# STUDY GUIDE ANATOMY 1<sup>ST</sup> Year

# **MBBS COURSE**

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# Mission Statement



# Guiding your passion to profession

IMC Strives to improve health care in Faisalabad, our country and the world through excellence.

We seek to foster the development of dedicated clinicians, scientists, professionals and educators to provide leadership in education, services and discovery.

#### Vision:

To be an institution with

- An environment to develop creative free thinking and life long learners.
- A culture of objective research to transform health care delivery.
- Quality professional educational program based on innovation and collaboration.
- High moral and ethical values.
- Serving the needs of community in the best tradition of profession.

### Goals:

- To develop humanist, skilled, intellectually disciplined and innovative medical professionals with dedication to those who they treat, lead and serve
- To educate and guide the next generation of leaders in healthcare and medical science to provide and sustain achievements in service, teaching and research.
- To provide comprehensive and effective patient centered, culturally sensitive, compassionate and innovative health care of highest quality to all.
- To recruit, develop and nurture and independent and academically outstanding community of faculty, student, trainees and staff, who each contribute to excellence in our missions.
- To promote professional and personal growth, productive, accountability, integrity and synergistic collaboration and synergy of faculty, students and staff

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# INTRODUCTION

#### WHAT IS A STUDY GUIDE?

It is an aid to:

- A. Inform students how student learning program of the subject has been Organized
- B. Help students organize and manage their studies throughout the year
- C. 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 objectives which are expected to be achieved at the end of the program.
- Identifies the learning strategies such as lectures, small group teachings, clinical skills,
- Demonstration, tutorial and case based learning that will be implemented to achieve the Learning objectives.
- Provides a list of learning resources such as books, computer assisted learning program, web-links, and journals, for students to consult in order to maximize their learning.
- Highlights information on the contribution of continuous and term test on the Student's overall performance.
- Includes information on the assessment methods that will be held to determine every student's
- Achievement of objectives.
- Focuses on information pertaining to examination policy, rules and regulations.

# **ANATOMY FOR 1ST YEAR MBBS**

Subject: Anatomy Year: 1st year Duration: 36 weeks

Year	Theory	Practical	Total
1st year	150 hours (100 Lecture, 50 SGD / PBL)	150 hours	300

# AT THE END OF 1st YEAR MBBS STUDENT WILL BE ABLE TO

- To explain various anatomical terms.
- To distinguish different anatomical landmarks.
- To discuss principles of General Anatomy.
- To demostrate ability to mark structure of surface anatomy.
- To identify anatomical parts on models and cadavers.
- To explain the anatomical principles of different clinical methods.
- To identify different cellular structures & tissue on microscopic slides.
- To describe different parts & relationships of Anatomical structures.
- To explain the clinical application of knowledge of Anatomy.
- To describe steps of development of embryo and other human organs.
- To discuss various developmental anomalies.

# **RULES AND REGULATION**

- 75% attendance in theory and clinical classes in mandatory.
- All progress will be recorded on clinical log book.
- Pass marks for assessment will be 50%.
- All this will be creadited in internal assessment for Final Professional.
- Any Conflict will be resolved by Co-Ordinator.
- All students will have to fill online feedback perfroma.

# LEARNING RESOURCES

The department of Anatomy will require following resources for implementation resources:

- Human resource
- Instructors (faculty members)
- Curriculum coordinator curriculum secretary
- Infrastructure
- Lecture hall with AV aids
- Tutorial room with AV aids
- Dissection Hall and Museum with Anatomy Models
- Histology Lab with Pool of slides
- Simulated patients and simulated manikins
- Computers

# LISTS OF CONTENT RESOURCES

- General Anatomy by Prof. Sadig Hussain Siddigui
- Medical Histology by Prof. Laiq Hussain Siddiqui
- Di-Fiore Atlas of Histology
- Clinically Oriented Anatomy by Keith L. Moore.
- Cunningham's Manual of Practical Anatomy by G.J. Romanes, 15'h Ed., Vol-I, II, III.
- Clinical Anatomy by Richard S. Shield.
- Wheater's Functional Histology
- Basic histology by Junqueira and Carniero
- Grant's Atlas of Anatomy
- Langman's embryology
- The Developing Human. Clinically Oriented Embryology by Keith L. Moore, 6'h Ed.
- Neuroanatomy by Richard S.Snell.
- Gray's Anatomy Latest Edition.
- Clinical Anatomy by R.J. Last, Latest Ed.

