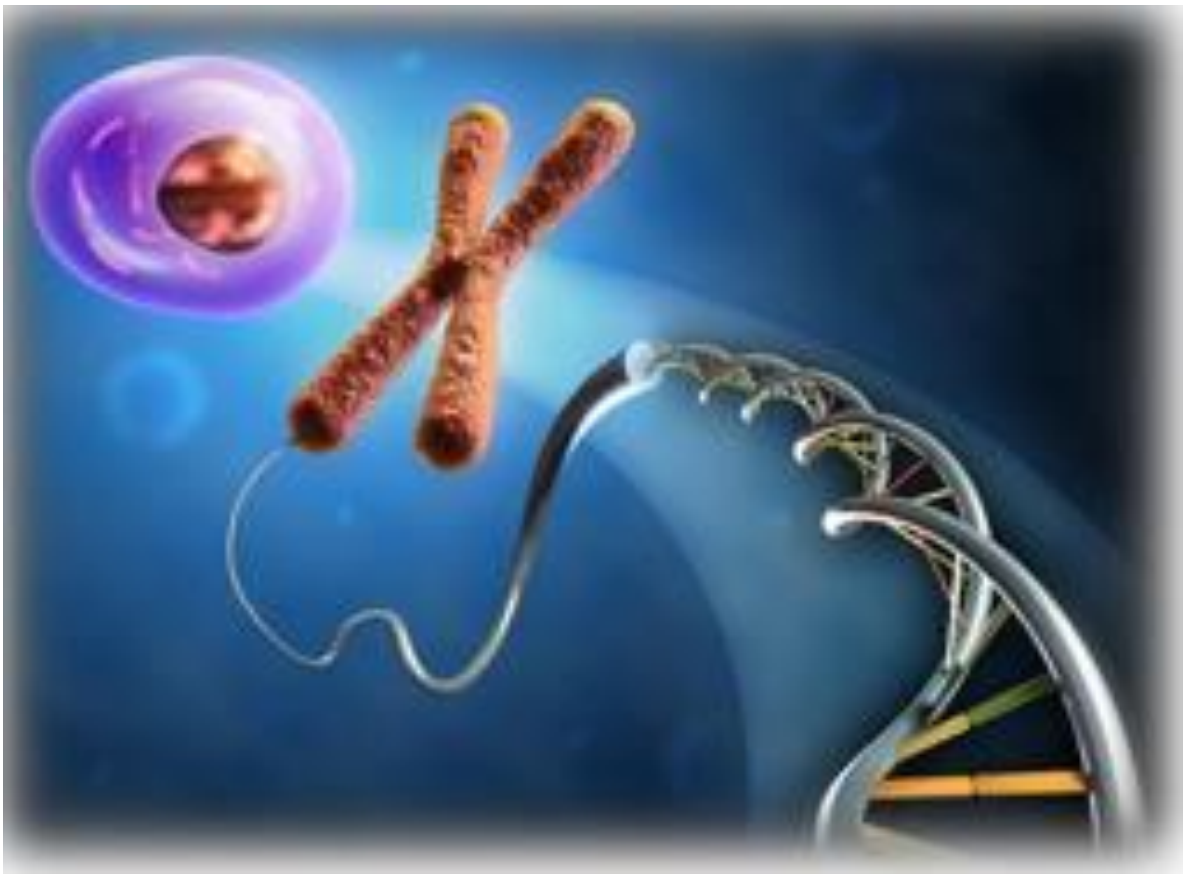
Students will experience an integrated curriculum for MBBS as provided by the UHS.

INTEGRATED CURRICULUM comprises of system-based modules such as foundation, H&L etc in the Blocks, which links basic science knowledge to clinical problems. Integrated teaching means that subjects are presented as a meaningful whole. Students are able to have better understanding of basic sciences when they repeatedly learn in relation to clinical examples.

Case-based discussions, problem-based learning, computer-based assignments, early exposure to clinics, wards, and skills acquisition in skills lab and physiotherapy department are characteristics of integrated teaching program

MODULE RATIONALE

Tomorrow's doctor is required to acquire competencies, which could align his knowledge base and skill set for his professional practices. The foundation of knowledge needs to commence from 'The Cell'. The cell is a structural and functional unit of life and has a role in normal homeostasis ensuring appropriate cellular functions. Hence, this module has been designed to introduce a blend of molecular, genetic, anatomical, physiological, and psychosocial information essential for developing a perspective on the function of the human body in health and disease. Besides, an initial orientation to pharmacology and pathology subject has been provided so that students are able to use this information in the coming modules.



MODULE OUTCOMES

1. Describe the microscopic features of nerve cells, muscle cells, general features of epithelia of the body.

2. Appraise the functional characteristics of various components of cell membrane and organelles of cell.

3. Differentiate between the dynamics of various transport mechanisms along the cell membrane.

4. Compare the functional differences between RBCs, WBCs and blood groups.

5. Explain the significance of homeostatic mechanisms in keeping body's internal environment nearly constant.

6. Appraise the formation and functions of autonomic nervous system.

7. Correlate the structural design of each organ to its function.

8. Acquire information about the different fascial planes in the different regions of the body & their surgical importance.

9. Use descriptive anatomical terms of position to describe the different body structures in relation to each other.

10. Describe the movements of body using proper anatomical terms of movement.

11. Describe and demonstrate the various bony landmarks.

12. Describe the types of joints and correlate them to the mechanisms of movement.

THEMES

1. Cell structure

2. Cell transport and signaling

3. Cell chemistry

4. Homeostasis and blood

5. Autonomic nervous system

6. Body movement

7. Muscles

8. Growth and development

LEARNING METHODOLOGIES

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

i. Interactive Lectures
ii. Hospital/Clinic visits
iii. Small Group Discussion
iv. Case- Based Learning
v. Problem-based learning
vi. Practicals
vii. Skills session
viii. E-Learning
ix. Self-Directed Study

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.

Hospital visits: In small groups, students observe patients with signs and symptoms in hospital or clinical settings. This helps students to relate knowledge of basic and clinical sciences of the relevant module.

Small group discussion (SGD): 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 re phrase to help clarify concepts.

Team-based learning: A small group discussion format where learning is focused around a series of questions based on a clinical scenario. Students' discuss and answer the questions applying relevant knowledge gained in clinical and basic health sciences during the module.

a) **Preparation before class:** Students must complete preparatory materials before a class or the start of the module. Materials may be text, visual or other, and set at a level that is appropriate to the students and the course.

b) **In-class Readiness Assurance Testing:** Students complete an individual readiness assurance test (IRAT), consisting of 5 to 20 multiple choice questions. After submitting their individual answers, and they take the same test, the team RAT (TRAT), with their team. All members of each team share the same TRAT score, and both IRAT and TRAT scores count toward the students' grades.

c) **Reflective Writing:** Students will write reflective essays for the activities and tasks of the Professionalism, Ethics, Research and Leadership (PERLs) programme for each module and block.

d) The students will develop a Portfolio of the PERLs activities and tasks as assignments and reflective essay

e) **Instructor Feedback**: The instructor reviews material from the RAT that seems to be difficult for students.

f) **In-class application focused exercise:** The remainder of the session is taken up with exercises that help students learn how to apply and extend the knowledge that they have pre-learned and tested. Teams are given an appropriate problem or challenge, and must arrive at a consensus to choose a "best" solution out of options provided. Teams then display their answer choice, and the educator facilitates a classroom discussion between teams to explore the topic and the possible answers to the problem.

Practical: Basic science practicals related to anatomy, biochemistry, pathology, pharmacology and physiology are scheduled for student learning.

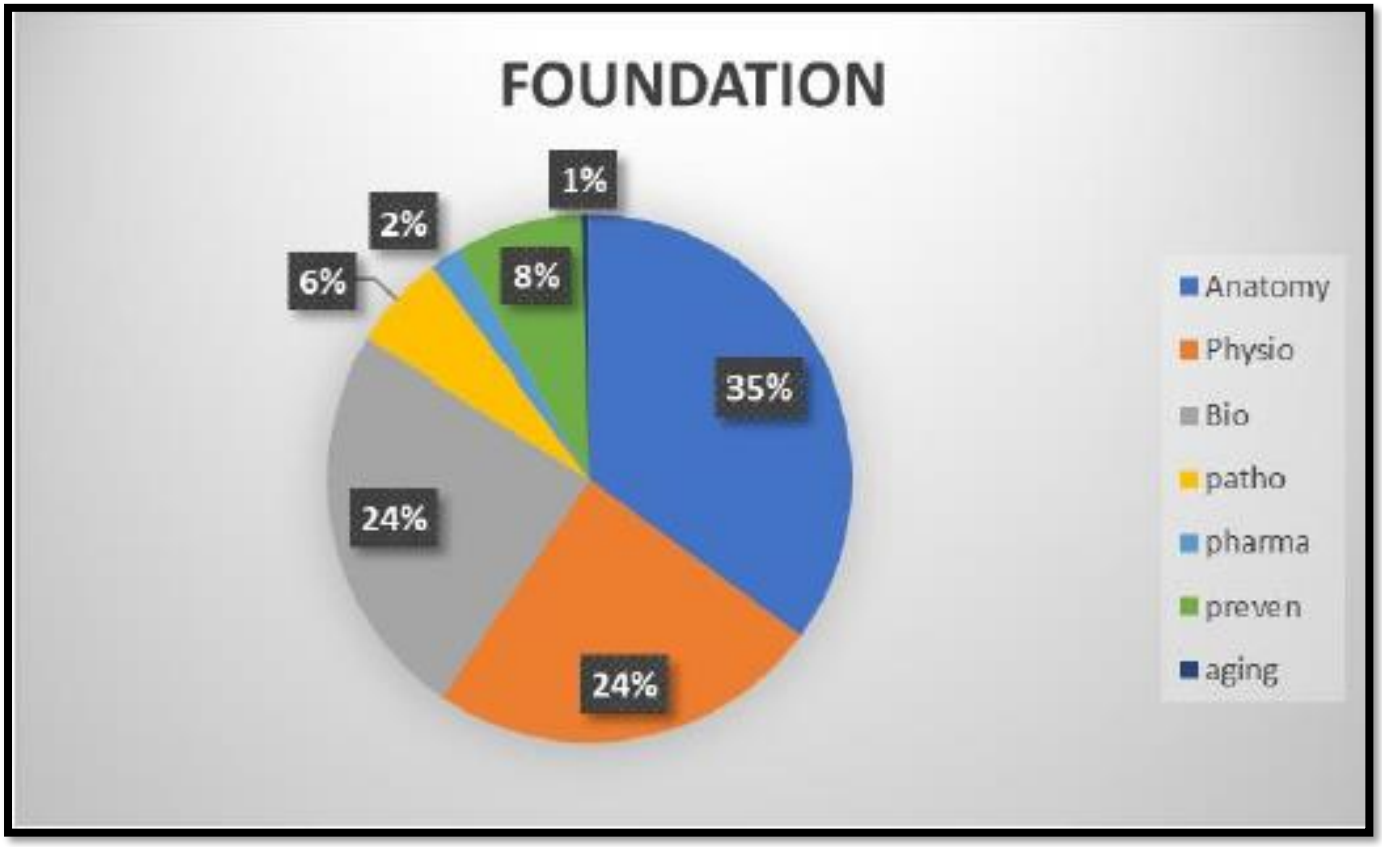
Clinical skills session: Clinical Skills relevant to respective module are observed and practiced where applicable in hospital settings, clinical skills laboratory or Department of Physiotherapy.

Self-directed study: 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.

E-learning: E-Learning is a strategy by which learning occurs through the utilization of electronic media, typically the Internet. The basic aspects of medical professionalism and ethics will be addressed through an e-learning course.

INTEGRATION OF DISCIPLINES IN FOUNDATION MODULES

MODULE WEEKS	8	TOTAL HOURS	205
Anatomy	74	Physiology	33
Biochemistry	24	Pathology	9
Pharmacology	3	Behavioural sciences	6
Community medicine	6	Aging	1



Curriculum of individual subjects

NORMAL STRUCTURE							
No.	Code	Topic	Learning Objective	Teaching strategy	Department	Faculty member	References
1	FA-001	Lecture Introduction to General Anatomy	Briefly describe the applied branches of anatomy Describe the "Anatomical Position" Describe the anatomical planes of body. Describe the terms of relationship, commonly used in Anatomy. Describe the anatomical terms used specifically for Limbs. Describe the terms related to movements	Lecture	Anatomy	Dr. Ijaz	General Anatomy by Tassaduq Hussain Ed 16th, Pg 1-11
2	FA-002/L3	Bones (Osteology)	Describe, identify, and exemplify the general morphological features of bones. Describe the developmental classification of bones. Describe the regional classification of bones. Describe the structural classification of bones.	Lecture	Anatomy	Dr. M. Ijaz	GA by Tassadaq Hussain Ch.-2, Pg No. 15-22
3	FA-002/L7	Bones (Osteology)	Describe the morphological classification of bones. Describe and exemplify Sesamoid, Pneumatic, Wormian and Heterotopic bones. Describe the classification of bones on the basis of osteogenesis. Describe the relationship of growing end of bones with the direction of nutrient foramen Describe the blood supply, innervation and lymphatic drainage of various types of bones Describe the use of bone tissue for bone marrow biopsy and bone grafting, Describe the salient features of common types of fractures	Lecture	Anatomy	Dr. Razia	GA by Tassadaq Hussain Ch.-2, Pg No. 22-30
4	FA-003	Cartilage (Chondrology)	Describe the general features of cartilage and its importance in gross anatomy. Describe the subtypes and gross features of Hyaline Cartilage Describe the gross features of Elastic Cartilage Describe the gross features of Fibrocartilage. Differentiate the three types of cartilages	Lecture	Anatomy	Dr. Maleeha	GA by Tassadaq Hussain Ch.-3, pg no. 31-34

5	FA-004	Joints (Arthrology)	Describe and exemplify the structural classification of Joints (synovial, cartilaginous & fibrous) along with their sub-classification. Describe the components and characteristic features of a Synovial Joint.	Lecture	Anatomy	Dr. Maleeha	GA by Tassadaq Hussain Ch.-4, pg no. 35-48
6	FA-004	Joints (Arthrology)	Describe the blood supply, innervation and lymphatic drainage of Synovial Joints, cartilaginous joints, and fibrous joints. List the factors stabilizing a synovial joint. Describe the mechanism of movements	Lecture	Anatomy	Dr. Ijaz	GA by Tassadaq Hussain Ch.-5, pg no. 48-51
7	FA-005	Integumentary System	Describe the structure and function of Skin on the basis of its two layers; Epidermis and Dermis Describe the surface irregularities of the skin. Describe the structure of Hair as an appendage of skin. Describe the structure of Nail as an appendage of skin. Describe the structure of Sweat and Sebaceous Glands Describe the structure and function of Superficial Fascia Describe the structure, function, and modifications of Deep Fascia Describe and classify the burns and anatomical basis of manifestations of integumentary system	Lecture	Anatomy	Dr. Ijaz	GA by Tassadaq Hussain Ch.-1, pg no 1-13
8	FA-006	Muscle Tissue (Myology)	Define Muscle Classify and describe Muscle Tissue based on Structure, Function and Development Describe Somatic and Visceral Muscles Describe and differentiate the Red and White Variety of Skeletal Muscles	Lecture	Anatomy	Dr. Ahmed	GA by Tassadaq Hussain Ch.-5
9	FA-006	Muscle Tissue (Myology)	Describe Type A, B and C of Skeletal Muscles Classify and describe the skeletal muscles based on architecture. Classify skeletal muscle based on action. Describe the parts of a skeletal muscle. Describe the methods of studying skeletal muscle activity. Describe and differentiate the basic organization of innervation to skeletal, smooth, and cardiac muscle. Describe the structure of Tendons. Describe the structure of Synovial Bursae Describe the structure of Raphe. Comprehend the meaning of Paralysis, Spasm, Atrophy, Hypertrophy, Hyperplasia and Regeneration in relation to muscle tissue. Define Myasthenia Gravis and Polymyositis	Lecture	Anatomy	Dr. Ahmed	GA by Tassadaq Hussain Ch.-5, 52-64

			Define Angina pectoris and Fibrillation of Cardiac Muscle				
10	FA-007	Vascular System (Angiology)	Classify the types of blood circulation. Classify and exemplify various types of blood vessels. Describe and exemplify various types of anastomoses. Explain the importance of End Arteries ,Define the terms: Arteriosclerosis, Atherosclerosis and Varicose Veins Describe the general organization of Lymphatic Circulation Define the terms: Lymphoid Tissue, Tissue Fluid, Lymphatic Capillaries, Lymph and Lymphatic Vessels Define the terms; Lymphangitis, Lymphadenitis, Lymphadenopathy and Lymphography	Lecture	Anatomy	Dr. Ahmed	GA by Tassadaq Hussain Ch.-7, pg no 81-88
11	FA-008	Nervous Tissue (Neurology)	Define neuron. Describe the anatomical structure of a neuron. Classify neurons based on morphology with examples. Classify neurons based on function. Describe the components of the central nervous system. Describe the components of the peripheral nervous system. Name the supporting cells (neuroglia) of the central nervous system. Describe the structure and functions of the neuroglia of the central nervous system. Enumerate the supporting cells (neuroglia) of the peripheral nervous system. Describe the structure and functions of the neuroglia of the peripheral nervous system.	Lecture	Anatomy	Dr. Ahmed	GA by Tassadaq Hussain Ch.-6, pg no 66-79
12	FA-008	Nervous Tissue (Neurology)	Describe the gross and/or microscopic anatomy of the following structures: Nerve, Nerve fiber, Ganglion, Tract, Fasciculus, Funiculus and Lemniscus Enlist the cranial nerves I to XII Describe the types of nerve fibers carried by and distribution of the cranial nerves. Describe the formation, types of modalities carried by, and distribution of the spinal nerves. Define and explain Dermatome (s) Define and explain Myotome (s) Describe the formation of Plexuses. Differentiate between Somatic and Visceral nervous system. Define Receptors Describe the functions of receptors. Classify sensory receptors based on modality (with location) Define Effectors Describe the functions of effectors. " Describe ANS and differentiate between sympathetic and parasympathetic nervous system "	Lecture	Anatomy	Dr. Ahmed	GA by Tassadaq Hussain Ch.-6, pg no 66-79

