Anatomy Department

CMH Institute of Medical Sciences (CIMS)

Multan

Student Study Guide

1st Year MBBS

Contents

Departmental Vision Statement

Welcome to the Department of Anatomy at CMH Institute of Medical Sciences (CIMS) Multan. We strive to inspire nationally and internationally by pursuing excellence in medical education, research and patient care to meet the evolving healthcare needs of the nation and the region through Professionalism, Excellence and Teamwork.

Our priority for medical students is to equip them in the discipline of Human Anatomy, by imparting knowledge and understanding of structure and function of human systems. Thus, to foster the development of professional skills through well designed curriculum; based on experiments, training and research.

It is our mission to produce socially accountable competent doctors who will make a significant contribution to the health of the community through evidence-based healthcare.

We are very pleased to have an outstanding team contributing to the success of the Department of Anatomy. We strive to continue to provide exceptional teaching to our students.

Head of Department
Prof. Dr. Santosh Kumar

Details of Faculty

Sr. No.	Name	Designation	Qualification
1.	Dr. Santosh Kumar	Professor	M.B.B.S, M Phil (Anatomy)
2.	Dr. Wajid Hussain Barki	Professor	MBBS, M Phil (Anatomy)
3.	Dr. Sadaf Iqbal	Assistant Professor	MBBS, MPhil (Anatomy)
4.	Dr. Aasma Hashmi	Assistant Professor	MBBS, FCPS (Anatomy)
5.	Dr. Muhammad Arshad	Senior Demonstrator	MBBS
6.	Dr. Shabnam Riaz	Demonstrator	MBBS, DGO
7.	Dr. Aasma Hashmi	Assistant Professor	MBBS, FCPS (Anatomy)
8.	Dr. Yasir Ali	Demonstrator	MBBS
9.	Dr. Faraz Shaukat	Demonstrator	MBBS
10.	Dr. Ahmed Ali Cheema	Demonstrator	MBBS
11.	Dr. Samar Tariq	Demonstrator	MBBS
12.	Dr. Amna Ilyas	Demonstrator	MBBS
13.	Dr. Ramisha Khan	Demonstrator	MBBS
14.	Dr. Maham Ubaid	PG Trainee	M.B.B.S ,R1

Faculty Dedicated to First Year

Lectures:

Venue	Name	Designation
Lecture Hall 1	Prof. Dr. Santosh Kumar	Professor & HOD
	Prof. Dr. Wajid Hussain Barki	Principal &Professor of anatomy
	Dr. Sadaf Iqbal	Asst. Professor

Dissection/ Prosection Activity:

Venue	Name	Designation
Dissection Hall	Dr. Muhammad Arshad Dr. Ramisha Khan	Senior Demonstrator Demonstrator
	Dr. Maham Ubaid	PGR Trainee
	Dr. Ahmed Ali Cheema	Demonstrator
	Dr. Amna Ilyas	Demonstrator

Tutorial/Demonstrations:

Venue (on rotation)	**Name**	**Designation**
Tutorial Room-3	Dr. Muhammad Arshad/ Dr. Ramisha	Senior Demonstrator
Lecture Hall 1	Dr. Maham Ubaid	PGR Trainee
Museum	Dr. Ahmed Ali Cheema	Demonstrator
Skill Lab	Dr. Amna Ilyas	Demonstrator

CBL:

Venue	Name	Designation
Skill lab	Dr. Ramisha , Dr. Ahmed Ali Cheema	Demonstrator
Lecture Hall	Dr. Maham, Dr. Amna	PGR Trainee Demonstrator

Practicals:

Venue	Name	Designation
Histology	Dr. Shabnam Riaz	Demonstrator

Introduction / Guidelines

What is a study guide?

It is an aid to:

- Inform students how student learning program of the block has been organized.
- Help students organize and manage their studies throughout the module.
- Guide students on assessment methods, rules and regulations.

The study guide:

- Informs about organization and management of the block.
- Defines the objectives which are expected to be achieved at the end of the block.
- Identifies the learning strategies such as lectures, small group teachings, clinical skills, demonstrations, tutorials, and case-based learning that will be implemented to achieve the block objectives.
- Provides a list of learning resources such as books, computer assisted learning programs, web-links, and journals, for students to consult in order to maximize their learning.
- Highlights information on the contribution of continuous assessment and annual examinations on the student's overall performance.
- Includes information on the assessment methods.
- Focuses on information pertaining to examination policy, rules and regulations.

Organization.

The curriculum of 1st year MBBS is modular. It is organized and the content taught is integrated concurrently in themed modules. The themes form the building blocks of this curriculum. There can be vertical thread of content across more than one module for the content that does not fit into central theme of a module. In each module the sequencing of the content is subject based. Modules.