## **E-LEARNING**

- e-IMC phone app for online lectures
- IMC youtube channel

# **JOURNALS**

- The Professional Medical Journal
- Independent Review (H-2000)
- Independent Journal of Allied Health Sciences
- Online Journals and Reading Materials through HEC Digital Library Facility

# **LEARNING METHODOLOGY**

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

- Interactive Lectures
- Hospital / Clinic visits
- Small Group Discussion
- Case- Based Learning
- Skills session
- E-Learning
- 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.

**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 rephrase to help clarify concepts.

**CASE- 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.

**SKILLS SESSION:** Skills relevant to respective module are observed and practiced where applicable in 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

**VIDEO SESSIONS:** Anatomy is a subject which involves visual learning and formulating concepts. Video assisted learning sessions also provides opportunities to learn gross anatomy.

**LABORATORY SESSIONS:** Laboratory sessions are important as they provide opportunity for experiential learning in terms of study of slides and identification of tissues

**EARLY CLINICAL EXPOSURE (ECE)**: Clinical skills session are important part of curriculum to achieve psychomotor and affective outcomes. This provide opportunity for medical students in early years and will stimulate contextual learning.

# **ASSESSMENT**

# MCQ's and SEQ's

Multiple choice question and short essay question test will be used at the end of part of curriculum to assess the learning of knowledge. These all assessment exercises will be formative. The written tests like Multiple-Choice Questions (MCQs) and Short-Essay Questions (SEQs) test formats are used for the assessment of cognitive domain. The MCQs are more objective and essentially select type of item response format. MCQs have a cueing effect, which promotes guessing and leads to higher scores. In addition, writing MCQs of higher cognitive level of problem solving is challenging. On the contrary, the SEQs are more subjective and have a supply or construct type item response format, which does not have any cueing effect and can effectively assess problem solving skills(8).

#### **OSCE AND SHORT CASE**

Short case and OSCE will be used to evaluate clinical skills and procedural skills at the ward end of placement. The OSCE is a method of clinical skill assessment, and it has been reported to be appropriate for assessing learning achievement levels in the psychomotor and emotional domains, which are difficult to evaluate with written examinations(9).

## **VIVA VOCE**

Viva voce is used for assessment of knowledge and problem solving ability of students. This method is useful evaluating cognitive domain.

### **ASSIGNMENTS**

Students of different year will be given assignment of different nature such as research and literature search and surveys

Evaluation plan		
Term Test	Written test (MCQ and SEQ)	Formative
After each region / Module	Stage (OSCE and viva voce)	Formative

# **INTERNAL ASSESSMENT**

- i. The weightage of internal assessment shall be 10% of totals marks.
- ii. Continuous internal assessment shall consist of evaluation at the end of each assignments, e.g. stages/sub-stage, class tests etc., attitudinal assessment from educational supervisors.
- iii. Assessment of knowledge, Skills and Attitude shall contribute toward internal assessment. Methods used to assess these domains shall include Multiple Choice Questions of one-best type, Short essay questions, Oral/Viva, and Practical/Clinical axaminations.
- iv. The score of internal assessment shall contribute to the score in the final examination, Final university examination of each subject shall contribute 90 to total score, and the candidate shall pass in aggregate.
- v. Proper record of continuous internal assessment shall be maintained.