13	FA-009	Imaging in Anatomy	Identify displacement of fracture segments of the bone Identify dislocation of joints Describe the basic concept behind taking a biopsy of a tissue.	Lecture	Anatomy		GA by Tassadaq Hussain Ch.-2, pg. no. 29-30
14	FA-010/L1	Lecture Cell cycle	Describe the cell cycle Enlist different stages of Mitosis and Meiosis Compare and contrast mitosis and Meiosis	Lecture	Anatomy	Dr. Razia	Developing Human KLM Ed 10th, Pg 1-10
15	FA-010/L2	Lecture Introduction to Histology	Describe the electron microscopic structure and fluid mosaic model of plasma membrane Draw the fluid mosaic model of plasma membrane	Lecture	Anatomy	Dr. Ijaz	Histology by Laiq Hussain Ed 6th Pg 7-9
16	FA-010/L2	Lecture Cell cycle and Gametogenesis	Describe the anatomical basis for structural chromosomal abnormalities Describe the anatomical basis for the structural and numerical chromosomal anomalies Describe the embryological basis for mosaicism Describe the embryological basis for teratoma Describe the clinical presentation of common numerical chromosomal abnromalitites	Lecture	Anatomy	Dr. Razia	Developing Human KLM Ed 10th, Pg 11-14
17	FA-010	Cell Cycle & gametogenesis	Cell Cycle & gametogenesis	Tutorial	Embryology	Demonstrator	KLM Embryology
18	FA-011, FA-013, FA-014/L1	Spermatogenesis, Oogenesis , Gametogenesis	Describe the Process of spermatogenesis and spermiogenesis Describe the embryological basis for Abnormal gametes Discuss the embryological basis of male infertility. Describe the significance of arrested development of oocyte Describe the hormonal control of oocyte maturation Discuss the embryological basis of female infertility. Compare and contrast oogenesis and spermatogenesis,	Lecture	Anatomy	Dr. Razia	KLM Embryology ed. 10th, Ch. 2 Pg No. 12-17
19	FA-015/L2	Female Reproductive organs	Enlist and briefly describe the female reproductive organs	Lecture	Anatomy	Dr. Razia	KLM Embryology ed. 10th, Ch. 2 Pg No. 18-20
20	FA-016/L4	Female Reproductive Cycle	Describe the hormonal control of female reproductive cycles Enumerate and describe the steps of the ovarian cycle Describe the process of ovulation Describe the formation, function and fate of corpus luteum Describe the anatomical and physiological basis of the following: Mittelschmerz, Anovulation, Menopause Define menstrual cycle Describe the phases of menstrual cycle Describe the anatomical and	Lecture	Anatomy	Dr. Razia	KLM Embryology ed. 10th, Ch. 2 Pg No. 20-24,

			physiological basis of an-ovulatory menstrual cycle				
21	FA-017	Transportation of gametes	Describe the transportation of male and female gametes Describe viability of gametes Explain the anatomical basis of diaspermy, triploidy	Lecture	Anatomy	Dr. razia	KLM Embryology ed. 10th, Ch. 2 Pg No.25-26
22	FA-16/FA-17	Female Reproductive Cycle & Transportation of Gamete	Describe the hormonal control of female reproductive cycles Enumerate and describe the steps of the ovarian cycle Describe the process of ovulation,Describe the formation, function and fate of corpus luteum,Describe the anatomical and physiological basis of the following: Mittelschmerz, Anovulation, MenopauseDefine menstrual cycle,Describe the phases of menstrual cycle , Describe the transportation of male and female Gametes.	Lecture	Integrated with Gynaecology	Prof Nadia Zahid	Clinically Oriented Embryology 11th Edition KLM, TVN
23	FA-018	Fertilization	Define fertilization Describe the phases of fertilization Draw and label a diagram illustrating the phases of fertilization Enumerate and describe the results of fertilization Describe the anatomical and physiological basis of sex determination of the embryo	Lecture	Anatomy	Dr. Razia	KLM Embryology ed. 10th, Ch. 2, Pg No.27-35
24	FA-019	Contraception	Define contraception Explain the mechanisms of following contraceptive techniques: 1. Barrier methods 2. Hormonal methods 3. Intrauterine device (IUD) 4. Emergency contraceptive pills (ECPs) 5. Male and female sterilization	Lecture	Anatomy	Dr. Razia	Langman Embryology ed. 13th, Ch. 2, Pg No41-42.
25	FA-20	Infertility & assisted reproductive techniques	Describe the anatomical and physiological basis of male and female infertility Describe the role of clomiphine citrate in inducing ovulation	Lecture	Anatomy	Dr. Ijaz	Langman Embryology ed. 10th, Ch. 2, pg no 41-42
26	FA-021	Cleavage, blastocyst formation	Describe the process of cleavage of embryo and blastocyst formation Describe the differentiation of embryo blast into epiblast and hypoblast Describe the establishment of cranial-caudal embryonic axis Describe pre-implantation genetic diagnosis Describe the origin and uses of embryonic stem cells and the techniques of obtaining these cells from the embryo (reproductive cloning & therapeutic cloning) Explain the embryological basis of spontaneous	Lecture	Anatomy	Dr. Ijaz	KLM Embryology ed. 10th, Ch. 2,3 Pg No. 30-33

			abortion Describe the events and factors influencing the cleavage of zygote, Describe the sequence of events pertaining to formation of blastocyst Compare and contrast the villi Describe the process of Compaction Describe the Formation of morula (division into inner and outer cell mass) Describe the anatomical basis for the preimplantation genetic diagnosis Describe the formation of amniotic cavity, embryonic disc, and umbilical vesicle Describe the formation of chorionic sac				
27	FA-020,21	Infertility & assisted reproductive techniques	Describe the anatomical and physiological basis of male and female infertilityDescribe the role of clomiphine citrate iinducing ovulationDefine assisted reproductive techniquesDescribe the mechanisms of following reproductive techniques:1. In vitro fertilization (IVF) and embryotransfer2.Cryopreservation of embryo3. Intra-cytoplasmic sperm injection (ICSI)4. Assisted in vivo fertilization5. Surrogacy	Lecture	Integration with Gynaecology	Prof Muntiha Sarosh	Clinically Oriented Embryology 11th Edition KLM, TVN
28	FA-022	Implantation	Describe the Uterus at the time of implantation (decidua reaction) Illustrate the concept of Implantation Describe the differentiation of inner and outer cell mass Describe the Abnormal implantation/ extra uterine implantations Enumerate the factors responsible for inhibition of implantation	Lecture	Anatomy	Dr. Ijaz	KLM Embryology ed. 10th, Ch. 3 Pg No. 39-49
29	FA-023, FA-024	Molar pregnancy, Utero-placental circulation, Abortion	Describe the Molar pregnancy, Describe the Establishment of utero-placental circulation.	Lecture	Anatomy	Dr. Ijaz	KLM Embryology ed. 10th, Ch 3Pg No.. 46
30	FA-025	Abortion	Describe the embryological basis of abortions and its types	Levture	Gynaecology	Prof. Nadia Zahid	Clinically Oriented Embryology 11th Edition KLM, TVN
31	FA-026	Gastrulation	Describe the Formation & fate of primitive streak Draw a concept map highlighting the sequence of events responsible for transformation of bilaminar germ disc into trilaminar germ disc Describe the embryology behind sacrococcygeal teratoma and justify its clinical picture Describe the molecular factors responsible for gastrulation	Lecture	Anatomy	Dr. Razia	KLM Embryology ed. 10th, Ch. 4, Pg No. 51-55

32	FA-027	Formation of notochord	Describe the Invagination and movement of prenotochordal cells Describe the Notochordal plate formation Describe the Neuroenteric canal formation Describe the fate of the notochord Describe the Establishment of body axis Draw and label the fate map establishment Describe the Fate map establishment Describe the molecular basis for notochord formation Describe the role of notochord as an inducer Describe the embryological basis for situs inversus	Lecture	Anatomy	Dr. Razia	KLM Embryology ed. 10th, Ch. 4, Pg No.54-60
33	FA-028, FA -029, FA-031, FA-034	Germ Layers Derivative	Derivatives of Ectoderm, Mesoderm and Emdoderm	Lecture	Anatomy	Dr. Razia	Langman Embryology ed. 13th, Ch. 4, 71-86
34	FA-029	Mesodermal derivatives	Describe the Autonomic receptors	Lecture	Integration with Pharmacology	Dr Zahid Rasheed	Ketzung Ed. 14th
35	FA-035, FA-036	Control of the embryonic development	Describe the factors influencing the embryonic development, Enlist the characteristic features of the embryo during 4th – 8th weeks. Describe the criteria for estimating the developmental staging in human embryos Explain the estimation of gestational & embryonic age	Lecture	Anatomy	Dr. Ijaz	KLM Embryology ed. 11th, Ch. 5, Pg No. 65-79
36	FA-037	Fetal period	Explain the trimesters of Pregnancy. Explain the estimation of fetal age Explain the measurement and characteristics of fetus. Describe the Overview of the monthly changes in External appearance of fetus (9th-38th weeks) Describe Viability of fetuses and low birth weight babies Explain the factors influencing fetal growth	Lecture	Anatomy	Dr. Ijaz	KLM Embryology ed. 11th, Ch. 6, Pg No.85-93
37	FA-037 (2,3)	Fetal Period	"Tabulate the criteria for estimating fertilization age during the fetal periodDescribe the post maturity syndrome Describe the procedures for assessing fetal status Describe the clinical picture of IUGR & factors resulting in IUGRCorrelate the levels of alpha fetoprotein essay and fetal anomalies"	Lecture	Gynaecology	Prof . Muntiha Sarosh	Clinically Oriented Embryology 11th Edition KLM, TVN

38 39	FA-38 FA-39	Fetal Membranes	"""Describe the Formation & fate Umbilical cord Describe the Cord abnormalitiesJustify embryologically the clinical features observed in Absence of umbilicl arteryDescribe the formation and circulation ofAmniotic fluidEnlist the components of amniotic fluid Describe the Procedure of diagnostic amniocentesis Explain the significance of amniotic fluid Describe the factors responsible for Polyhydramnios andoligohydramnios Describe the characteristic signs and symptoms of oligohydramnios and polyhydramnios and justify embryologicallyExplain the clinical picture of umbilical bandm syndrome and justify it embryologically Explain the formation and fate of umbilical vesicle (yolk sac) Explain the formation and fate of Allantois Describe the clinical picture of allantoic cyst & sinus and justify it Embryologically """	Lecture	Gynaecology	Prof Nadia Zahid	Clinically Oriented Embryology 11th Edition KLM, TVN
40	FA-040 FA-041	Multiple pregnancies Prenatal diagnosis and fetal therapy	Describe the development of Dizygotic twins Describe the development of Monozygotic twins Describe the fetal membranes in twin pregnancy Describe the twin transfusion syndrome Explain the zygosity of the twins Describe the characteristics of various types of conjoined monozygotic twins Describe the Various methods of pre-natal diagnosis Describe the Fetal therapy	Lecture	Anatomy	Dr. Ahmed	KLM Embryology ed. 11th, Ch.7, Pg No. 120-126, Ch 6, Pg No. 93-96
41	FA-042	Molecular regulations and signaling pathways	Describe Molecular regulation and cell signaling and common signaling pathways used during development Describes morphogens, protein kinases, notch delta pathway, transcription factors, epigenetics Describe stem cells and pluripotency Describe the human disorders associated with genetic mutations	Lecture	Anatomy	Dr. Ahmed	KLM Embryology ed. 11th, Ch. 21,Pg No.463-478
42	FA-043	Teratogenicity	Define teratology: classification and causes of birth defects Define genomic imprinting Describe birth defects caused by genetic factors: numerical and structural anomalies Define and enlist the teratogens	Lecture	Anatomy	Dr. Ijaz	KLM Embryology ed. 11th, Ch. 20,Pg No. 433-452

43	FA-043	Teratogenicity	Describe the role of following in causing teratogenicity in humans: Drugs Environmental agents Chemicals & heavy metals Infectious agents Radiation Hormones Maternal diseases Describe the basis for male-mediated teratogens	Lecture	Anatomy	Dr. Ijaz	KLM Embryology ed. 11th, Ch. 20,Pg No. 452-460
44	FA-044	Introduction to microscopy & staining techniques	Describe different types of microscopies Describe Staining methods and their significance Describe the basis of enzyme histochemistry	Lecture	Anatomy	Dr. Maleeha	Liaq Hussain 6th ed. Ch. 1, pg no 1-5,
45	FA-045	Lecture Cell Membrane	Draw and label the structure and function of glycocalyx coat and lipid raft Describe the structure of glycocalyx coat and lipid raft and correlate it with function Describe different types of membrane proteins and their functions	Lecture	Anatomy	Dr. Ijaz	Histology by Laiq Hussain Ed 6th Pg 10-12
46	FA-045/L2	Cell membrane	Explain different modes of transport across the cell membrane	Lecture	Integrated with pathology	Dr Nadia Salam	Robbins 10th Ed
47	FA-046/L5	Cell organelles	List the membranous and non-membranous cellular organelles Draw and label the light and electron microscopic structure and functions of the cellular organelles Describe the structure of the following cellular organelles and correlate with their function: • Ribosomes • Endoplasmic reticulum (rough & smooth) • Golgi apparatus • Lysosomes • Proteasomes • Mitochondria • Peroxisomes	Lecture	Anatomy	Dr. M. Ijaz	Liaq Hussain 6th ed. Ch. 2
48	FA-046	Cytoplasmic inclusions	Describe the histological features of cytoplasmic inclusions (Integrate with Pathology) Explain the histological basis of acne vulgaris (Integrate with Pathology)	Lecture	Integrated with Pathology	Dr Nadia Salam	Robins 10th Ed;Cytoplasmic inclusions (166, 365, 392, 841, 1120, 1169, 1228, 1230, 1243, 1281 and 1288) Acne vulgaris (1166)
49	FA-047	Cell nucleus	Describe the structure of chromatin Describe the structure of chromosome Draw and label the structure of nucleolus Describe the structure of nucleolus Describe the structure and types of	Lecture	Anatomy	Dr. Ijaz	Liaq Hussain 6th ed. Ch. 2,8-32

			DNA and RNA Describe the histological basis for apoptosis and necrosis				
50	FA-048	Epithelium	Describe the structure of exocrine glands Explain the mechanism of transport across the epithelia Describe the classification of exocrine glands on the basis of: 1. Shape of secretory portions and ducts 2. Mode of secretion 3. Type of secretion Describe the Electron Microscopic Structure of the Following Apical Cell Surface Specialization: 1. Microvilli 2. Sterocilia 3. Cilia	Lecture	Anatomy	Dr. Ijaz	Liaq Hussain 6th ed. Ch.4, 47-55,
51	FA-047+48	Epithelium	Explain the correlation between the structure of microvilli and celiac disease Classify and exemplify the epithelia with their histological structure, locations and functions,Describe the correlation of cell cycle with the following diseases. • Retinoblastoma • Malignancy	Lecture	Integrated with pathology	Dr Nadia Salam	Robins 10th Ed; Page No. 17, 300, 784
52	FA-049	Connective Tissue 1	Describe the composition and list the constituents of connective tissue Classify the connective tissue with examples Describe the composition of ground substance of connective tissue Describe the composition, distribution, and function of glycosaminoglycans in connective tissue Explain the role of GAGs in formation of barrier against bacteria and the role of hyaluronidase in the breakdown of this barrier.	Lecture	Anatomy	Dr. Ijaz	Liaq Hussain 6th ed. Ch.5, pg no. 47-59
53	FA-050	Osteology, imaging and crooss sectional anatomy, Arthrology	Demonstrate various anatomical movements of body	SGD	Gross Anatomy	Demonstrator	KLM pg. 2-7
54	FA-050	X-ray	Identify and interpret joint dislocations and displaced fracture bone segments radiographically.	SGD	Gross Anatomy	Demonstrator	KLM Gross Anatomy
55	FA-050	Revision	Demonstrate the anatomical terms of position and movement, in particular on limbs, Demonstrate various anatomical movements of body , Identify various elevations and anatomical landmarks on bones.	SGD	Gross Anatomy	Demonstrator	KLM Gross Anatomy
56	FA-050	Osteology, imaging and crooss sectional anatomy, Arthrology	Demonstrate various anatomical movements of body	SGD	Gross Anatomy	Demonstrator	KLM Gross Anatomy

57	FA-051	Embryology	On models, charts, aborted embryos and fetal specimens, identify the: • events of embryonic period, i.e., cleavage, morula and blastula formation, yolk sac, amniotic cavity, connecting stalk, gastrulation (notochord & primitive streak, three germ layers and their parts/derivatives),	Practical	Embryology	Demonstrator	KLM Embryology ed. 10th, Ch. 3
58	FA-052	Embryology	Perform USG interpretation of: • fetal features, fetal age estimation, placental attachment with it's variations and fetal membranes. multiple pregnancies	Tutorial	Embryology	Demonstrator	Gynae OPD
59	FA-053	Embryology	On gross examination of human placenta and umbilical cord, identify: • normal complete placenta and cord • placental structural variations • umbilical cord and anomalies of its attachment to placenta • contents of umbilical cord (umbilical vessels anomalies)	Tutorial	Embryology	PGR	Gynae OPD
60	FA-054,055	Embryology	Identify the features of haemolytic disease of newborn, dizygotic and monozygotic twins and correlate them embryologically. Identify the protocols and procedural steps for amniocentesis and chorionic villus sampling (CVS) and correlate their significance in developmental defects. Correlate the role of alpha feto-protein assays in neural tube defects	Tutorial	Embryology	Demonstrator	KLM Embryology ed. 10th, Ch. 7
61	FA-056, 057	Microscope and Staining Techniques	Microscope and Staining Techniques	Practical	Histology	Demonstrator	Practical Book
62	FA-059,.060	Epithelium	Identify and demonstrate under light microscope the Transitional epithelium, Identify and demonstrate serous & mucous secreting glands under light microscope	Practical	Histology	Demonstrator	Histology Manual
63	FA-061	Connective tissue	Identify and demonstrate the various types of connective tissue	Practical	Histology	Demonstrator	Histology Manual