The key detail is as follows

1. There shall be three blocks in an academic year.
2. Each block consists of multiple modules.
3. The duration of three blocks shall be 10 – 16 weeks each.
4. The syllabus shall be integrated horizontally around systems of the body.
5. Additional chunks of content may be added in a module that exactly does not fit in the central theme of the module.
6. There can be vertical thread of a content across more than one module for the content that does not fit into central theme of a module
7. There shall by vertical integration to the extent decided by the medical college.
8. Total Contact Hours of Anatomy is 250 hours

Teaching and Learning methods (MIT):

Following modes of information transfer (MIT) shall be used

- Large Group Interactive Lectures
- Clinical lectures of basic sciences
- Case based Learning in Small Groups
- Dissection Hall Tutorials
- Histology Laboratory Work

1. Interactive lectures:

In large group, the lecturer introduces basic science concepts through 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.

2. Self-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.

3. Case based learning (CBL):

3.1.What is case based learning?

Case based learning is a form of small group learning that involves the use of learning activities commonly based on patient cases associated with real life situations. A case is used to stimulate learning and acquisition of knowledge, skills and attitudes. It is structured so that students develop the skills of clinical reasoning and critical thinking.

In CBL, the learning objectives for the case are explicitly stated at the beginning of the case, and the learners can focus their learning on attaining the specific outcomes. The students learning through CBL case is supported by other teaching modalities scheduled during the week (for example lectures, e-modules, videos, seminars, etc.).

All of these learning activities and resources have been designed and organized to allow students to approach their learning as "Discovery Learning" and to create a learning environment that brings together related content from the different domains of medical knowledge.

The Goal of CBL is for student to integrate knowledge and apply it to clinical situations from the start of their medical education.

3.2.Self-Assessment and Reflection in CBL

When you are preparing for the case you should reflect and answer the following questions to help you focus your learning.

1. What resources should I use to understand the case?
2. Do I understand how the parts of the case are connected?
3. How has my previous learning experience shaped my approach to this case?
4. What do I know to solve the case and achieve the learning objectives?

5. How do I seek and use feedback from others?
6. How do I seek and use data from other sources?

External sources (e.g. text books/journal articles/lectures/role models) It is also important for students to consider their emotional reaction to feedback and how they deal with this.

What steps should I take or resources should I use to respond to my areas in need of improvement?

You may consider various resources including:

- *Role models (tutor, other students who they find particular effective in their approach to learning)*
- *Literature:(journal articles/texts)*

3.3.The CBL / Tutorial process

1. **Pre- Tutorial:** self-study by students
2. **CBL session:**

a. Introduction and group rules

- **Tutor Introductions:** Tutor introduce herself/himself
- **Student Introductions:** Tutor asks the students introduce themselves to the group.
- **Group Rules:** Every group needs to establish their own accepted rules for group behavior. These would likely include that only one person speaks at once; everyone listens attentively, comes to tutorial prepared and contributes to the discussion. Other ground rules might relate to checking internet, dictionary, notes or taking phone calls during the session.

b. Tutorial Discussions

- The group will determine any roles people will adopt during the session (scribe, timekeeper, leader etc.).
- A student will volunteer to verbally read the first component of the case. The reading of the case provides the students an opportunity to formalize themselves with the pronunciation of unfamiliar terms and provides auditory learning opportunities.
- Discussion might begin with learners identifying any terms or concepts they did not understand.
- The tutor will use active listening skills, and open-ended questions to promote discussion, and probing questions to prompt learners to explore topics more deeply. For Example, can a "normal" Lab value be abnormal? What do we expect it to be in this case? The teacher will not deliver the content. Tutor will only facilitate your learning.

c. Feedback:

Feedback is an interactive process between two or more people that allows the parties to share information with the intention of guiding future performance. Feedback helps an individual to keep their behavior "on target", thus, it helps a person to better achieve their goals.

- *Feedback is specific rather than general.*
- *Feedback is descriptive rather than judgmental.*

- *Feedback is both positive and negative.*
- *Feedback takes into account the needs of both the receiver and the giver of feedback.*
- *Feedback is directed at behavior that the receiver can do something about.*
- *Feedback is solicited rather than imposed.*
- *Feedback is directed primarily at the person's performance or behavior rather than at the person themselves.*
- *Avoid defensiveness.*

d. Assessment:

Tutor completes formal assessment for the student in the CBL tutorial at the end of tutorial process. The tutor meets with each student in person to encourage self- assessment, discuss the assessment, and provides additional feedback.

e. At the end of a Session

By the end of each session, the students need to clarify any outstanding questions.

3.4.Expectations from the learner in CBL

Case based learning is a student-centered process and it is the responsibility of individual student to participate fully, not only for his or her own learning, but also to aid the learning of others in the group. Although much time is spent alone in the library or at the computer, the full benefits of CBL cannot be realized in isolation.