# **ANATOMY 1ST YEAR MBBS**

# **EDUCATION PLAN**

	General Anatomy & Embryology	Gross Anatomy	Histology	Assessment	Week		
	General Anatomy		Introduction of Histology		1		
	General Anatomy	Pectoral region	Microscopy		2		
		Axilla, Brachial plexus	Preparation of slide & staining procedure	Test 1 General Anatomy	3		
ks)	1st week of development	Cervical & scapula	Cell & its part		4		
weeks)	1st week of development	Back, scapular Region	Epithelium	Test 2 1st Sub stage	5		
<del>-</del>	1st week of development	Arm, cubital fossa, sternoclavicular joint, humerus,	Stratified epithelium		6		
Term	1st week of development	Shoulder joint, front of forearm	Transitional epithelium & pseudostratifies epithelium	Test 2 2nd Sub stage	7		
1st ]		Wrist, palm, radius & ulna.	Glands	Test 3 Histo & Embryo	8		
		Back & lateral side of forearm, dorsum of hand,	Connective tissue	Test 4 3rd Sub stage	9		
		Elbow joint, all joint of hand, carpal metacarpal bones, phalanges, surface marking & radiology.	Classification of connective tissue	Test 5 4th Sub stage	10		
		Upper limb Stage / 1st tern	n test	, and the second	11		
	2nd week of development	Front & medial side of thigh	Cells of connective tissue		12		
	2nd week of development	Hip bone	Connective tissue proper	Test 6 1st Sub stage	13		
	2nd week of development	Gluteal region. Popliteal fossa, Back of the thigh	Cartilage		14		
iks)	2nd week of development Femur, Hip Joint Bone  3rd week of development Front & Lateral side of the leg Muscular tissue  3rd week of development Medial side of the leg Nervous tissue  3rd week of development Dorsum of foot Neurons  3rd week of development Tibia & Fibula Gray Matter & White Matter		Test 7 2nd Sub stage	15			
weeks)			Test 8 1st Sub stage	16			
£ .			3	17			
Term			Neurons		18		
2nd			Gray Matter & White Matter	Test 9 3rd Sub stage	19		
	4th week of development	Back of leg, Sole of foot & Knee joint	Immune System	Test 10 Histo & Embryo	20		
	4th week of development	All joints of foot, Tarsal, Meta Tarsal bones, Phalanges, surface marking & rediology	Tonsils	Test 11 4th Sub stage	21		
		Lower limb Stage / 2nd terr	n test		22		
	4th week of development	Introduction walls of thorax, Thoracic Cavity	Thymus		23		
	4th week of development	Thoracic Cavity & Sternum	Spleen	Test 12 1st Sub stage	24		
ks)	5th-8th week of development	Lungs & Pleura	Circulatory system		25		
(9 weeks)	5th-8th week of development	Anterior mediastinun	Respiratory System		26		
6) m	9th week of development	Middle mediastinun	Respiratory System	Test 13 2nd Sub stage	27		
	Placenta and fetal membranes	Posterior mediastinun, great Vessels, trachea, esophagus	Integumentary system	Test 14 Histo & Embryo	28		
3rd Ter	Placenta and fetal membranes	Joints of thoracic cage	Integumentary system	Test 15 3rd Sub stage	29		
	Human birth defects	Surface Anatomy & radiology		Test 16 4th Sub stage	30		
		Thorax Stage / 3rd term t	est		31		
					32		
eks	(g)     → (g)     + (g)     Preparation Leaves						
4 We		Preparation Leaves			34		
٠					35		
		Sendup Examination			36		