PHYSIOLOGY

No.	Code	Topic	Learning Objective	Teaching strategy	Department	Faculty members	References
1	FP-001	CELL BIOLOGY	Define Homeostasis Explain control system of body by giving examples Differentiate between Extracellular and Intracellular Fluids Explain the positive and negative feedback mechanisms with examples Explain the significance of feed forward/ adaptive control/delayed negative feedback mechanisms	LECTURE	Physiology	Dr Jaweria	Guyton & Hall Ed 14th Ch.1 Pg 4-10
2	FP-001	CELL BIOLOGY	Explain the structure of cell membrane Enlist the types of cell membrane	LECTURE	Physiology	Dr Afsheen	Guyton & Hall Ed 14th Ch.2 Pg 14-18

			proteins Enumerate the functions of membrane proteins Define and enumerate the functions of cell Glycocalyx Enlist membranous and non-membranous organelles Enlist the self-replicative organelles				
3	FP-001	CELL BIOLOGY	Differentiate between the functions of smooth and rough endoplasmic reticulum Explain the functions of Golgi apparatus Enlist the enzymes of lysosomes Explain the functions of lysosomes	LECTURE	Physiology	Dr Afsheen	Guyton & Hall Ed 14th Ch.2 Pg 17 – 18
4	FP-001	CELL BIOLOGY	Enlist the enzymes of peroxisomes Explain the functions of peroxisomes Enumerate the components and functions of cytoskeleton Define and enlist types of endocytosis Explain the mechanism of pinocytosis	LECTURE	Physiology	Dr. Shaheena	Guyton & Hall Ed 14th Ch.2 Pg 16 – 19
5	FP-001	CELL BIOLOGY	Classify different transport mechanisms Compare the composition of Na, K and Cl in extracellular and intracellular fluid	LECTURE	Physiology	Dr. Shaheena	Guyton & Hall Ed 14th Ch.4 Pg 47 – 48
6	FP-001	CELL BIOLOGY	Define and enlist different types of diffusion Explain the process of facilitated diffusion with the aid of diagram Define and classify different types of active transport	LECTURE	Physiology	Dr. Shaheena	Guyton & Hall Ed 14th Ch.4 Pg 49 – 53
7	FP-001	CELL BIOLOGY	Describe primary and 8secondary active transport with examples Explain voltage and ligand gated channels with examples Name Na, K channel Blockers. Discuss functions and significance of Na/K ATPase pump	LECTURE	Physiology	Dr. Shaheena	Guyton & Hall Ed 14th Ch.4 Pg 54 – 56
8	FP-001	CELL BIOLOGY	Define and enlist types of endocytosis Explain the mechanism of pinocytosis Classify different transport mechanisms Compare the composition of Na, K and Cl in extracellular and intracellular fluid Define and enlist different types of diffusion	LECTURE	Physiology	Dr Beenish	Guyton & Hall Ed 14th Ch.4 Pg 57-58
9	FP-001	CELL BIOLOGY	Explain the process of facilitated diffusion with the aid of diagram Define and classify different types of active transport Describe primary and secondary active transport with examples ,Explain voltage and ligand gated channels with examples Name Na, K channel Blockers. Discuss functions and significance of Na/K ATPase pump	LECTURE	Physiology	Dr Faiza	Guyton & Hall Ed 14th Ch.4 Pg 51
10	Cell biology	FP-001	Explain voltage and ligand gated channels with examples Name Na, K channel Blockers. Discuss functions and significance of Na/K ATPase pump	LECTURE	Physiology	Dr Afsheen	Guyton & Hall Ed 14th Ch.4 Pg 56
11	Blood	FP-002	Discuss functions of plasma proteins & describe the pathophysiology of edema	LECTURE	Physiology	Dr Afsheen	Guyton & Hall Ed 14th Ch.33 Pg 445
12	RBC	FP-003	Discuss the characteristics of red blood cells Explain different types of Bone marrows Enumerate the different sites	LECTURE	Physiology	Dr Beenish	Guyton & Hall Ed 14th Ch.33 Pg 446-447

			of erythropoiesis at different ages Explain the stages of Erythropoiesis				
13	Hemo globin	FP-004	Enumerate the types of normal hemoglobin in different ages of life.Explain the role of Iron in Hemoglobin formation.Define blood indices, give their normal values & enumerate the conditions in which these values are disturbed Enlist the abnormal types of hemoglobin	LECTUR E	Physi ology	Dr Beenish	Guyton & Hall Ed 14th Ch.33 Pg 449
14	White blood cells	FP-005	Enumerate the types of white blood cells Describe the characteristics and functions of Neutrophils Explain the process of defense against invading agent by neutrophils	LECTUR E	Physi ology	Dr Shahee na	Guyton & Hall Ed 14th Ch.34 Pg 455
15	White blood cells	FP-005	Define leukocytosis and leukemia Explain the effects of leukemia on body Define leukopenia	LECTUR E	Physi ology	Dr Shahee na	Guyton & Hall Ed 14th Ch.34 Pg 463
16	White blood cells	FP-005	Explain the process of defense against invading agent by macrophages	LECTUR E	Physi ology	Dr Afsheen	Guyton & Hall Ed 14th Ch.34 Pg 457
17	White blood cells	FP-005	Discuss different lines of defense during inflammation	LECTUR E	Physi ology	Dr Afsheen	Guyton & Hall Ed 14th Ch.34 Pg 460
18	White blood cells	FP-005	Explain the functions of neutrophils and macrophages in spread of inflammation (walling off effect)	LECTUR E	Physi ology	Dr Sadia	Guyton & Hall Ed 14th Ch.34 Pg 458
19	White blood cells	FP-005	Define the Reticuloendothelial system Enlist the different components of Reticuloendothelial system	LECTUR E	Physi ology	Dr Nida	Guyton & Hall Ed 14th Ch.34 Pg 458-559
20	White blood cells	FP-005	Explain the characteristics and functions of basophils Explain the characteristics and functions of eosinophils and enlist conditions in which these cells are raised.	LECTUR E	Physi ology	Dr Afsheen	Guyton & Hall Ed 14th Ch.34 Pg 462-
21	Blood Types	FP-006	Enumerate different blood group types. Explain the basis of ABO and Rh blood system	LECTUR E	Physi ology	Dr Afsheen	Guyton & Hall Ed 14th Ch.36 Pg 477
22	Blood Types	FP-006	Explain the Landsteiner law	LECTUR E	Physi ology	Dr Afsheen	Guyton & Hall Ed 14th Ch.36 Pg 478-479
23	ANS	FP-007	Discuss Components of Autonomic nervous system Explain the physiological anatomy of sympathetic and parasympathetic nervous system	LECTUR E	Physi ology	Dr Sadia	Guyton & Hall Ed 14th Ch.61Pg 773-775
24	ANS	FP-007	Describe the types of adrenergic and cholinergic receptors and their functions	LECTUR E	Physi ology	Dr Nida	Guyton & Hall Ed 14th Ch.61 Pg 776-780
25	ANS	FP-007	Explain the effects of sympathetic and parasympathetic on various organs/ system of body	LECTUR E	Physi ology	Dr Nida	Guyton & Hall Ed 14th Ch.61 Pg 781-785
26	Conse nt	FP-008	Explain laboratory/clinical procedure to the subject. Obtain verbal consent from subject before starting a procedure.	Practical	Physi ology	Demons trators	Prof. Zafar Ali Ch. Volume

			Reassure the subject after the procedure.				
27	RBS	FP-009	Determine Erythrocyte Sedimentation Rate and packed cell volume	Practical	Physiology	Demonstrators	Prof. Zafar Ali Ch. Volume
28	Blood Groups	FP-010	Determination of blood group	Practical	Physiology	Demonstrators	Prof. Zafar Ali Ch. Volume
29	WBC	FP-011	interpret Total Leucocyte Count, Differential Leucocyte Count (normal & abnormal) in a CBC report generated by Automated Cell Counter.	Practical	Physiology	Demonstrators	Prof. Zafar Ali Ch. Volume

MEDICAL BIOCHEMISTRY

No.	Code	Topic	Learning Objective	Teaching strategy	Department	Faculty members	References
1	FB-001	Structure of Cell	Differentiate between different types of cells. Explain the concept of organization of cells to tissue, tissues to organ,organs to system. Differentiate between the eukaryotic and prokaryotic cells.	Lecture	Biochemistry	Dr Ali	Cell Notes, Marks 2nd edition, Chapter 8, Page 113
2	FB-002	Cell Membrane	Describe the composition and structure of cell on biochemical basis and justify it as fluid mosaic model. Describe the structure and function of cell membrane with particular reference to the role of (i) Lipids (ii) Carbohydrates (iii) Proteins Explain why the cell membrane is called fluid mosaic model	Lecture	Biochemistry	Dr Ali	Cell Notes, Marks 2nd edition, Chapter 8, Page 113
3	FB-003	Signal transduction	Discuss the various ways of cell-to-cell communication and to the environment. Describe cell to cell communications. Cell signaling pathways (only G protein signaling) Describe cell to cell adhesion.	Lecture	Biochemistry	Dr Sadia	Marks 2nd edition, Chapter 8, Page 113
4	FB-004	Subcellular organelles	Explain the biochemical markers and importance of subcellular organelles and their inherited disorders especially: a. I- cell disease b. Refsum disease c. Parkinsonism d. Progeria	Lecture	Biochemistry	Dr Sadia	Marks 2nd edition, Chapter 8, Page 113, Cell notes
5	FB-005	Chemistry of purine and pyrimidines	Describe the chemistry of purines and pyrimidines and their linkage in nucleic acid synthesis and their metabolism	Lecture	Biochemistry	Dr Yusra	Harper 30th edition, Chapter # 32, Page 339
6	FB-006	DNA	Discuss the organization of DNA with special reference to Watson and crick model, composition, structure, role of proteins, Chargaff's rule of base pairing and genetic coding	Lecture	Biochemistry	Dr Sadia	Lippincott 7th edition, Chapter 30, Page 411-414, Chapter 32, Page 447-450

			Describe the structural forms of DNA				
7	FB-007	RNA	Discuss the structure of different types of RNAs with special reference to composition, linkage, functions hn RNA, micro RNA Illustrate the structure and functions of various types of RNAs Describe the functions of various small RNAs present in cell	Lecture	Biochemistry	Dr Yusra	Harper 30th edition, chapter 34, Page 363-368
8	FB-008	Nucleotides	Explain the structure and nomenclature of nucleotides, biomedical importance of natural and synthetic analogues Interpret the role of synthetic analogues of nucleotides in medicine based on sign/symptoms and data e.g Methotrexate, 5 Flurouracil and Allupurinol.	Lecture	Biochemistry	Dr Yusra	Harper 30th edition, chapter 32, Page 339-344
9	FB-009	Chromosome	Explain the higher organization of DNA. Difference between DNA, chromatid and chromosome	Lecture	Biochemistry	Dr Sadia	Lippincott 7th edition Chapter #30, Page 425-426
10	FB-010	Nucleotide Metabolism	Illustrate de Novo and salvage pathways of purines and pyrimidines Describe the degradation of purine and pyramidine nucleotides Interpret Lesch-Nyhan syndrome, gout and adenosine deaminase deficiency on given data	Lecture	Biochemistry	Dr Sadia	Lippincott 7th edition, Chapter#22, Page 291
11	FB-011	Replication	Describe in detail all the steps in prokaryotic DNA replication with emphasis on: Different proteins required, Primers, DNA polymerase; their different components and functions, Initiation, elongation and termination of replication, Topoisomerases Describe in detail all the steps in Eukaryotic DNA replication with emphasis on differences between Pro- and Eukaryotes	Lecture	Biochemistry	Dr Yusra	Lippincott 7th edition Chapter#30, Page#411
12	FB-012	DNA repair	Describe DNA repair especially Xeroderma pigmentosa	Lecture	Biochemistry	Dr Yusra	Lippincott 7th edition page#411, chapter# 30
13	FB-013	Transcription	Explain the transcription in prokaryotes focusing on the following key points; RNA polymerase, its components and functions, Initiation, elongation, and termination of transcription Illustrate the transcription in eukaryotes focusing on the differences between pro- and eukaryotic transcription and post	Lecture	Biochemistry	Dr Yusra	Lippincott 8th edition, chapter #31, Page#433

			transcriptional modifications Wobble hypothesis				
14	FB-014	Translation	Interpret the translation focusing on the following key points: Initiation, elongation and termination and inhibition by drugs Describe Post-translational modification of proteins	Lecture	Biochemistry	Dr Yusra	Lippincott 7th edition, Chapter #32, Page # 447
15	FB-015	Lab Hazards	Demonstrate the step taken to prevent or rectify the Laboratory Hazards	Practical	Biochemistry	Dr Asad/ Dr Hamza	Practical Manual
16	FB-016	Cell	Identify the structure of cells under microscope	Practical	biochemistry	Dr Ayesha/ Dr Zahra	Practical Manual
17	FB-017	Cell organelles	Identify the methods of isolation of cell organelles'	Practical	Biochemistry	Dr Misbah	Practical Manaul
18	FB-018	Equipment	Identify the different parts of equipment i.e., centrifuge, Microlab, Electrophoresis, PCR and ELISA	Practical	Biochemistry	Dr Shehla	Practical Manual
19	FB-019	Demonstration of techniques	Demonstrate the basic principles, uses and working of centrifuge, chromatography, electrophoresis & spectrophotometer ELISA, PCR	Practical	Biochrmistry	Dr.Maham	Practical Manual

Pathology

No.	Code	Topic	Learning Objective	Teaching strategy	Department	Faculty members	References
1	FPa-001	Cell Injury	Discuss the significance of pathology. Discuss the causes of cell injury.	Lecture	General Pathology	Dr Munazza Salman	Robbins 10th Ed Page 45-48
2			Identify the types of cell injury. Describe the mechanism of cell injury Identify the types of cell death.	Lecture	General Pathology	Dr Munazza Salman	Robbins 10th Ed Page 49-61
3			Define necrosis and apoptosis. Describe different types of necrosis.	Lecture	General Pathology	Dr Munazza Salman	Robbins 10th Ed Page 45-48
4			Identify different types and mechanism of cellular adaptations to stress	Lecture	General pathology	Dr Qurrat-ul-ain	Robins 10th Ed; Page No. 69-73
5			Discuss the mechanism and types of intracellular accumulations and pathological calcifications	Lecture	General pathology	Dr Qurrat-ul-ain	Robins 10th Ed; Page No. 74-78

			Compare apoptosis with necrosis.	Lecture	General Pathology	Dr Qurrat-ul-ain	Robbins Pathology 10th edition
6	FPa-002	Introduction to Microorganisms	Enumerate the microbes causing infectious diseases. Differentiate cell walls of gram positive and gram-negative bacteria. Compare the structure of bacterial cell and virus	Lecture	General Microbiology	Dr Majid Rauf	Levinson Review of Medical microbiology 17 edition
7			Describe the structure of bacterial cell	Lecture	General microbiology	Dr Majid Rauf	Levinson Review of Medical microbiology 17 edition
8			Discuss the growth curve of bacteria. Enlist steps of viral replication Identify types of bacterial infections Enlist stages of bacterial pathogenesis Discuss the determinants of bacterial pathogenesis	Lecture	General microbiology	Dr Sidra Zaman	Levinson Review of Medical microbiology 17 edition
9	FPa-003	Sterilization & Disinfection	Define sterilization and disinfection. Describe the principles of sterilization and disinfection. Describe clinical uses of common disinfectants and their mode of sterilization Discuss physical and chemical agents of sterilization	Lecture	General Microbiology	Dr Sidra Zaman	Levinson Review of Medical microbiology 17 edition

Pharmacology

No.	Code	Topic	Learning Objective	Teaching strategy	Department	Faculty members	References
1	FPh-001	Absorption, Distribution, Metabolism and Excretion of drugs	Definitions of Pharmacology, drug, pro-drug, placebo, active principles, sources of drugs; Brief outline of Absorption, Distribution, Metabolism and Excretion	Lecture	Pharmacology	Dr Rubina Iqbal	Ketzung Ed. 14th Ch.1
2	FPh-002	Basic terminologies of Pharmacology	Definitions of receptor, agonist, partial agonist, inverse agonist, antagonist and types of receptors and second messengers; Diagrammatic concept of signaling mechanisms	Lecture	Pharmacology	Dr Usman	Ketzung Ed. 14th Ch.1
3	FPh-003	Autonomic System	Pharmacological aspects of Autonomic Receptors (types of autonomic receptors, important sites and action.	Lecture	Pharmacology	Dr Zahid Rasheed	Ketzung Ed. 14th

Aging

No.	Code	Topic	Learning Objective	Teaching strategy	Department	Faculty members	References
1	Fag-001	Process of aging	Discuss telomeres and telomerase and their clinical significance in aging.	Lecture	Pathology	Dr Nadia Salam	Robins 10th Ed Pg567

Community Medicine and Public Health

No.	Code	Topic	Learning Objective	Teaching strategy	Department	Faculty members	References
1	FCM-001	Concept of health	Describe the changing concepts and new philosophy of health Explain responsibility for health	Lecture	Community Medicine	Prof. Dr. Rana Akhtar Khan/ Prof. Dr. MN. Tabassum	K.PARK, 24th Edition, Chapter 02, Page no.13 to 22
2	FCM-002	Positive health Dimension, health Determinants	Explain dimensions and determinants of health and their role in achieving positive health Discuss concept of health and wellbeing Describe the Physical quality of Life Index & Human Development Index	Lecture	Community Medicine	Prof. Dr. Rana Akhtar Khan/ Prof. Dr. MN. Tabassum	K.PARK, 24th Edition, Chapter 02, Page no. 13 to 22
3	FCM-003	Health indicators	Describe explain importance of health indicators Classify health indicators	Lecture	Community Medicine	Prof. Dr. Rana Akhtar Khan/ Prof. Dr. MN. Tabassum	K.PARK, 24th Edition, Chapter 02, Page no.23
4	FCM-004	Disease causation	Conceptualize disease causation and natural history of disease Explain Germ theory & multifactorial causation	Lecture	Community Medicine	Prof. Dr. Rana Akhtar Khan/ Prof. Dr. MN. Tabassum	K.PARK, 24th Edition, Chapter 02, Page no.37
5	FCM-004	Disease causation	Describe Epidemiological Triad Discuss Web of disease causation Describe Gradient of infection	Lecture	Community Medicine	Prof. Dr. Rana Akhtar Khan/ Prof. Dr. MN. Tabassum	K.PARK, 24th Edition, Chapter 02, Page no. 37 to 39

6	FCM-005	Disease Prevention	Describe principles of prevention and control on prevalent diseases Explain difference between elimination and eradication	Lecture	Community Medicine	Prof. Dr. Rana Akhtar Khan/ Prof. Dr. MN. Tabassum	K.PARK, 24th Edition, Chapter 02 and 03, Page no. 45 to 49 And 99

IMPACT (EPIDEMIOLOGY, SOCIOLOGY/SOCIETY, COMMUNITY MEDICINE & PUBLIC HEALTH)

No.	Code	Topic	Learning Objective	Teaching strategy	Department	Faculty members	References
1	FBhS-001	Biological Basis of behavior	Identify the Biological Basis of human behavior and discuss social behavior Describe processes such as neurobiology of memory, emotions, sleep, learning, motivation, sex, arousal, reward and punishment	Lecture	Behavioral Sciences integrated with healthcare	Dr. Fariha	Behavioural Sciences By Moudat Rana Page 108-114
2	FBhS-002	Psychological Disorders	Identify the burden of mental illness on the person, family and society Describe Intellectual disability, Mental Disorders and Personality Disorders	Lecture	Behavioral Sciences integrated with healthcare	Dr. Farhat	Behavioural Sciences By Moudat Rana Page 114-118
3	FBhS-003	Psychology and Disease	Identify the role of psychosocial factors in various illnesses Describe psychosocial aspects of various system diseases such as CVS, CNS, GIT, Respiration, renal, endocrine and Cancer	Lecture	Behavioral Sciences integrated with healthcare	Dr. Farhat	Behavioural Sciences By Moudat Rana Page 106-108
4	FBhS-004	Behavioral factors and pharmacological treatment	Identify the behavioral factors associated with pharmacological treatment of diseases Discuss Health belief model, treatment compliance and its psychosocial factors, social factors in drugs prescription and drug resistance	Lecture	Behavioral Sciences integrated with healthcare	Dr. Farhat	Behavioural Sciences By Moudat Rana Page 148-152
5	FBhS-005	Palliative care	Identify the rehabilitation work for patients on dialysis and any kind of physical disability Discuss the care requirements in chronic debilitating conditions like Diabetes, Multi-infarcts Dementia, chronic renal disease, limb amputation	Lecture	Behavioral Sciences integrated with healthcare	Dr. Farhat	Behavioural Sciences By Moudat Rana Page 160,210,211
6	FBhS-006	Stress	Identify the various physiological effects of stress Explain ANS response to stress,	Lecture	Behavioral Sciences integrated	Dr. Fariha	Behavioural Sciences By Moudat Rana

			Describe behavioural manifestations of stress Stress related multiple sclerosis and autoimmune diseases		with healthcare		
Professionalism, Ethics, Research, Leadership							
No.	**Code**	**Topic**	**Learning Objective**	**Teaching strategy**	**Department**	**Faculty members**	**References**
1	PERLs-001	Portfolio Reflective Writing	Describe a Portfolio Describe types of portfolios Identify Portfolio entries Write reflection based on Gibbs reflective cycle	Interactive lecture	DME	Prof. Gulfreen Waheed	Handouts shared as soft copy
2	PERLs-002	Professionalism and communication	communication skills Describe principles of Communication. Discuss types of Communication at professional level. Identify different Communication Styles. Explain the importance of non-verbal communication. Demonstrate active Listening. Describe assertive Communication techniques. Describe barriers to Effective Communication.	Interactive lecture	DME	Prof. Dr. Gulfreen	Handouts shared as soft copy
3	PERLs-003	Responsible & Accountable, Responsibility towards self and the profession	Follow the dress code and rules and regulation of the institution. Demonstrate punctuality. Describe responsibility to oneself. Discuss responsibilities of being a learner	Interactive lecture	DME	Dr. Shandana	Handouts shared as soft copy
4	PERLs-004	Teamwork	Work respectfully and effectively with their peers. Describe characteristics of a team. Describe types of teams Discuss stages of team development. Identify various team roles. Discuss barriers to effective teamwork	Interactive lecture	DME	Prof. Dr. Gulfreen	Handouts shared as soft copy
5	PERLs-005	Digital citizen	Maintain personal privacy while sharing information Identify cyberbullying, harassing, and sexting Describe cybersecurity laws Discuss digital rights and Responsibilities.	Interactive lecture	DME	Dr Faiza	Handouts shared as soft copy

Holy Quran							
No.	**Code**	**Topic**	Learning Objective	**Teaching strategy**	Department	Faculty members	References
1	QI-001	Oncness of Allah Tawheed	Describe unity of Allah and attributes ,describe concept of shrik ,describe inpact of Tawheed	Interactive lecture	Holy Quran	Mrs Farah	Introduction to Islam
2	QI-002	Prophethood (Risalat) & Divine	Explain Significance of Risalat Identify Prophets as role models Recognize finality of Prophethood - Prophet Muhammad (PBUH)	Interactive lecture	Holy Quran	Mrs Farah	Introduction to Islam
3	QI-002	Revelations (Holy Books)	Explain the divine decree in sending the Holy Books Identify the Holy Quran as the only preserved & authenticated divine revelation to date Interpret Quran as Furqan	Interactive lecture	Holy Quran	Mrs Farah	Introduction to Islam
4	QI-003	Angels & Beliefs in Hereafter	Appraise continuity of life beyond material world Concept of Doomsday and its various stages Concept of Day of Judgment and accountability in the Hereafter Concept of “Meezan” Discuss belief in angels and its significance Describe the universal role of angels (their specific duties)	Interactive lecture	Holy Quran	Mrs Farah	Introduction to Islam
5	QI-003	Angels & Beliefs in Hereafter	Appraise continuity of life beyond material world Concept of Doomsday and its various stages Concept of Day of Judgment and accountability in the Hereafter Concept of “Meezan” Discuss belief in angels and its significance Describe the universal role of angels (their specific duties)	Interactive lecture	Holy Quran	Mrs Farah	Introduction to Islam
6	QI-004	Qadr (Taqdeer)	Identify Taqdeer as Knowledge of Allah Explain the concept of Faith in Good and Evil Explain different types of Qadr	Interactive lecture	Holy Quran	Mrs Farah	Introduction to Islam

RESOURCE BOOKS

Anatomy

• Moore K.L. Clinically Oriented Anatomy. Baltimore, U.S.A. Williams and Wilkins:

• The Developing Human by K.L. Moore.

• Snell's Clinical Neuroanatomy.

• Laiq H.S. Medical Histology. Paramount Books.

• Laiq H.S. General Anatomy. Paramount Books.

Physiology

• Guyton AC and Hall JE (2001). Textbook of Medical Physiology. 10th edition. W. B. Sunders & Co.,Philadelphia.

Biochemistry

• Champe, P.C. & Harvey, E.A. Biochemistry (Lippincott's Illustrated Reviews). J.B Lippincott Co.

• Robert K. Murray, Daryl K. Granner, Peter A. Mayes, Victor W. Rodwell. Harper's Biochemistry. McGraw-Hill.

• ABC of Clinical Genetics by H.M. Kingston.

Pathology

• Vinary Kumar, Abul K. Abbas and Nelson Fausto Robbins and Cotran, Pathologic basis of disease. WB Saunders.

• Richard Mitchall, Vinary Kumar, Abul K. Abbas and Nelson Fausto Robbins and Cotran, Pocket Companion to Pathologic basis of diseases. Saunder Harcourt.

• Walter and Israel. General Pathology. Churchill Livingstone.

Pharmacology

• Basic and Clinical Pharmacology by Katzung, McGraw-Hill.

• Pharmacology by Champe and Harvey, Lippincott Williams & Wilkins

Community medicine

• Parks Textbook of Preventive and Social Medicine. K. Park (Editor)

• Public Health and Community Medicine, Ilyas, Ansari (Editors)

OTHER LEARNING RECOURCES:

- **Hands-on Activities/ Practical:**

  Students will be involved in Practical sessions and hands-on activities that link with the foundation module to enhance the learning.

- **Labs:**

  Utilize the lab to relate the knowledge to the specimens and models available.

- **Skill Labs**

  A skills lab provides the simulators to learn the basic skills and procedures. This helps build the confidence to approach the patients.

- **Videos**

  Video familiarize the student with the procedures and protocols to assist patients.

- **Computer Lab/CDs/DVDs/Internet Resources:**

  To increase the knowledge students should utilize the available internet resources and CDs/DVDs. This will be an additional advantage to increase learning.

- **Self Learning:**

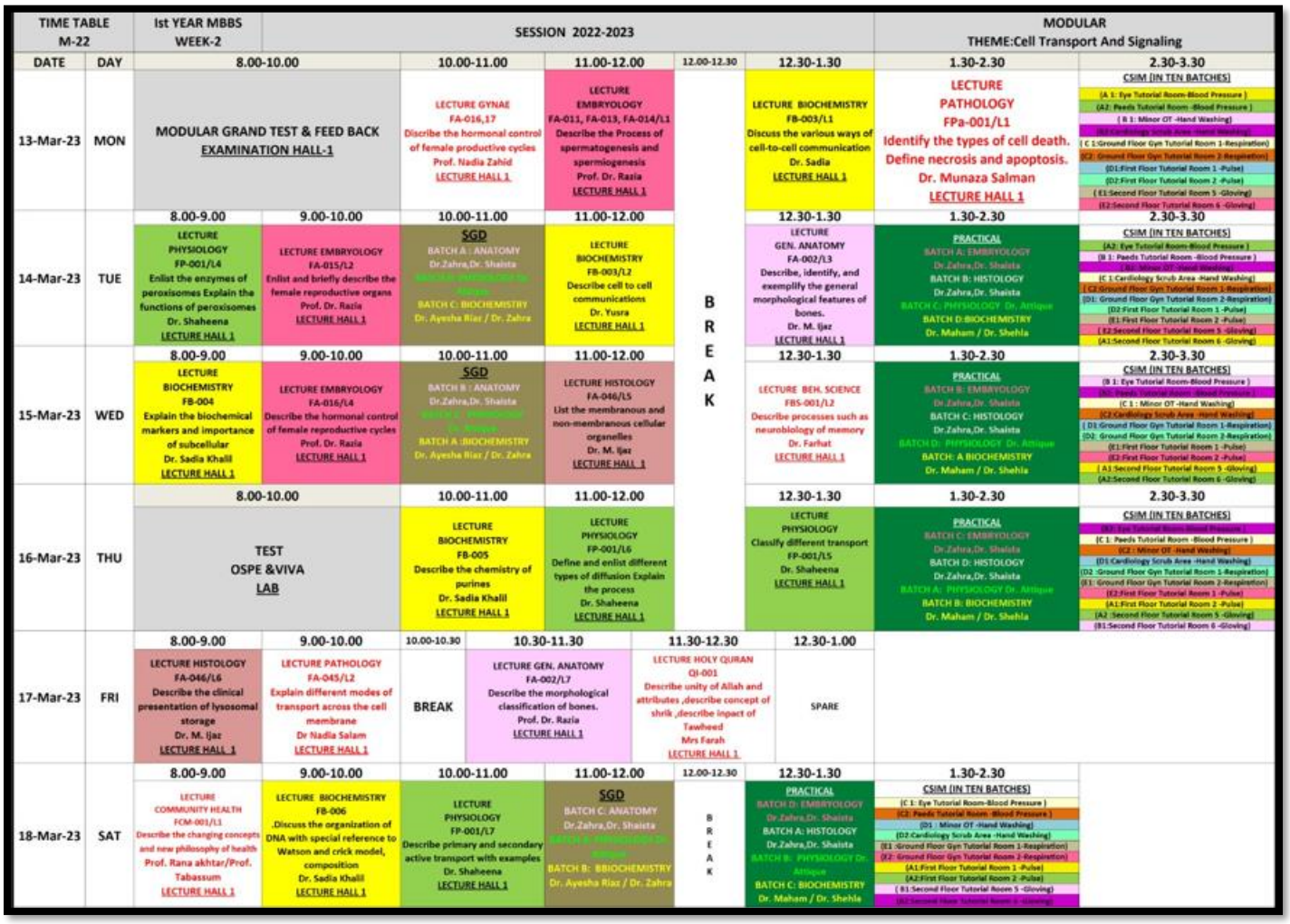
  Self Learning is scheduled to search for information to solve cases, read through different resources and discuss among the peers and with the faculty to clarify the concepts.

THEMATIC TIMETABLES FOR EACH WEEK

WEEK-1

TIME TABLE M-22		1st YEAR MBBS WEEK-1			SESSION 2022-2023			MODULAR THEME: Cell Structure	
Date	Days	08:00 - 09:00	09:00 - 10:00	10:00 - 11:00	11:00 - 11:30	11:30 - 12:30	12:30 - 01:30	01:30 - 02:30	02:30 - 03:30
6-Mar-23	Monday	LECTURE BIOCHEMISTRY (FB-001) Structure of Cell Dr. Sadia Khalil LECTURE HALL 1	LECTURE ANATOMY (FA-001) General Anatomy (Dr. Ijaz) LECTURE HALL 1	SGD: Tutorial Batch A: Anatomy (Dr. Shahista) Batch B: Physiology (Dr. Beenish) Batch C: Biochemistry (Dr. Ayesha Riaz / Dr. Zahra)	Break	LECTURE PHYSIOLOGY (FP-001) Cell Biology (Dr. Jawaria) LECTURE HALL 1	PRACTICAL Batch A: Embryology (Dr. Zahra) Batch B: Histology (Dr. Shaista) Batch C: Biochemistry (Dr. Maham) Batch D: Physiology (Dr. Areej)	LECTURE PATHOLOGY (FPa-001) Cell Injury (Dr. Munaza Salman) LECTURE HALL 1	Clinical Skills Introduction to Medicine
7-Mar-23	Tuesday	LECTURE ANATOMY (FA-010) Embryology Cell Cycle (Dr. Razia) LECTURE HALL 1	LECTURE PHYSIOLOGY (FP-001) Cell Biology (Dr. Afsheen) LECTURE HALL 1	SGD:Tutorial Batch B: Anatomy (Dr. Talha) Batch C: Physiology (Dr. Atiq) Batch A: Biochemistry (Dr. Ayesha Riaz / Dr. Zahra)		LECTURE BIOCHEMISTRY (FB-002) Cell Membrane Dr. Sadia Khalil LECTURE HALL 1	PRACTICAL Batch A: Embryology (Dr. Zahra) Batch B: Histology (Dr. Shaista) Batch C: Biochemistry (Dr. Maham) Batch D: Physiology (Dr. Areej)	LECTURE ANATOMY (FA-045) Introduction to Histology (Dr. Ijaz) LECTURE HALL 1	Clinical Skills Introduction to Surgery
8-Mar-23	Wednesday	LECTURE BIOCHEMISTRY (FB-002) Cell Membrane Dr. Sadia Khalil LECTURE HALL 1	White Coat Ceremony						
9-Mar-23	Thursday	LECTURE COMMUNITY MEDICINE (FCM-001) Concept of Health Prof. Rana Akhtar / Prof. Tabassum LECTURE HALL 1	LECTURE ANATOMY (FA-010) Embryology Cell Cycle (Dr. Razia) LECTURE HALL 1	LECTURE PHYSIOLOGY (FP-001) Cell Biology (Dr. Afsheen) LECTURE HALL 1	Break	LECTURE PATHOLOGY (FPa-001) Cell Injury (Dr. Munaza Salman) LECTURE HALL 1	PRACTICAL Batch A: Embryology (Dr. Zahra) Batch B: Histology (Dr. Shaista) Batch C: Biochemistry (Dr. Shehla) Batch D: Physiology (Dr. Areej)	SGD Tutorial Batch C: Anatomy (Dr. Fizza) Batch A: Physiology (Dr. Atiq) Batch B: Biochemistry (Dr. Ayesha Riaz / Dr. Zahra)	Clinical Skills Introduction to Gynae / Peads
10-Mar-23	Friday	08:00 - 09:00	09:00 - 10:00	10:00 - 10:30	10:30 - 11:30	11:30 - 12:30			
		PERL Introduction (Dr. Shandana) LECTURE HALL 1	LECTURE ANATOMY (FA-010) Histology Cell Membrane (Dr. Ijaz) LECTURE HALL 1	Break	PRACTICAL Batch A: Embryology (Dr. Zahra) Batch B: Histology (Dr. Shaista) Batch C: Biochemistry (Dr. Shehla) Batch D: Physiology (Dr. Areej)	LECTURE SCIENCES (FBS-001) Biological Basis of Behaviour Dr. Fariha LECTURE HALL 1			
11-Mar-23	Saturday	Sports Day							

WEEK-2:

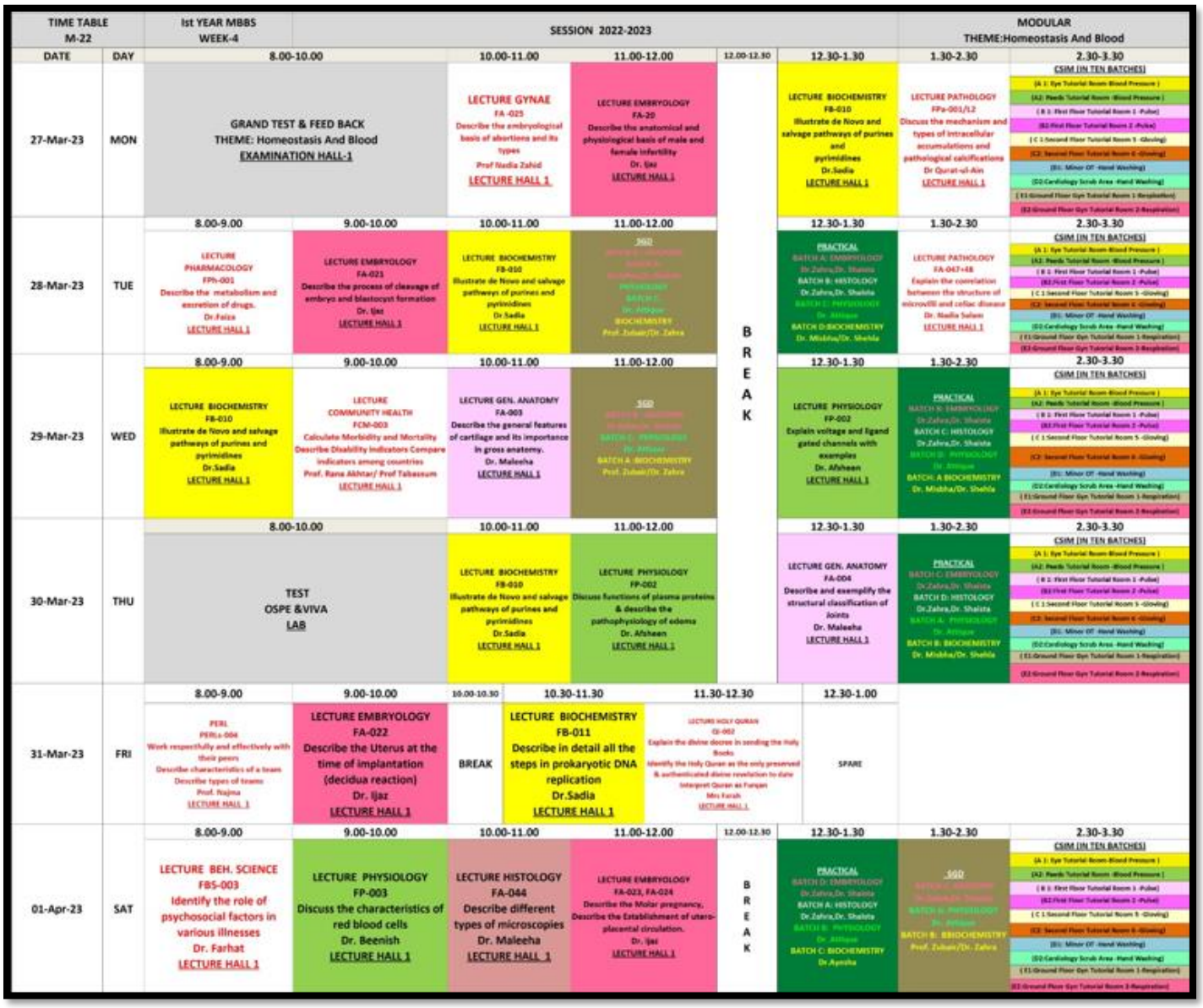


TIME TABLE M-22		1st YEAR MBBS WEEK-2		SESSION 2022-2023				MODULAR THEME:Cell Transport And Signaling	
DATE	DAY	8.00-10.00		10.00-11.00	11.00-12.00	12.00-12.30	12.30-1.30	1.30-2.30	2.30-3.30
13-Mar-23	MON	MODULAR GRAND TEST & FEED BACK EXAMINATION HALL-1		LECTURE GYNAE FA-016,17 Discribe the hormonal control of female productive cycles Prof. Nadia Zahid LECTURE HALL 1	LECTURE EMBRYOLOGY FA-011, FA-013, FA-014/L1 Describe the Process of spermatogenesis and spermiogenesis Prof. Dr. Razia LECTURE HALL 1		LECTURE BIOCHEMISTRY FB-003/L1 Discuss the various ways of cell-to-cell communication Dr. Sadia LECTURE HALL 1	LECTURE PATHOLOGY FPa-001/L1 Identify the types of cell death. Define necrosis and apoptosis. Dr. Munaza Salman LECTURE HALL 1	CSIM (IN TEN BATCHES) (A 1: Eye Tutorial Room-Blood Pressure) (A2: Peeds Tutorial Room -Blood Pressure) (B 1: Minor OT -Hand Washing) (D1:Cardiology Scrub Area -Hand Washing) (C 1:Ground Floor Gyn Tutorial Room 1-Respiration) (C2: Ground Floor Gyn Tutorial Room 2-Respiration) (D1:First Floor Tutorial Room 1 -Pulse) (D2:First Floor Tutorial Room 2 -Pulse) (E1:Second Floor Tutorial Room 5 -Gloving) (E2:Second Floor Tutorial Room 6 -Gloving)
14-Mar-23	TUE	8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00	B R E A K	12.30-1.30	1.30-2.30	2.30-3.30
		LECTURE PHYSIOLOGY FP-001/L4 Enlist the enzymes of peroxisomes Explain the functions of peroxisomes Dr. Shaheena LECTURE HALL 1	LECTURE EMBRYOLOGY FA-015/L2 Enlist and briefly describe the female reproductive organs Prof. Dr. Razia LECTURE HALL 1	SGD BATCH A : ANATOMY Dr.Zahra,Dr. Shaista BATCH B: PHYSIOLOGY Dr. Attique BATCH C: BIOCHEMISTRY Dr. Ayesha Riaz / Dr. Zahra	LECTURE BIOCHEMISTRY FB-003/L2 Describe cell to cell communications Dr. Yusra LECTURE HALL 1		LECTURE GEN. ANATOMY FA-002/L3 Describe, identify, and exemplify the general morphological features of bones. Dr. M. Ijaz LECTURE HALL 1	PRACTICAL BATCH A: EMBRYOLOGY Dr.Zahra,Dr. Shaista BATCH B: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH C: PHYSIOLOGY Dr. Attique BATCH D:BIOCHEMISTRY Dr. Maham / Dr. Shehla	CSIM (IN TEN BATCHES) (A2: Eye Tutorial Room-Blood Pressure) (B 1: Peeds Tutorial Room -Blood Pressure) (B2: Minor OT -Hand Washing) (C 1:Cardiology Scrub Area -Hand Washing) (C2:Ground Floor Gyn Tutorial Room 1-Respiration) (D1: Ground Floor Gyn Tutorial Room 2-Respiration) (D2:First Floor Tutorial Room 1 -Pulse) (E1:First Floor Tutorial Room 2 -Pulse) (E2:Second Floor Tutorial Room 5 -Gloving) (A1:Second Floor Tutorial Room 6 -Gloving)
15-Mar-23	WED	8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00		12.30-1.30	1.30-2.30	2.30-3.30
		LECTURE BIOCHEMISTRY FB-004 Explain the biochemical markers and importance of subcellular Dr. Sadia Khalil LECTURE HALL 1	LECTURE EMBRYOLOGY FA-016/L4 Describe the hormonal control of female reproductive cycles Prof. Dr. Razia LECTURE HALL 1	SGD BATCH B : ANATOMY Dr.Zahra,Dr. Shaista BATCH C: PHYSIOLOGY Dr. Attique BATCH A :BIOCHEMISTRY Dr. Ayesha Riaz / Dr. Zahra	LECTURE HISTOLOGY FA-046/L5 List the membranous and non-membranous cellular organelles Dr. M. Ijaz LECTURE HALL 1		LECTURE BEH. SCIENCE FBS-001/L2 Describe processes such as neurobiology of memory Dr. Farhat LECTURE HALL 1	PRACTICAL BATCH B: EMBRYOLOGY Dr.Zahra,Dr. Shaista BATCH C: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH D: PHYSIOLOGY Dr. Attique BATCH: A BIOCHEMISTRY Dr. Maham / Dr. Shehla	CSIM (IN TEN BATCHES) (B 1: Eye Tutorial Room-Blood Pressure) (B2: Peeds Tutorial Room -Blood Pressure) (C 1 : Minor OT -Hand Washing) (C2:Cardiology Scrub Area -Hand Washing) (D1:Ground Floor Gyn Tutorial Room 1-Respiration) (D2: Ground Floor Gyn Tutorial Room 2-Respiration) (E1:First Floor Tutorial Room 1 -Pulse) (E2:First Floor Tutorial Room 2 -Pulse) (A1 Second Floor Tutorial Room 5 -Gloving) (A2:Second Floor Tutorial Room 6 -Gloving)
16-Mar-23	THU	8.00-10.00		10.00-11.00	11.00-12.00		12.30-1.30	1.30-2.30	2.30-3.30
		TEST OSPE &VIVA LAB		LECTURE BIOCHEMISTRY FB-005 Describe the chemistry of purines Dr. Sadia Khalil LECTURE HALL 1	LECTURE PHYSIOLOGY FP-001/L6 Define and enlist different types of diffusion Explain the process Dr. Shaheena LECTURE HALL 1		LECTURE PHYSIOLOGY FP-001/L5 Classify different transport Dr. Shaheena LECTURE HALL 1	PRACTICAL BATCH C: EMBRYOLOGY Dr.Zahra,Dr. Shaista BATCH D: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH A: PHYSIOLOGY Dr. Attique BATCH B: BIOCHEMISTRY Dr. Maham / Dr. Shehla	CSIM (IN TEN BATCHES) (A2: Eye Tutorial Room-Blood Pressure) (C 1: Peeds Tutorial Room -Blood Pressure) (C2 : Minor OT -Hand Washing) (D1:Cardiology Scrub Area -Hand Washing) (D2 :Ground Floor Gyn Tutorial Room 1-Respiration) (E1: Ground Floor Gyn Tutorial Room 2-Respiration) (E2:First Floor Tutorial Room 1 -Pulse) (A1:First Floor Tutorial Room 2 -Pulse) (A2 :Second Floor Tutorial Room 5 -Gloving) (B1:Second Floor Tutorial Room 6 -Gloving)
17-Mar-23	FRI	8.00-9.00	9.00-10.00	10.00-10.30	10.30-11.30	11.30-12.30	12.30-1.00		
		LECTURE HISTOLOGY FA-046/L6 Describe the clinical presentation of lysosomal storage Dr. M. Ijaz LECTURE HALL 1	LECTURE PATHOLOGY FA-045/L2 Explain different modes of transport across the cell membrane Dr Nadia Salam LECTURE HALL 1	BREAK	LECTURE GEN. ANATOMY FA-002/L7 Describe the morphological classification of bones. Prof. Dr. Razia LECTURE HALL 1	LECTURE HOLY QURAN QI-001 Describe unity of Allah and attributes ,describe concept of shrik ,describe inpact of Tawheed Mrs Farah LECTURE HALL 1	SPARE		
18-Mar-23	SAT	8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00	12.00-12.30	12.30-1.30	1.30-2.30	
		LECTURE COMMUNITY HEALTH FCM-001/L1 Describe the changing concepts and new philosophy of health Prof. Rana akhtar/Prof. Tabassum LECTURE HALL 1	LECTURE BIOCHEMISTRY FB-006 .Discuss the organization of DNA with special reference to Watson and crick model, composition Dr. Sadia Khalil LECTURE HALL 1	LECTURE PHYSIOLOGY FP-001/L7 Describe primary and secondary active transport with examples Dr. Shaheena LECTURE HALL 1	SGD BATCH C: ANATOMY Dr.Zahra,Dr. Shaista BATCH A: PHYSIOLOGY Dr. Attique BATCH B: BBIOCHEMISTRY Dr. Ayesha Riaz / Dr. Zahra	B R E A K	PRACTICAL BATCH D: EMBRYOLOGY Dr.Zahra,Dr. Shaista BATCH A: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH B: PHYSIOLOGY Dr. Attique BATCH C: BIOCHEMISTRY Dr. Maham / Dr. Shehla	CSIM (IN TEN BATCHES) (C 1: Eye Tutorial Room-Blood Pressure) (C2: Peeds Tutorial Room -Blood Pressure) (D1 : Minor OT -Hand Washing) (D2 Cardiology Scrub Area -Hand Washing) (E1 :Ground Floor Gyn Tutorial Room 1-Respiration) (E2 :Ground Floor Gyn Tutorial Room 2-Respiration) (A1:First Floor Tutorial Room 1 -Pulse) (A2:First Floor Tutorial Room 2 -Pulse) (B1:Second Floor Tutorial Room 5 -Gloving) (B2:Second Floor Tutorial Room 6 -Gloving)	

WEEK-3:

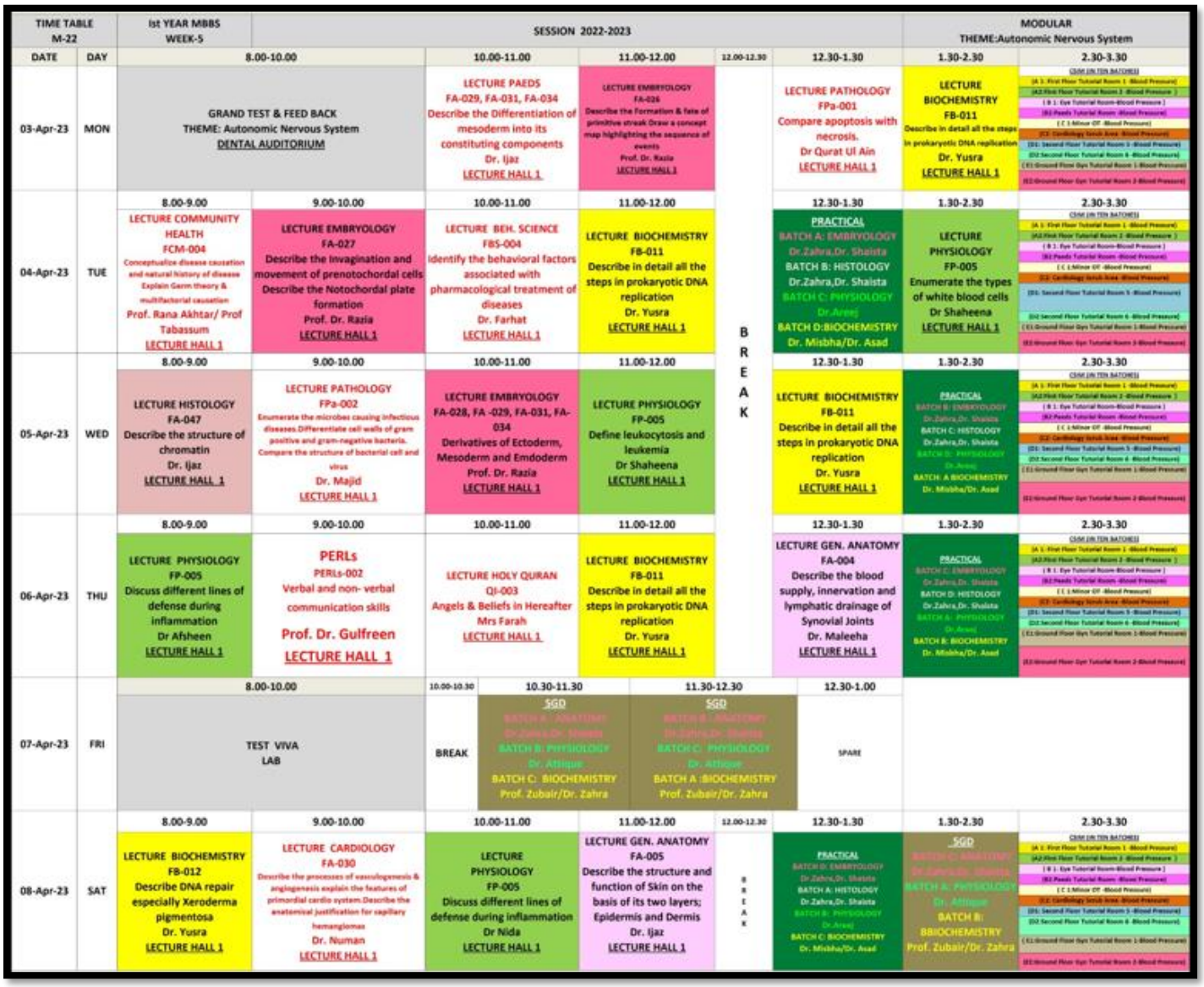
TIME TABLE M-22		Ist YEAR MBBS WEEK-3		SESSION 2022-2023				MODULAR THEME:Cell Chemistry	
DATE	DAY	8.00-10.00		10.00-11.00	11.00-12.00	12.00-12.30	12.30-1.30	1.30-2.30	2.30-3.30
20-Mar-23	MON	MODULAR GRAND TEST & FEED BACK THEME: Cell Chemistry EXAMINATION HALL-1		LECTURE GYNAE FA-020,21 Describe the anatomical and physiological basis of male and female infertility Langman Text book Embryology Prof Muntiha Sarosh LECTURE HALL 1	LECTURE EMBRYOLOGY FA-017 Describe the transportation of male and female gametes KLM Embryology ed. 10th, Ch. 2 Prof. Dr. Razia LECTURE HALL 1		LECTURE BIOCHEMISTRY FB-007 Discuss the structure of different types of RNAs Lippincott ch 31, Harper Ch# 34 Dr.Sadia LECTURE HALL 1	LECTURE GEN. ANATOMY FA-003 Describe the general features of cartilage GA by Tassadaq Hussain Ch.-3 Dr. Ijaz LECTURE HALL 1	CSIM (IN TEN BATCHES) (C1: Eye Tutorial Room-Blood Pressure) (D1 : Paeds Tutorial Room -Blood Pressure) (D2: Minor OT -Hand Washing) (E1:Cardiology Scrub Area -Hand Washing) (E2 :Ground Floor Gyn Tutorial Room 1-Respiration) (A1: Ground Floor Gyn Tutorial Room 2-Respiration) (A2:First Floor Tutorial Room 1 -Pulse) (B1:First Floor Tutorial Room 2 -Pulse) (B2 :Second Floor Tutorial Room 5 -Gloving) (C1:Second Floor Tutorial Room 6 -Gloving)
21-Mar-23	TUE	8.00-9.00 LECTURE PHYSIOLOGY P-001 Define and enlist types of endocytosis Guyton 14th Ed. Dr.Beenish LECTURE HALL 1	9.00-10.00 LECTURE EMBRYOLOGY FA-018 Define fertilization Define fertilization Describe the phases of fertilization Prof. Dr. Razia LECTURE HALL 1	10.00-11.00 SGD BATCH A : ANATOMY Dr.Zahra,Dr. Shaista BATCH B: EMBRYOLOGY Dr. Fahad BATCH C: BIOCHEMISTRY Prof.Zubair/ Dr.Zahra	11.00-12.00 LECTURE BIOCHEMISTRY FB-008 Explain the structure and nomenclature of nucleotides Lippincott Ch# 31, Harper Ch#32 Dr.Sadia LECTURE HALL 1	B R E A K	12.30-1.30 LECTURE BEH. SCIENCE FBS-002 Identify the burden of mental illness on the person Behavioural Sciences By Moudat Rana Page 106-108 Dr. Farhat LECTURE HALL 1	1.30-2.30 PRACTICAL BATCH A: EMBRYOLOGY Dr.Zahra,Dr. Shaista BATCH B: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH C: PHYSIOLOGY Dr. Fahad BATCH D:BIOCHEMISTRY Dr. Maham / Dr. Shehla	2.30-3.30 CSIM (IN TEN BATCHES) (D1: Eye Tutorial Room-Blood Pressure) (D2 : Paeds Tutorial Room -Blood Pressure) (E1: Minor OT -Hand Washing) (E2:Cardiology Scrub Area -Hand Washing) (A1: Ground Floor Gyn Tutorial Room 1-Respiration) (A2: Ground Floor Gyn Tutorial Room 2-Respiration) (B1:First Floor Tutorial Room 1 -Pulse) (B2:First Floor Tutorial Room 2 -Pulse) (C1:Second Floor Tutorial Room 5 -Gloving) (C2:Second Floor Tutorial Room 6 -Gloving)
22-Mar-23	WED	8.00-9.00 LECTURE BIOCHEMISTRY FB-009 Explain the higher organization of DNA. Difference between DNA, chromatid and chromosome lippincott Ch 22 Dr.Sadia LECTURE HALL 1	9.00-10.00 LECTURE EMBRYOLOGY FA-019 Define contraception Prof. Dr. Razia LECTURE HALL 1	10.00-11.00 SGD BATCH B : ANATOMY Dr.Zahra,Dr. Shaista BATCH C: EMBRYOLOGY Dr. Fahad BATCH A :BIOCHEMISTRY Prof.Zubair/ Dr.Zahra	11.00-12.00 LECTURE COMMUNITY HEALTH FCM-003 Describe explain importance of health indicators Classify health indicators K.Park ed 24th Pg # 13-56 Prof. Rana Akhtar/ Prof Tabassum LECTURE HALL 1		12.30-1.30 LECTURE PHARMACOLOGY FPh-001 Describe the absorption, distribution, metabolism and excretion of drugs. Ketsung Ed. 14th Ch.1 Dr.Rubina LECTURE HALL 1	1.30-2.30 PRACTICAL BATCH B: EMBRYOLOGY Dr.Zahra,Dr. Shaista BATCH C: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH D: PHYSIOLOGY Dr. Fahad BATCH: A BIOCHEMISTRY Dr. Maham / Dr. Shehla	2.30-3.30 CSIM (IN TEN BATCHES) (D2: Eye Tutorial Room-Blood Pressure) (L1: Paeds Tutorial Room -Blood Pressure) (E2: Minor OT -Hand Washing) (A1 :Cardiology Scrub Area -Hand Washing) (A2:Ground Floor Gyn Tutorial Room 1-Respiration) (B1: Ground Floor Gyn Tutorial Room 2-Respiration) (B2:First Floor Tutorial Room 1 -Pulse) (C1:First Floor Tutorial Room 2 -Pulse) (C2:Second Floor Tutorial Room 5 -Gloving) (D1:Second Floor Tutorial Room 6 -Gloving)
23-Mar-23	THU	PAKISTAN DAY HOLIDAY							
24-Mar-23	FRI	8.00-9.00 LECTURE HISTOLOGY FA-048 Describe the Biochemical composition of the basolateral modifications Liaq Hussain 6th ed. Ch. 2 Dr. Ijaz LECTURE HALL 1	9.00-10.00 LECTURE BIOCHEMISTRY FB-010 Illustrate de Novo and salvage pathways of purines and pyrimidines lippincott Ch 22 Dr.Sadia LECTURE HALL 1	10.00-10.30 BREAK	10.30-11.30 PRACTICAL BATCH C: EMBRYOLOGY Dr.Zahra,Dr. Shaista BATCH D: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH A: PHYSIOLOGY Dr. Fahad BATCH B: BIOCHEMISTRY Dr. Maham / Dr. Shehla	11.30-12.30 LECTURE HOLY QURAN QI-002 Explain Significance of Risalat Introduction to Islam Mrs Farah LECTURE HALL 1	12.30-1.00 SPARE		
25-Mar-23	SAT	8.00-9.00 LECTURE PATHOLOGY FPa-001/L1 Identify different types and mechanism of cellular adaptations to stress Robins 10th Ed; Page No. 69-73 Dr Qurat-ul-Ain LECTURE HALL 1	9.00-10.00 LECTURE BIOCHEMISTRY FB-010 Illustrate de Novo and salvage pathways of purines and pyrimidines lippincott Ch 22 Dr. Yusra LECTURE HALL 1	10.00-11.00 LECTURE PHYSIOLOGY Explain the process of facilitated diffusion with the aid of diagram Guyton 14th Ed. Dr. Afsheen LECTURE HALL 1	11.00-12.00 SGD BATCH C: ANATOMY Dr.Zahra,Dr. Shaista BATCH A: EMBRYOLOGY Dr. Fahad BATCH B: BBIOCHEMISTRY Dr. Hamza/Dr. Shehla	12.00-12.30 B R E A K	12.30-1.30 PRACTICAL BATCH D: EMBRYOLOGY Dr.Zahra,Dr. Shaista BATCH A: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH B: PHYSIOLOGY Dr. Fahad BATCH C: BIOCHEMISTRY Dr. Maham / Dr. Shehla	1.30-2.30 (E1: Eye Tutorial Room-Blood Pressure) (E2: Paeds Tutorial Room -Blood Pressure) (A1 : Minor OT -Hand Washing) (A2:Cardiology Scrub Area -Hand Washing) (B1:Ground Floor Gyn Tutorial Room 1-Respiration) (B2: Ground Floor Gyn Tutorial Room 2-Respiration) (C1:First Floor Tutorial Room 1 -Pulse) (C2:First Floor Tutorial Room 2 -Pulse) (D1 :Second Floor Tutorial Room 5 -Gloving) (D2:Second Floor Tutorial Room 6 -Gloving)	

WEEK-4:



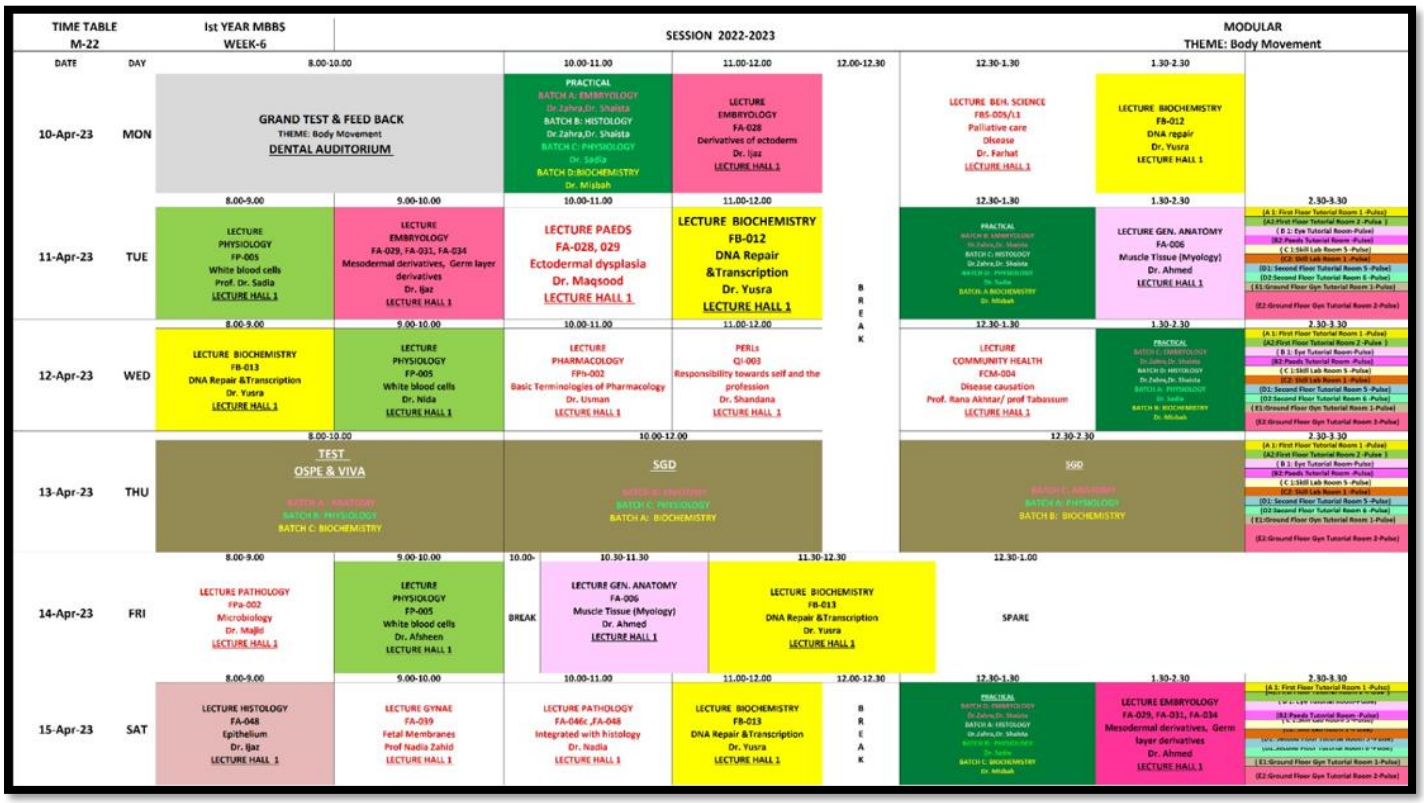
TIME TABLE M-22		1st YEAR MBBS WEEK-4	SESSION 2022-2023					MODULAR THEME:Homeostasis And Blood	
DATE	DAY	8.00-10.00	10.00-11.00	11.00-12.00	12.00-12.30	12.30-1.30	1.30-2.30	2.30-3.30
27-Mar-23	MON	GRAND TEST & FEED BACK THEME: Homeostasis And Blood EXAMINATION HALL-1	LECTURE GYNAE FA -025 Describe the embryological basis of abortions and its types Prof Nadia Zahid LECTURE HALL 1	LECTURE EMBRYOLOGY FA-20 Describe the anatomical and physiological basis of male and female infertility Dr. Ijaz LECTURE HALL 1		LECTURE BIOCHEMISTRY FB-010 Illustrate de Novo and salvage pathways of purines and pyrimidines Dr.Sadia LECTURE HALL 1	LECTURE PATHOLOGY FPa-001/L2 Discuss the mechanism and types of intracellular accumulations and pathological calcifications Dr Qurat-ul-Ain LECTURE HALL 1	CSIM (IN TEN BATCHES)
		8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00	12.30-1.30	1.30-2.30	2.30-3.30
28-Mar-23	TUE	LECTURE PHARMACOLOGY FPh-001 Describe the metabolism and excretion of drugs. Dr.Faiza LECTURE HALL 1	LECTURE EMBRYOLOGY FA-021 Describe the process of cleavage of embryo and blastocyst formation Dr. Ijaz LECTURE HALL 1	LECTURE BIOCHEMISTRY FB-010 Illustrate de Novo and salvage pathways of purines and pyrimidines Dr Sadia LECTURE HALL 1	SGD PHYSIOLOGY BIOCHEMISTRY Prof. Zuhair/Dr. Zahra	PRACTICAL BATCH B: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH D:BIOCHEMISTRY Dr. Misbha/Dr. Shehla	LECTURE PATHOLOGY FA-047+48 Explain the correlation between the structure of microvilli and celiac disease Dr. Nadia Saleem LECTURE HALL 1	CSIM (IN TEN BATCHES)
		8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00	12.30-1.30	1.30-2.30	2.30-3.30
29-Mar-23	WED	LECTURE BIOCHEMISTRY FB-010 Illustrate de Novo and salvage pathways of purines and pyrimidines Dr.Sadia LECTURE HALL 1	LECTURE COMMUNITY HEALTH FCM-003 Calculate Morbidity and Mortality Describe Disability Indicators Compare indicators among countries Prof. Rana Akhtar/ Prof Tabassum LECTURE HALL 1	LECTURE GEN. ANATOMY FA-003 Describe the general features of cartilage and its importance in gross anatomy. Dr. Maleeha LECTURE HALL 1	SGD BATCH A :BIOCHEMISTRY Prof. Zuhair/Dr. Zahra	LECTURE PHYSIOLOGY FP-002 Explain voltage and ligand gated channels with examples Dr. Afsheen LECTURE HALL 1	PRACTICAL BATCH C: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH A: BIOCHEMISTRY Dr. Misbha/Dr. Shehla	CSIM (IN TEN BATCHES)
		8.00-10.00	10.00-11.00	11.00-12.00		12.30-1.30	1.30-2.30	2.30-3.30
30-Mar-23	THU	TEST OSPE &VIVA LAB	LECTURE BIOCHEMISTRY FB-010 Illustrate de Novo and salvage pathways of purines and pyrimidines Dr.Sadia LECTURE HALL 1	LECTURE PHYSIOLOGY FP-002 Discuss functions of plasma proteins & describe the pathophysiology of edema Dr. Afsheen LECTURE HALL 1		LECTURE GEN. ANATOMY FA-004 Describe and exemplify the structural classification of Joints Dr. Maleeha LECTURE HALL 1	PRACTICAL BATCH D: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH B: BIOCHEMISTRY Dr. Misbha/Dr. Shehla	CSIM (IN TEN BATCHES)
		8.00-9.00	9.00-10.00	10.00-10.30	10.30-11.30	11.30-12.30	12.30-1.00	
31-Mar-23	FRI	PERL PERLs-004 Work respectfully and effectively with their peers Describe characteristics of a team Describe types of teams Prof. Najma LECTURE HALL 1	LECTURE EMBRYOLOGY FA-022 Describe the Uterus at the time of implantation (decidua reaction) Dr. Ijaz LECTURE HALL 1	BREAK	LECTURE BIOCHEMISTRY FB-011 Describe in detail all the steps in prokaryotic DNA replication Dr.Sadia LECTURE HALL 1	LECTURE HOLY QURAN QI-002 Explain the divine decree in sending the Holy Books Identify the Holy Quran as the only preserved & authenticated divine revelation to date Interpret Quran as Furqan Mrs Farah LECTURE HALL 1	SPARE	
		8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00	12.00-12.30	12.30-1.30	1.30-2.30	2.30-3.30
01-Apr-23	SAT	LECTURE BEH. SCIENCE FBS-003 Identify the role of psychosocial factors in various illnesses Dr. Farhat LECTURE HALL 1	LECTURE PHYSIOLOGY FP-003 Discuss the characteristics of red blood cells Dr. Beenish LECTURE HALL 1	LECTURE HISTOLOGY FA-044 Describe different types of microscopies Dr. Maleeha LECTURE HALL 1	LECTURE EMBRYOLOGY FA-023, FA-024 Describe the Molar pregnancy, Describe the Establishment of utero-placental circulation. Dr. Ijaz LECTURE HALL 1	BREAK	PRACTICAL BATCH A: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH C: BIOCHEMISTRY Dr Ayesha	SGD BATCH B: BIOCHEMISTRY Prof. Zuhair/Dr. Zahra	CSIM (IN TEN BATCHES)

WEEK-5:



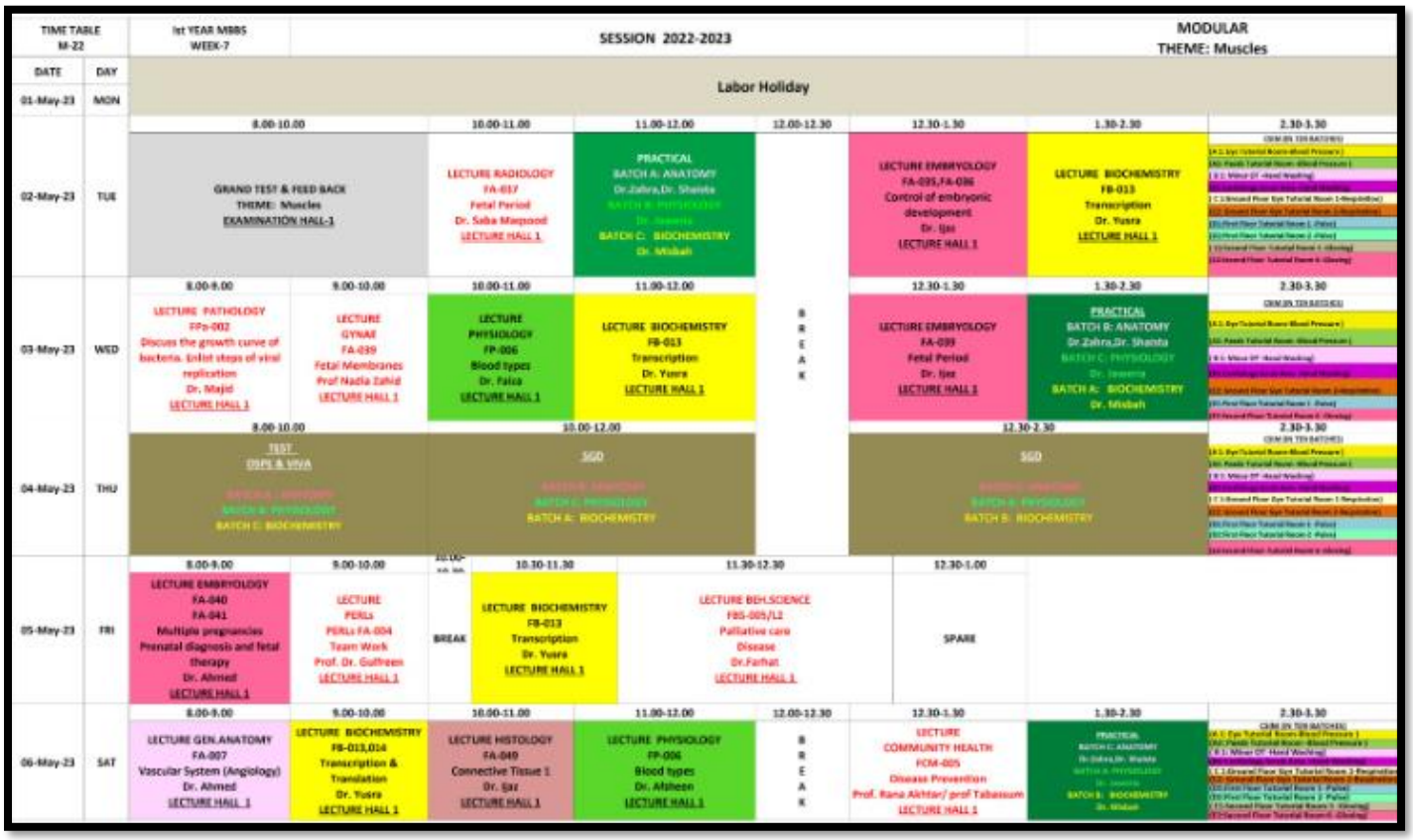
TIME TABLE M-22		1st YEAR MBBS WEEK-5		SESSION 2022-2023				MODULAR THEME:Autonomic Nervous System	
DATE	DAY	8.00-10.00		10.00-11.00	11.00-12.00	12.00-12.30	12.30-1.30	1.30-2.30	2.30-3.30
03-Apr-23	MON	GRAND TEST & FEED BACK THEME: Autonomic Nervous System DENTAL AUDITORIUM		LECTURE PAEDS FA-029, FA-031, FA-034 Describe the Differentiation of mesoderm into its constituting components Dr. Ijaz LECTURE HALL 1	LECTURE EMBRYOLOGY FA-026 Describe the Formation & fate of primitive streak Draw a concept map highlighting the sequence of events Prof. Dr. Razia LECTURE HALL 1		LECTURE PATHOLOGY FPa-001 Compare apoptosis with necrosis. Dr Qurat Ul Ain LECTURE HALL 1	LECTURE BIOCHEMISTRY FB-011 Describe in detail all the steps in prokaryotic DNA replication Dr. Yusra LECTURE HALL 1	
04-Apr-23	TUE	8.00-9.00 LECTURE COMMUNITY HEALTH FCM-004 Conceptualize disease causation and natural history of disease Explain Germ theory & multifactorial causation Prof. Rana Akhtar/ Prof Tabassum LECTURE HALL 1	9.00-10.00 LECTURE EMBRYOLOGY FA-027 Describe the invagination and movement of prenotochordal cells Describe the Notochordal plate formation Prof. Dr. Razia LECTURE HALL 1	10.00-11.00 LECTURE BEH. SCIENCE FBS-004 Identify the behavioral factors associated with pharmacological treatment of diseases Dr. Farhat LECTURE HALL 1	11.00-12.00 LECTURE BIOCHEMISTRY FB-011 Describe in detail all the steps in prokaryotic DNA replication Dr. Yusra LECTURE HALL 1	B R E A K	12.30-1.30 PRACTICAL BATCH A: EMBRYOLOGY Dr.Zahra,Dr. Shaista BATCH B: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH C: PHYSIOLOGY Dr.Areej BATCH D:BIOCHEMISTRY Dr. Misbha/Dr. Asad	1.30-2.30 LECTURE PHYSIOLOGY FP-005 Enumerate the types of white blood cells Dr Shaheena LECTURE HALL 1	2.30-3.30
05-Apr-23	WED	8.00-9.00 LECTURE HISTOLOGY FA-047 Describe the structure of chromatin Dr. Ijaz LECTURE HALL 1	9.00-10.00 LECTURE PATHOLOGY FPa-002 Enumerate the microbes causing infectious diseases.Differentiate cell walls of gram positive and gram-negative bacteria. Compare the structure of bacterial cell and virus Dr. Majid LECTURE HALL 1	10.00-11.00 LECTURE EMBRYOLOGY FA-028, FA -029, FA-031, FA-034 Derivatives of Ectoderm, Mesoderm and Emdoderm Prof. Dr. Razia LECTURE HALL 1	11.00-12.00 LECTURE PHYSIOLOGY FP-005 Define leukocytosis and leukemia Dr Shaheena LECTURE HALL 1		12.30-1.30 LECTURE BIOCHEMISTRY FB-011 Describe in detail all the steps in prokaryotic DNA replication Dr. Yusra LECTURE HALL 1	1.30-2.30 PRACTICAL BATCH B: EMBRYOLOGY Dr.Zahra,Dr. Shaista BATCH C: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH D: PHYSIOLOGY Dr.Areej BATCH: A BIOCHEMISTRY Dr. Misbha/Dr. Asad	2.30-3.30
06-Apr-23	THU	8.00-9.00 LECTURE PHYSIOLOGY FP-005 Discuss different lines of defense during inflammation Dr Afsheen LECTURE HALL 1	9.00-10.00 PERLs PERLs-002 Verbal and non- verbal communication skills Prof. Dr. Gulfreen LECTURE HALL 1	10.00-11.00 LECTURE HOLY QURAN QI-003 Angels & Beliefs in Hereafter Mrs Farah LECTURE HALL 1	11.00-12.00 LECTURE BIOCHEMISTRY FB-011 Describe in detail all the steps in prokaryotic DNA replication Dr. Yusra LECTURE HALL 1		12.30-1.30 LECTURE GEN. ANATOMY FA-004 Describe the blood supply, innervation and lymphatic drainage of Synovial Joints Dr. Maleeha LECTURE HALL 1	1.30-2.30 PRACTICAL BATCH C: EMBRYOLOGY Dr.Zahra,Dr. Shaista BATCH D: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH A: PHYSIOLOGY Dr.Areej BATCH B: BIOCHEMISTRY Dr. Misbha/Dr. Asad	2.30-3.30
07-Apr-23	FRI	8.00-10.00 TEST VIVA LAB		10.00-10.30 BREAK	10.30-11.30 SGD BATCH B: PHYSIOLOGY Dr. Atique BATCH C: BIOCHEMISTRY Prof. Zubair/Dr. Zahra	11.30-12.30 SGD BATCH C: PHYSIOLOGY Dr. Atique BATCH A :BIOCHEMISTRY Prof. Zubair/Dr. Zahra	12.30-1.00 SPARE		
08-Apr-23	SAT	8.00-9.00 LECTURE BIOCHEMISTRY FB-012 Describe DNA repair especially Xeroderma pigmentosa Dr. Yusra LECTURE HALL 1	9.00-10.00 LECTURE CARDIOLOGY FA-030 Describe the processes of vasculogenesis & angiogenesis explain the features of primordial cardio system.Describe the anatomical justification for capillary hemanglomas Dr. Numan LECTURE HALL 1	10.00-11.00 LECTURE PHYSIOLOGY FP-005 Discuss different lines of defense during inflammation Dr Nida LECTURE HALL 1	11.00-12.00 LECTURE GEN. ANATOMY FA-005 Describe the structure and function of Skin on the basis of its two layers; Epidermis and Dermis Dr. Ijaz LECTURE HALL 1	B R E A K	12.30-1.30 PRACTICAL BATCH D: EMBRYOLOGY Dr.Zahra,Dr. Shaista BATCH A: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH B: PHYSIOLOGY Dr.Areej BATCH C: BIOCHEMISTRY Dr. Misbha/Dr. Asad	1.30-2.30 SGD BATCH C: ANATOMY Dr.Zahra,Dr. Shaista BATCH A: PHYSIOLOGY Dr. Atique BATCH B: BIOCHEMISTRY Prof. Zubair/Dr. Zahra	2.30-3.30

WEEK-6:



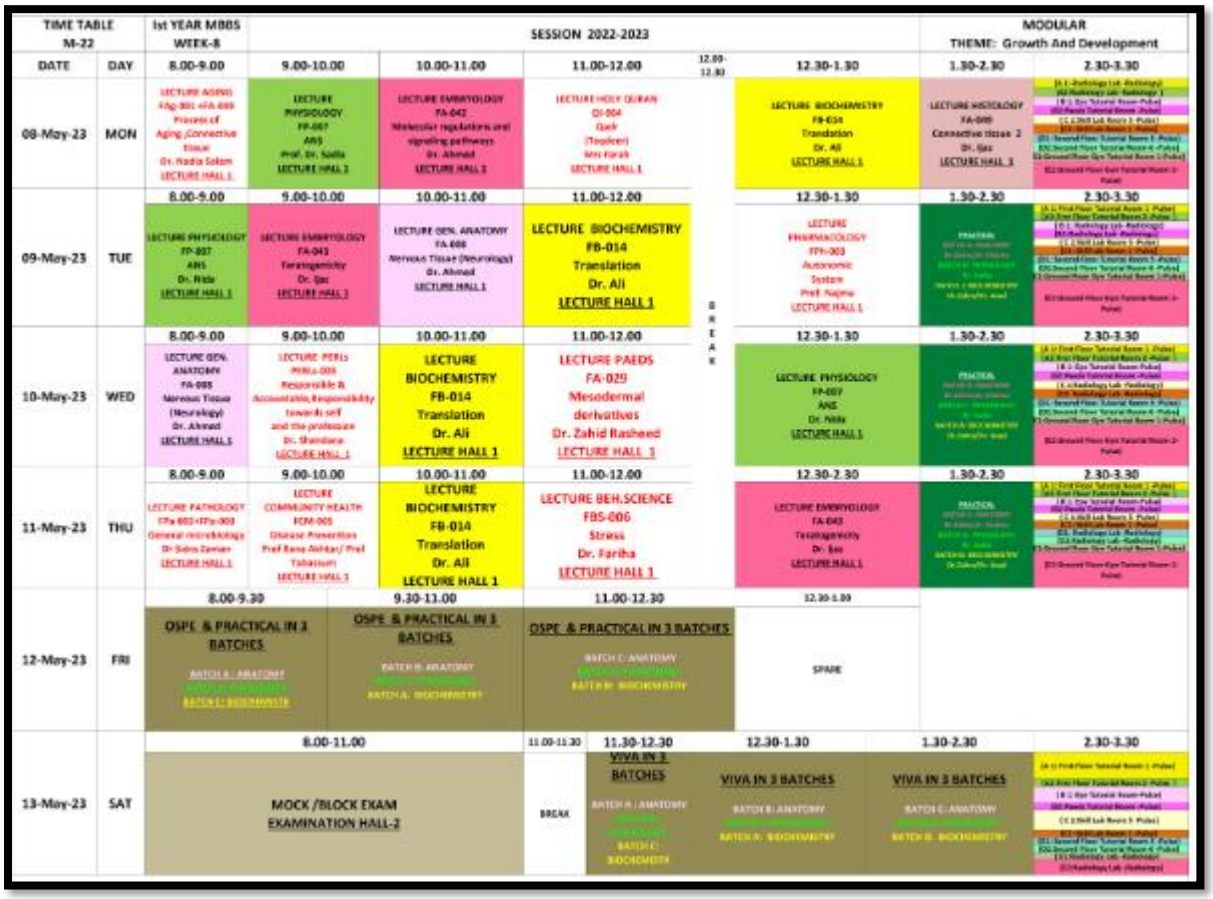
TIME TABLE M-22	Ist YEAR MBBS WEEK-6	SESSION 2022-2023						MODULAR THEME: Body Movement
DATE	DAY	8.00-10.00	10.00-11.00	11.00-12.00	12.00-12.30	12.30-1.30	1.30-2.30	
10-Apr-23	MON	GRAND TEST & FEED BACK THEME: Body Movement DENTAL AUDITORIUM	PRACTICAL BATCH A: EMBRYOLOGY Dr.Zahra,Dr. Shaista BATCH B: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH C: PHYSIOLOGY Dr. Sadia BATCH D:BIOCHEMISTRY Dr. Misbah	LECTURE EMBRYOLOGY FA-028 Derivatives of actoderm Dr. Ijaz LECTURE HALL 1		LECTURE BEH. SCIENCE FBS-005/L1 Palliative care Disease Dr. Farhat LECTURE HALL 1	LECTURE BIOCHEMISTRY FB-012 DNA repair Dr. Yusra LECTURE HALL 1	
		8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00	12.30-1.30	1.30-2.30	2.30-3.30
11-Apr-23	TUE	LECTURE PHYSIOLOGY FP-005 White blood cells Prof. Dr. Sadia LECTURE HALL 1	LECTURE EMBRYOLOGY FA-029, FA-031, FA-034 Mesodermal derivatives, Germ layer derivatives Dr. Ijaz LECTURE HALL 1	LECTURE PAEDS FA-028, 029 Ectodermal dysplasia Dr. Maqsood LECTURE HALL 1	LECTURE BIOCHEMISTRY FB-012 DNA Repair &Transcription Dr. Yusra LECTURE HALL 1	PRACTICAL BATCH B: EMBRYOLOGY Dr.Zahra,Dr. Shaista BATCH C: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH A: PHYSIOLOGY Dr. Sadia BATCH A: BIOCHEMISTRY Dr. Misbah	LECTURE GEN. ANATOMY FA-006 Muscle Tissue (Myology) Dr. Ahmed LECTURE HALL 1	(A 1: First Floor Tutorial Room 1 -Pulse) (A2:First Floor Tutorial Room 2 -Pulse) (B 1: Eye Tutorial Room-Pulse) (B2: Peads Tutorial Room -Pulse) (C 1:Skill Lab Room 5 -Pulse) (C2: Skill Lab Room 1 -Pulse) (D1: Second Floor Tutorial Room 5 -Pulse) (D2:Second Floor Tutorial Room 6 -Pulse) (E1:Ground Floor Gyn Tutorial Room 1-Pulse) (E2:Ground Floor Gyn Tutorial Room 2-Pulse)
		8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00	12.30-1.30	1.30-2.30	2.30-3.30
12-Apr-23	WED	LECTURE BIOCHEMISTRY FB-013 DNA Repair &Transcription Dr. Yusra LECTURE HALL 1	LECTURE PHYSIOLOGY FP-005 White blood cells Dr. Nida LECTURE HALL 1	LECTURE PHARMACOLOGY FPh-002 Basic Terminologies of Pharmacology Dr. Usman LECTURE HALL 1	PERLs QI-003 Responsibility towards self and the profession Dr. Shandana LECTURE HALL 1	LECTURE COMMUNITY HEALTH FCM-004 Disease causation Prof. Rana Akhtar/ prof Tabassum LECTURE HALL 1	PRACTICAL BATCH C: EMBRYOLOGY Dr.Zahra,Dr. Shaista BATCH D: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH A: PHYSIOLOGY Dr. Sadia BATCH B: BIOCHEMISTRY Dr. Misbah	(A 1: First Floor Tutorial Room 1 -Pulse) (A2:First Floor Tutorial Room 2 -Pulse) (B 1: Eye Tutorial Room-Pulse) (B2: Peads Tutorial Room -Pulse) (C 1:Skill Lab Room 5 -Pulse) (C2: Skill Lab Room 1 -Pulse) (D1: Second Floor Tutorial Room 5 -Pulse) (D2:Second Floor Tutorial Room 6 -Pulse) (E1:Ground Floor Gyn Tutorial Room 1-Pulse) (E2:Ground Floor Gyn Tutorial Room 2-Pulse)
		8.00-10.00		10.00-12.00		12.30-2.30		2.30-3.30
13-Apr-23	THU	TEST OSPE & VIVA BATCH A: ANATOMY BATCH B: PHYSIOLOGY BATCH C: BIOCHEMISTRY		SGD BATCH D: ANATOMY BATCH C: PHYSIOLOGY BATCH A: BIOCHEMISTRY		SGD BATCH C: ANATOMY BATCH A: PHYSIOLOGY BATCH B: BIOCHEMISTRY		(A 1: First Floor Tutorial Room 1 -Pulse) (A2:First Floor Tutorial Room 2 -Pulse) (B 1: Eye Tutorial Room-Pulse) (B2: Peads Tutorial Room -Pulse) (C 1:Skill Lab Room 5 -Pulse) (C2: Skill Lab Room 1 -Pulse) (D1: Second Floor Tutorial Room 5 -Pulse) (D2:Second Floor Tutorial Room 6 -Pulse) (E1:Ground Floor Gyn Tutorial Room 1-Pulse) (E2:Ground Floor Gyn Tutorial Room 2-Pulse)
		8.00-9.00	9.00-10.00	10.00-	10.30-11.30	11.30-12.30	12.30-1.00	
14-Apr-23	FRI	LECTURE PATHOLOGY FPa-002 Microbiology Dr. Majid LECTURE HALL 1	LECTURE PHYSIOLOGY FP-005 White blood cells Dr. Afsheen LECTURE HALL 1	BREAK	LECTURE GEN. ANATOMY FA-006 Muscle Tissue (Myology) Dr. Ahmed LECTURE HALL 1	LECTURE BIOCHEMISTRY FB-013 DNA Repair &Transcription Dr. Yusra LECTURE HALL 1	SPARE	
		8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00	12.00-12.30	12.30-1.30	1.30-2.30	2.30-3.30
15-Apr-23	SAT	LECTURE HISTOLOGY FA-048 Epithelium Dr. Ijaz LECTURE HALL 1	LECTURE GYNAE FA-039 Fetal Membranes Prof Nadia Zahid LECTURE HALL 1	LECTURE PATHOLOGY FA-046 ,FA-048 Integrated with histology Dr. Nadia LECTURE HALL 1	LECTURE BIOCHEMISTRY FB-013 DNA Repair &Transcription Dr. Yusra LECTURE HALL 1	BREAK	PRACTICAL BATCH D: EMBRYOLOGY Dr.Zahra,Dr. Shaista BATCH A: HISTOLOGY Dr.Zahra,Dr. Shaista BATCH B: PHYSIOLOGY Dr. Sadia BATCH C: BIOCHEMISTRY Dr. Misbah	LECTURE EMBRYOLOGY FA-029, FA-031, FA-034 Mesodermal derivatives, Germ layer derivatives Dr. Ahmed LECTURE HALL 1	(A 1: First Floor Tutorial Room 1 -Pulse) (A2:First Floor Tutorial Room 2 -Pulse) (B 1: Eye Tutorial Room-Pulse) (B2: Peads Tutorial Room -Pulse) (C 1:Skill Lab Room 5 -Pulse) (C2: Skill Lab Room 1 -Pulse) (D1: Second Floor Tutorial Room 5 -Pulse) (D2:Second Floor Tutorial Room 6 -Pulse) (E1:Ground Floor Gyn Tutorial Room 1-Pulse) (E2:Ground Floor Gyn Tutorial Room 2-Pulse)