DEPARTMENT OF MEDICAL EDUCATION

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တ္				ctiona tegy	al	Assessment			
Modules	Objectives	Lecture	SGD	PBL	Lab	MCQ	SEQ	OSPE	Viva
	Explain anatomical terms and sectional planes of the body.	••	••			••	••		
	Classify the skeleton system (appendicular and axial).	••	••			••	••		
	Classify bones on the basis of shape, size, evolution, structure.	••	••			••	••		
	Describe general features of bones of human body.	••	••			••	••		
	Explain the functions of bones.	••	••			••	••		
E (E	Discuss the general concepts of ossification and growth of bones.	••	••			••	••		
yste	Describe the blood supply of bones.	••	••			••	••		
s	Explain the basis of classification of joints.	••	••			••	••		
l elet	Discuss the characteristics, types and movement of joints.	••	••			••	••		
Module 1 General Anatomy (Skeletal system)	Describe the factors responsible for the stability of joints.	••	••			••	••		
lodt my	Explain general principles of blood and nerve supply of joints.	••	••			••	••		
_ Nato	Analyze different clinical scenario resulting into dislocation of joints	••	••			••	••		
Ā	Describe different terms related to muscles.	••	••			••	••		
era	Comprehend the basis of classification of muscles.	••	••			••	••		
Gen	Describe principles of blood and nerve supply of muscles.	••	••			••	••		
	Explain sprain, spasm, degeneration and regeneration changes.	••	••			••	••		
	Define and explain the mechanism of sprain and spasm.	••	••			••	••		
	Explain the function of synovial structures related to muscles.	••	••	••		••	••	••	
	Describe different form of fibrous structures.	••	••			••	••		
	Comprehend clinical correlates (bone, cartilage and fractures).	••	••			••	••		
	Compressional common community (poster) can mage and macratico.								
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Describe different types of cardiovascular circulation	••	••			••	••		
om) yste	Explain the classification of different types of blood vessels.	••	••			••	••		
le 2 nate y sy	Define anastomoses with examples and their clinical correlates.	••	••			••	••	••	
Module General Ana (Circulatory	Describe components of lymphatic system.	••	••			••	••		
mer cul	Comprehend the mechanism of production and circulation of lymph.	••	••			••	••		
Module 2 General Anatomy (Circulatory syste)	Describe the lymphatic and its role in spread of infection and cancer.	••	••			••	••		
	bescribe the lymphatic and its role in spread of infection and cancer.								
	Name different components of nervous tissue.	••				••	••		
<u>.</u>	Classify different types of nervous system (Somatic and Autonomic)	••				••	••		
asc	Enumerate different parts of somatic nervous system.	••				••	••		
ρ F	Describe the formation and distribution of a typical spinal nerve.		••			••	••		
my n at	Discuss nerve plexus formation & dermatomes & clinical importance.		••			••	••		
e 3 nato Ski									
Module 3 General Anatomy (Nervous Systems & Skin and Fascia)	Describe different parts of autonomic nervous system functions.		••			••	••		
Mo nera tem	Define and comprehend reflex, reflex arc and referred pain.	-	••			••	••		
Ger	Name different types of skin and components (dermis and epidermis).	••	••			••	••		
sn.	Enumerate its appendages and give their function.	••	••			••	••		
) krvo	Describe the structure and function of superficial and deep fasciae.	••	••			••	••		
×	Describe the skin lines and their significance.	••	••			••	••		
	Give significance of discolouration (Jaundice, cyanosis and anemia).		••	••		••	••	••	

ý		I	nstru stra	ctiona tegy	al	,	Asses	smen	t
Modules	Objectives		SGD	PBL	Lab	MCQ	SEQ	OSPE	Viva
(se	Interpret normal radiographs of different regions of the body.		••					••	
my hniqu	Identify displacement of the fracture segments of the bone.		••					••	
e 4 nato	Diagnose dislocation of the joints.		••					••	
Module 4 General Anatomy (Common diagnostic techniques)	Understand and interpret ultra-sonographs of abdominal viscera.		••					••	
Mo nera	Understand principle of CT scan and interpret the normal scans.		••					••	
Gel	Interpret images of diagnostic techniques i.e. X-rays, CT scans, MRI.		••					••	
ပိ	Take the Biopsy and prepare it for examination.		••		••			••	
	Develop an expertise in identification of structures in a cadaver		••		••	••	••		
	Develop clear concepts of the topographic anatomy of the regions.		••			••	••		
	Explain muscle attachments, their actions, nerve supply.		••			••	••		
	Describe structure and mechanism of joints and the clinical conditions.		••			••	••		
ğ (2	Describe bones of the appendicular skeleton.		••			••	••		
Module 5 Gross Anatomy (Upper Limb)	Describe the bones of the foot and hand individually and in skiagrams.		••			••	••		
Module 5 oss Anato Jpper Liml	Explain common fractures of the bones, displacement.		••			••	••		
Mo Toss Upp	Describe nerve plexuses of limbs and ·different clinical conditions.		••			••	••		
ق ح	Demonstrate different injuries to the nerves of the extremities.		••			••	••	••	
	Recognize important superficial veins and their clinical uses.		••			••	••	••	
	Explain anatomical relevance to important clinical conditions.		••			••	••	••	
	Describe the regional lymphatic drainage and vascular supply.		••			••	••	••	
	Interpret normal skiagrams, C.T. Scans, MRI and Ultrasound.		••			••	••	••	
	Develop an expertise in identification of structures in a cadaver		••		••	••	••		
	Develop clear concepts of the topographic anatomy of the regions.		••			••	••		
	Explain muscle attachments, their actions, nerve supply.		••			••	••		
	Describe structure and mechanism of joints and the clinical conditions.		••			••	••		
رة ق	Describe bones of the appendicular skeleton.		••			••	••		
e 6 ator	Describe the bones of the foot and hand individually and in skiagrams.		••			••	••		
Module 6 Gross Anatomy (Lower Limb)	Explain common fractures of the bones, displacement.		••			••	••		
Me ross Low	Describe nerve plexuses of limbs and ·different clinical conditions.		••			••	••		
<u> </u>	Demonstrate different injuries to the nerves of the extremities.		••			••	••	••	
	Recognize important superficial veins and their clinical uses.		••			••	••	••	
	Explain anatomical relevance to important clinical conditions.		••			••	••	••	
	Describe the regional lymphatic drainage and vascular supply.		••			••	••	••	
	Interpret normal skiagrams, C.T. Scans, MRI and Ultrasound.		••			••	••	••	

S		I	nstru stra	ctiona tegy	al	Assessment				
Modules	Objectives			PBL	Lab	MCQ	SEQ	OSPE	Viva	
	Describe the topographic anatomy of the region.		••		••	••	••			
<u>&gt;</u>	Describe bony thorax & costo-vertebral & mechanism of respiration.		••			••	••			
Module 7 Cross Anatomy (Thorax)	Mark thoracic viscera & pleural reflections on the surface of the body.		••			••	••			
Module 7 iss Anato (Thorax)	Describe the importance of percussion nodes & clinical importance.		••			••	••			
SSO.	Give a precise account of the Anatomy of thoracic viscera, muscles.		••			••	••			
ن	Describe the regional lymphatic drainage & lymph nodes.		••			••	••			
	Interpret normal skiagram, CT scan, MRI & other diagnostic techniques.		••			••	••			
ax)	Describe clinical effects of nerve injuries of the upper and lower limbs	••	••			••	••			
Module 8 General Anatomy (Applied Anatomy of upper limb, lower limb and thorax)	Explain anatomical aspects of fracture of bones of upper & lower limbs.	••	••			••	••			
nb an	Explain the anatomical aspects of dislocation of joints of limbs	••	••			••	••	••		
er iin	Describe contracture, ganglia, pulp infection, carpel tunnel syndrome	••	••			••	••			
e 8 nato	Explain femoral hernia, vancose veins, bursitis and lymphadenitis	••	••			••	••			
Module 8 eral Anat upper limb, lo	Describe anatomical basis of spread of carcinoma breast	••	••			••	••			
Mo	Explain clinical importance of coronary circulation.	••				••	••			
Ge.	Define cardiac tamponade, pericarditis and paracentesis.					••	••			
Anato	Define pleural tap, pneumothorax, hydrothorax, haemothorax.					••	••			
plied	Describe clinical effects of nerve injuries of the upper and lower limbs		••			••	••			
(Ap	Explain the anatomical aspects of dislocation of joints of limbs		••			••	••			
	Describe the process of cell division and gametogenesis.		••		••	••	••			
	Describe ovarian and menstrual cycle.		••			••	••			
	Describe fertilization, cleavage, blastocyst formation and implantation.		••			••	••			
	Describe stages of embryonic development in 2nd and 3rd week.		••			••	••			
	Describe development of embryo (4th-8th week of development).		••			••	••			
	Describe fetal period (9th week to birth).		••			••	••			
	Descirbe Anmion, chorion, Yolk sac, Allantois & umbilical cord).		••			••	••			
Module 9 Embryology (General)	Describe formation of placenta, its structure and anomalies.		••			••	••	••		
9 jene	Describe the basis of multiple pregnancies.		••			••	••	••		
Module 9	Describe procedures for assessment of fetal status.		••			••	••	••		
Mod	Explain clinical correlates i.e. anovulatory cycles, semen analysis.		••			••	••	••		
bryc	Understand In-Vitro Fertilization (IVF), assisted in-vivo fertilization.		••			••	••	••		
E	Describe choriocarcinoma, pregnancy test, hydatidiform mole.		••			••	••			
	Explain estimation of gestational age and viability of fetus.		••			••	••			
	Explain basis of IUGR, hydramnios, twin transfusion syndrome.		••			••	••			
	Define teratogenesis and name common teratogens.		••			••	••			
	Describe development of Integumentry system including manuary.		••			••	••			
	Describe development of limbs and vertebral column.		••			••	••			
	Describe the development of muscular system and their anomalies.		••			••	••			
	Describe the structural and numerical chromosomal anomalies.		••			••	••			