WEEK-7:



TIME TABLE M-22		1st YEAR MBBS WEEK-7		SESSION 2022-2023				MODULAR THEME: Muscles	
DATE	DAY								
01-May-23	MON	Labor Holiday							
02-May-23	TUE	8.00-10.00 GRAND TEST & FEED BACK THEME: Muscles EXAMINATION HALL-1		10.00-11.00 LECTURE RADIOLOGY FA-017 Fetal Period Dr. Saba Maqsood LECTURE HALL 1	11.00-12.00 PRACTICAL BATCH A: ANATOMY Dr.Zahra,Dr. Shanta BATCH B: PHYSIOLOGY Dr. Javeria BATCH C: BIOCHEMISTRY Dr. Misbah	12.00-12.30	12.30-1.30 LECTURE EMBRYOLOGY FA-035,FA-036 Control of embryonic development Dr. Ijaz LECTURE HALL 1	1.30-2.30 LECTURE BIOCHEMISTRY FB-013 Transcription Dr. Yusra LECTURE HALL 1	2.30-3.30
03-May-23	WED	8.00-9.00 LECTURE PATHOLOGY FPa-002 Discuss the growth curve of bacteria. Enlist steps of viral replication Dr. Majid LECTURE HALL 1	9.00-10.00 LECTURE GYNAE FA-039 Fetal Membranes Prof Nadia Zahid LECTURE HALL 1	10.00-11.00 LECTURE PHYSIOLOGY FP-006 Blood types Dr. Faiza LECTURE HALL 1	11.00-12.00 LECTURE BIOCHEMISTRY FB-013 Transcription Dr. Yusra LECTURE HALL 1	BREAK	12.30-1.30 LECTURE EMBRYOLOGY FA-039 Fetal Period Dr. Ijaz LECTURE HALL 1	1.30-2.30 PRACTICAL BATCH B: ANATOMY Dr.Zahra,Dr. Shanta BATCH C: PHYSIOLOGY Dr. Javeria BATCH A: BIOCHEMISTRY Dr. Misbah	2.30-3.30
04-May-23	THU	8.00-10.00 TEST OSPE & VIVA BATCH A: ANATOMY BATCH B: PHYSIOLOGY BATCH C: BIOCHEMISTRY		10.00-12.00 SGD BATCH C: ANATOMY BATCH A: PHYSIOLOGY BATCH B: BIOCHEMISTRY			12.30-2.30 SGD BATCH B: ANATOMY BATCH C: PHYSIOLOGY BATCH A: BIOCHEMISTRY		2.30-3.30
05-May-23	FRI	8.00-9.00 LECTURE EMBRYOLOGY FA-040 FA-041 Multiple pregnancies Prenatal diagnosis and fetal therapy Dr. Ahmed LECTURE HALL 1	9.00-10.00 LECTURE PERLs PERLs FA-004 Team Work Prof. Dr. Gulfreen LECTURE HALL 1	10.00-10.30 BREAK	10.30-11.30 LECTURE BIOCHEMISTRY FB-013 Transcription Dr. Yusra LECTURE HALL 1	11.30-12.30 LECTURE BEH.SCIENCE FBS-005/L2 Palliative care Disease Dr.Farhat LECTURE HALL 1	12.30-1.00 SPARE		
06-May-23	SAT	8.00-9.00 LECTURE GEN.ANATOMY FA-007 Vascular System (Angiology) Dr. Ahmed LECTURE HALL 1	9.00-10.00 LECTURE BIOCHEMISTRY FB-013,014 Transcription & Translation Dr. Yusra LECTURE HALL 1	10.00-11.00 LECTURE HISTOLOGY FA-049 Connective Tissue 1 Dr. Ijaz LECTURE HALL 1	11.00-12.00 LECTURE PHYSIOLOGY FP-006 Blood types Dr. Afsheen LECTURE HALL 1	12.00-12.30 BREAK	12.30-1.30 LECTURE COMMUNITY HEALTH FCM-005 Disease Prevention Prof. Rana Akhter/ prof Tabassum LECTURE HALL 1	1.30-2.30 PRACTICAL BATCH C: ANATOMY Dr.Zahra,Dr. Shanta BATCH A: PHYSIOLOGY Dr. Javeria BATCH B: BIOCHEMISTRY Dr. Misbah	2.30-3.30

WEEK-8:



TIME TABLE M-22		1st YEAR MBBS WEEK-8	SESSION 2022-2023					MODULAR THEME: Growth And Development	
DATE	DAY	8.00-9.00	9.00-10.00	10.00-11.00	11.00-12.00	12.00-12.30	12.30-1.30	1.30-2.30	2.30-3.30
08-May-23	MON	LECTURE AGING FAg-301 +FA-049 Process of Aging ,Connective tissue Dr. Nadia Salam LECTURE HALL 1	LECTURE PHYSIOLOGY FP-007 ANS Prof. Dr. Sadia LECTURE HALL 1	LECTURE EMBRYOLOGY FA-042 Molecular regulations and signaling pathways Dr. Ahmed LECTURE HALL 1	LECTURE HOLY QURAN DI-004 Dark (Tresses) Mrs Farah LECTURE HALL 1		LECTURE BIOCHEMISTRY FB-014 Translation Dr. Ali LECTURE HALL 1	LECTURE HISTOLOGY FA-049 Connective tissue 2 Dr. Ijaz LECTURE HALL 1	
09-May-23	TUE	8.00-9.00 LECTURE PHYSIOLOGY FP-007 ANS Dr. Nida LECTURE HALL 1	9.00-10.00 LECTURE EMBRYOLOGY FA-043 Teratogenicity Dr. Ijaz LECTURE HALL 1	10.00-11.00 LECTURE GEN. ANATOMY FA-008 Nervous Tissue (Neurology) Dr. Ahmed LECTURE HALL 1	11.00-12.00 LECTURE BIOCHEMISTRY FB-014 Translation Dr. Ali LECTURE HALL 1	BREAK	12.30-1.30 LECTURE PHARMACOLOGY FPh-003 Autonomic System Prof. Najma LECTURE HALL 1	1.30-2.30 PRACTICAL	2.30-3.30
10-May-23	WED	8.00-9.00 LECTURE GEN. ANATOMY FA-008 Nervous Tissue (Neurology) Dr. Ahmed LECTURE HALL 1	9.00-10.00 LECTURE PERS PERS-009 Responsible & Accountable, Responsibility towards self and the profession Dr. Shandana LECTURE HALL 1	10.00-11.00 LECTURE BIOCHEMISTRY FB-014 Translation Dr. Ali LECTURE HALL 1	11.00-12.00 LECTURE PAEDS FA-029 Mesodermal derivatives Dr. Zahid Rasheed LECTURE HALL 1		12.30-1.30 LECTURE PHYSIOLOGY FP-007 ANS Dr. Nida LECTURE HALL 1	1.30-2.30 PRACTICAL	2.30-3.30
11-May-23	THU	8.00-9.00 LECTURE PATHOLOGY FPa-003+FPa-008 General microbiology Dr Sidra Zaman LECTURE HALL 1	9.00-10.00 LECTURE COMMUNITY HEALTH FCM-005 Disease Prevention Prof Rana Akhtar/ Prof Tabassum LECTURE HALL 1	10.00-11.00 LECTURE BIOCHEMISTRY FB-014 Translation Dr. Ali LECTURE HALL 1	11.00-12.00 LECTURE BEH.SCIENCE FBS-006 Stress Dr. Fariha LECTURE HALL 1		12.30-2.30 LECTURE EMBRYOLOGY FA-043 Teratogenicity Dr. Ijaz LECTURE HALL 1	1.30-2.30 PRACTICAL	2.30-3.30
12-May-23	FRI	8.00-9.30 OSPE & PRACTICAL IN 3 BATCHES BATCH A : ANATOMY BATCH B : PHYSIOLOGY BATCH C BIOCHEMISTRY	9.30-11.00 OSPE & PRACTICAL IN 3 BATCHES BATCH B: ANATOMY BATCH C: PHYSIOLOGY BATCH A: BIOCHEMISTRY		11.00-12.30 OSPE & PRACTICAL IN 3 BATCHES BATCH C: ANATOMY BATCH A: PHYSIOLOGY BATCH B: BIOCHEMISTRY		12.30-1.30 SPARE		
13-May-23	SAT	8.00-11.00 MOCK /BLOCK EXAM EXAMINATION HALL-2			11.00-11.30 BREAK		11.30-12.30 VIVA IN 3 BATCHES BATCH A : ANATOMY BATCH B : PHYSIOLOGY BATCH C : BIOCHEMISTRY	12.30-1.30 VIVA IN 3 BATCHES BATCH B: ANATOMY BATCH A: BIOCHEMISTRY	1.30-2.30 VIVA IN 3 BATCHES BATCH C: ANATOMY BATCH B: BIOCHEMISTRY

ASSESSMENT STRATEGIES:

As assessment drives learning so assessment tools need to be in alignment with the domains of learning and instructional strategies. Both formative and summative assessments are encouraged. Formative assessments will be those written and practical tests whose weightage will not be included in the internal assessments. The summative assessment will comprise of internal assessment and professional examination. The weightage of internal assessment is 20% while that of professional examination is 80%.

Assessment tools for Theory

- Multiple Choice Questions (MCQ)
- Structured Essay Questions (SEQ)
- Reflective paper
- Assignment
- Presentation

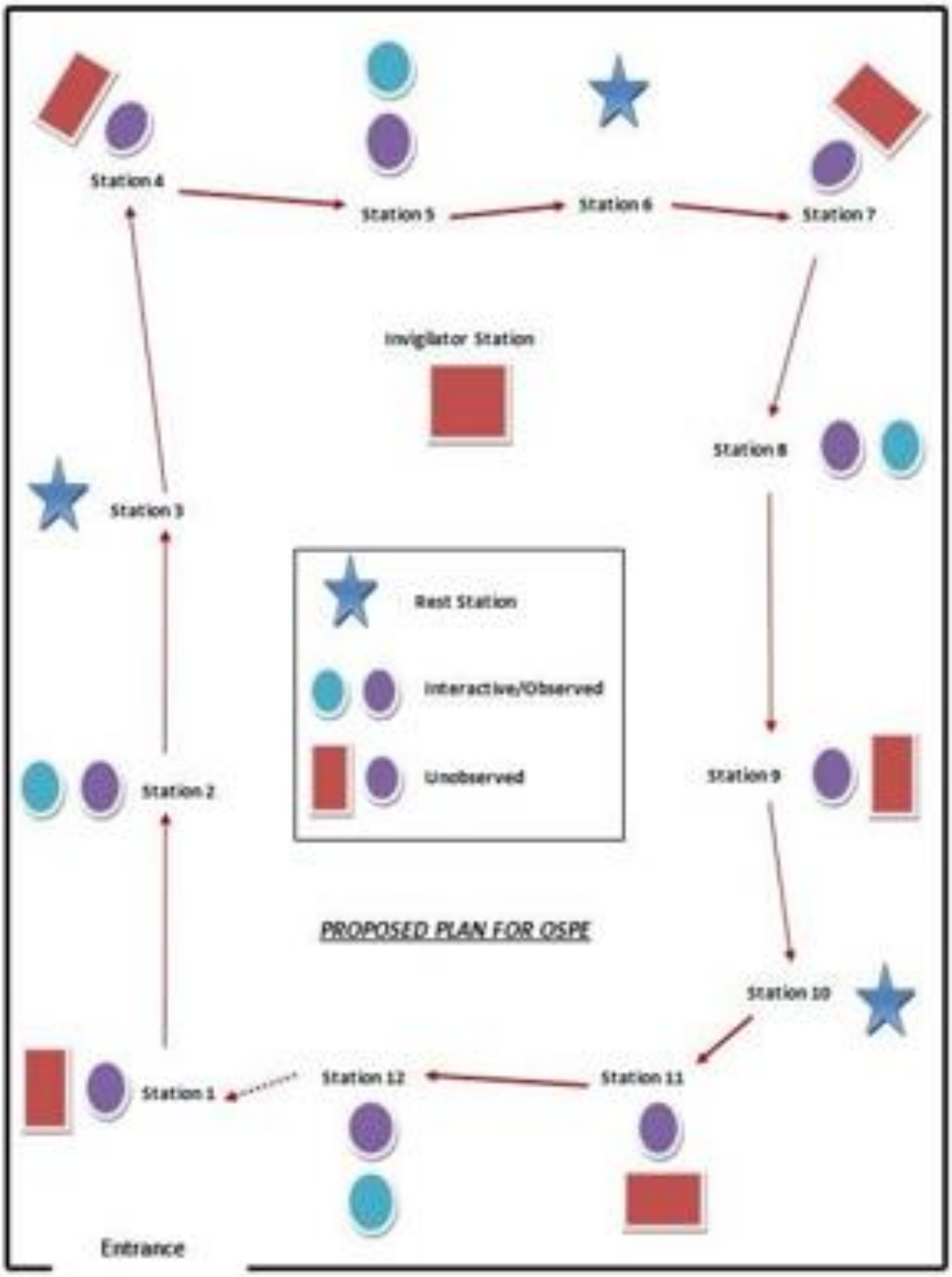
Assessment tools for Practical, Clinical and Human (soft) skills

- Objective Structured Practical Examination
- Objective Structured Clinical Examination
- Structured Viva
- Short Case
- Long Case
- Logbook
- Portfolio
- Feedback (simple and/or 360 degree)

Table of Specification for BLOCK-1 EXAM:

Theme	Subject	Written Exam			Oral/Practical/Clinical Exam			
					OSPE/OSCE/Viva Stations			
		MCQ (1 mark)	SEQ (5 mark each)	Marks	OSPE (08 marks each) Observed	OSCE (08 marks each) Observed	Structured Viva (16 marks each)	Marks
Normal Structure	Anatomy & applied/clinical	20	3	35	3	-	1	40
Normal Function	Physiology & applied/clinical	22	2	32	2	-	1	32
	Biochemistry & applied/clinical	22	2	32	2	-	1	32
Disease Burden & Prevention	Community Medicine & Public Health	05	-	05	-	-	-	-
	Behavioral Sciences	05	-	05	-	-	-	-
Pathophysiology and Pharmacotherapeutics	Pathology	06	-	06	-	-	-	-
	Pharmacology	05	-	05	-	-	-	-
CFRC	CF 1-1	-	-	-		1	-	8
PERLs	PERLs 1-1	-	-	-		1	-	8
		85	7x5=35	**120**	7 Stations x 08 = 56	2 Stations x 08 = 16	3 Vivas x 16 = 48	**120**

PROPOSED PLAN FOR OSPE:


Station 4
Station 5
Station 6
Station 7
Invigilator Station
Station 8
Station 3
Rest Station
Interactive/Observed
Unobserved
Station 2
Station 9
PROPOSED PLAN FOR OSPE
Station 10
Station 1
Station 12
Station 11
Entrance

MODULAR EXAMINATION RULES AND REGULATIONS:

- Student must report to examination hall/venue, 30 minutes before the exam.
- Exam will begin sharp at the given time.
- No student will be allowed to enter the examination hall after 15 minutes of scheduled examination time.
- Students must sit according to their roll numbers mentioned on the seats.
- Cell phones are strictly not allowed in examination hall.
- If any student is found with cell phone in any mode (silent, switched off or on) he/she will be not be allowed to continue their exam.
- No students will be allowed to sit in exam without University Admit Card, LNMC College ID Card and Lab Coat
- Student must bring the following stationary items for the exam: Pen, Pencil, Eraser, and Sharpener.
- Indiscipline in the exam hall/venue is not acceptable. Students must not possess any written material or communicate with their fellow students.