ø	Objectives		Instructional strategy				Assessment			
Modules			SGD	PBL	Lab	MCQ	SEQ	OSPE	Viva	
	Enumerate and describe structure of different components of cell		••		••	••	••	••		
	Classify the basic tissues of the body.		••		••	••	••			
	Classify and describe different types of epithelia with examples.		••		••	••	••	••	••	
	Describe surface modification of plasmalemma.		••		••	••	••	••	••	
	Describe different types of connective tissue proper with examples.		••		••	••	••	••	••	
	Describe connective tissue cells, fibers and ground substance.		••		••	••	••	••	••	
	Classify and describe different types of cartilages with examples.		••		••	••	••	••	••	
Module 10 Histology (General)	Classify bones from histological point of view.		••		••	••	••	••	••	
Module 10 ology (Gene	Describe histogenesis of bone(intramembranous & intracartilagenous).		••		••	••	••	••	••	
dule Sy (6	Describe light and electron microscopic structure of muscles.		••		••	••	••	••	••	
Mod	Describe the structure of neuron, neuroglial cells and nerve fibre.		••		••	••	••	••	••	
Hist	Describe microscopic structure of lymphoid organs.		••		••	••	••	••	••	
_	Describe different sub-division of vascular system.		••		••	••	••	••	••	
	Describe microscopic structure of different types of blood vessels.		••		••	••	••	••	••	
	Describe microscopic structure of skin and its appendages.		••		••	••	••	••	••	
	Describe the structure of mammary gland in different functional stages.		••		••	••	••	••	••	
	Describe the microscopic structure of respiratory system.		••		••	••	••	••	••	
	Define hypertrophy, atrophy, metaplasia, hyperplasia, and anaplasia.		••		••	••	••	••	••	
	Draw and label light microscopic structures of tissues.		••		••	••	••	••	••	

# TOS 1ST PROFESSIONAL (PART-1) ANATOMY, HISTOLOGY, EMBRYOLOGY & GENERAL ANATOMY

	TABLE OF SPECIFICATION (ToS)		
		MCQ'S	SEQ'S
General Anatomy	Anatomical Term and Sectional Planes of the Body Skeletal System Joints Muscles Circulatory System (a) Cardio Vascular (b) Lymphatic System Nervous System Skin and Fasciae Diagnosis Techniques	1 1 1 1 1 1 1 1	One In refernce to Upper and lower Limbs
Histology	Cell Epithelium Connective Tissue (a) Bones (b) Cartilage (c) Connect Tissue Proper Muscular Tissue Nervous Tissue, Skin and mammary Gland Lymphoid Organs Vascular System Respiratory System	1 1 2 1 1 1 1 1	1
Embryology	Cell Divisions (mitosis and meiosis) and Gametogenesis Fertilization, Development 1-2 weeks Development 3-8 weeks Fetal Period and Teratogensis Fetal membranes and Placenta Multiple Pregnancies and diagnostic procedures Development of Muscular system, skeletal system and limbs Development of skin, appendages and mammary glands	1 1 1 1 1 2 1 1	1
Upper Limb	Pectoral Region, Shoulder region, Axilla Arm Forearm Hand	1 2 2 1	2
Lower Limb	Gluteal region Thigh Leg Foot	1 2 2 2	2
Thorax	Heart Lung Pericardium / Pericardial Sec Pleural, Pleural Cavity Thoracic Wall, Joints, Bones and Diphragm Intercostals, Space and contents Mediastinum and its contents	1 1 1 1 1 1 1	1
	Total	45	9

1. 25% MCQ,s and SEQ,s should be clinical oriental or problem based

2. In each limb, an equal distribution should be practiced for the following tissues i. Skin ii. Muscles iii. Bones iv. Connective Tissue sheathes v. Joints vi. Nerves vii. Vessels

3. SEQs of general anatomy may be asked in reference to upper and lower limb

# TOS 1ST PROFESSIONAL (PART-1) ANATOMY, HISTOLOGY, EMBRYOLOGY & GENERAL ANATOMY

# **Gross & Radiological Anatomy and Embryology.**

- 1. Total No. of stations 12, each station will have 02 marks and 04 spots of identification.
- 2. Each station shall be given 1.5 min.
- 3. Total marks shall be 24.

# Gross Anatomy of upper Limb, Lower Limb, Thorax, Radiological Anatomy & Embryology

		OSPE		
Sr.	Region area	Station No.	No of Spots	Marks each Station
1	Upper Limb	01	04	02
	Upper Limb	02	04	02
	Upper Limb	03	04	02
2	Lower Limb	04	04	02
	Lower Limb	05	04	02
	Lower Limb	06	04	02
3	Throax	07	04	02
	Throax	08	04	02
4	Radiological Anatomy	09	04	02
5	Embryological	10	04	02
	Embryological	11	04	02
	Embryological	12	04	02
	Total	12	48	24

#### HISTOLOGY OSPE AND VIVA

- 1. There shall be 10 slides fixed on 10 microscopes.
- 2. For each station one minute shall be given, students will give point/points of identification for each slide
- 3. Total number of identifications spots 10
  - a. Each spots will be given 01 mark (0.5marks for identification and 2 points of identification, 0.25 marks each)
- 4. Long Slide (Total Marks 10) : (Time 10min)
- 5. Time 15 minutes will be given for

Identification : 1 mark, Drawing : 1 mark,

Labeling : 1 mark, Interactive Examination long Slide : 7 marks

# **ANATOMY STRUCTURED VIVA**

	ANATOMY STRUCTURED VIVA								
No. Context Area Marks Allocated Minimum number of Question									
1	Surface marking	04	01						
2	Upper limb	10	02						
3	Lower limb	10	02						
4	Thorax	10	02						
5	Embryology	12	03						
	Total	46	10						

# WEEKLY TIME TABLE 1ST YEAR MBBS INDEPENDENT MEDICAL COLLEGE, FAISALABAD.

SGD / Practical 12:15-02:00	SDL (Self Directed Learning)	SDL (Self Directed Learning)	SDL (Self Directed Learning)	SDL (Self Directed Learning)	Off	SDL (Self Directed Learning)
Lecture 12:15-02:00	Biochemistry	Biochemistry	Biochemistry	Biochemistry	10:30-11:15 11:15-12:00 Physiology Biochemistry	Biochemistry
		91:21	K 11:42 TO	BREA		
10:00-11:45	Physiology	Physiology	Physiology	Physiology	eat / Anatomy	Physiology
08:00-10:00	Anatomy	Anatomy	Anatomy	Anatomy	08:00-08:45         08:45-09:30           Behavioral Sciences         Islamiyat / Pak Studies           Islamiyat / Pak Studies         Pak Studies	Anatomy
Time	Mon	Tue	Wed	Ē	Ë	Sat

	Ist Year MBBS	
Session:	36 W	36 Weeks
	Duration	Test
First Term:	9 Weeks	1 Week
Second Term:	9 Weeks	1 Week
Third Term:	9 Weeks	1 Week
Send Up:	6 Weeks	seks