3.5.Guide to professional behavior during CBL session

(Courtesy of McMaster University and CPSP DME)

Respect

- Listens, and indicates so with appropriate verbal or non-verbal behavior.
- Verbal and non-verbal behaviors are neither rude, arrogant nor patronizing.
- Allows others to express opinions and give information without "putting down" anyone.
- Participates in discussion of differences in moral values.
- Differentiates value of information from value of person.
- Acknowledges others' contributions.
- Apologizes when late or gives reason for being so.

Communication Skills

- Speaks directly to group members.
- Presents clearly.
- Uses words that others understand
- Uses open-ended questions appropriately.
- Identifies misunderstanding between self and others or among others.
- Attempts to resolve misunderstanding.
- Tests own assumptions about group members.
- Accepts and discusses emotional issues.
- Able to express own emotional state in appropriate situations.
- Non-verbal behavior indicates that statements have been understood.
- Recognizes and responds to group member's non-verbal communication.

Responsibility

- Punctual completes assigned tasks.
- Presents relevant information.
- Identifies irrelevant or excessive information.
- Takes initiative or otherwise helps to maintain group dynamics.
- Advances discussion by responding to or expanding on relevant issues.
- I own emotional or physical state when relevant to own functioning or group dynamics.
- Describes strengths and weaknesses of group members in a supportive manner.

Self-Awareness/ Self-Evaluation

- Acknowledges own difficulty in understanding
- Acknowledges own lack of appropriate knowledge
- Acknowledges own discomfort in discussing or dealing with a particular issue
- Identifies own strengths
- Identifies own weaknesses
- Identifies means of correcting deficiencies or weaknesses
- Responds to fair negative evaluative comment with reasonable proposals for behavioral change

3.6.Using learning resources

In CBL, one of the objectives is self-directed learning. Students search for literature, based on the individual learning goals developed as a result of self-assessment and reflection question provided earlier in the guide.

Bring books and previous notes and use them in tutorial, if necessary, to clarify concepts and terminology. It is helpful to have a good dictionary to check the meaning of terms. We often use words as if we knew what they meant; it may be helpful to challenge your colleagues to define key terms.

To obtain additional information, provided to you, you may be directed to a specific resource or asked how you might find a good resource (journal article, book, expert, etc.). It is important to avoid "guessing games" or wasting time tracking down an obscure reference. But, on the other hand, it is important to develop skill in finding good information.

You are encouraged to discuss matters of interests pertaining to specific case with your peers. Develop a specific list of references for each case considered. Part of the overall learning experience implicit in CBL is the development of skills that will facilitate access to learning resources throughout your future professional career.

Examinations:

No student will be allowed to sit in the annual examination if attendance is below 75% in theory and practical separately.

Assessment types

The assessment will be continuous. The purpose of continuous assessment is formative and summative.

- **Summative Assessment:** The marks of this type of assessment contribute in the final university result through internal assessment. It comprises:
  - CBL/tutorial assessment
  - Scheduled tests
  - Sub-stages
  - End of block exam
  - Pre-annual exam

Scheduled tests and sub-stages will be conducted intermittently throughout the block. Their schedule will be intimated through the time tables.

- **The end of the Block exam** will be conducted after 09-15 weeks of instruction (depending on the block's volume and content). It will comprise one theory paper and one practical. (Table of specifications (TOS) for exam has been provided)
- **Formative Assessment:** Tests may be quizzes, surprise tests/written assignments/self-reflection by students during the teaching time but their marks will not be added to internal evaluation marks. The purpose of formative assessment is to provide feedback to the students, for the purpose of improvement and to teachers to identify areas where students need further guidance.

Internal Assessment

1. The department will plan out the EOB exams & Exam Branch will notify the schedules.
2. The weightage of internal assessment shall be 20 % in theory paper and 20 % in practical, in the annual professional examination.
3. Attendance, scheduled module tests, sub-stages, CBLs/tutorials, block examinations and pre-annual examinations, conducted by the college shall all contribute towards internal assessment for professional examination.
4. The results of Block exams will be submitted after each EOB exam to the university.

NUMS Professional Examination:

1. The professional examinations schedule will be notified by NUMS.
2. There will be two components of the result.

(i) University Examination-80 % (ii) Internal Assessment- 20 %

3. In the currently implemented integrated system, there will be theory paper 1, 2, & 3 + Practical exam of each block separately. Each Block exam with comprise of components from Anatomy, Physiology, and Biochemistry as per curricular content provided by NUMS.

4. Theory & Practical assessment shall be 150 marks each (including internal assessment) in Block I, Block II, and Block III, making a **total of 300 marks for each Block Exam.**

5. For each block exam, the annual theory paper shall be of 120 marks, with 70% weightage of MCQs, and 30% of SEQs/SAQs. Each paper will have three sections of Anatomy, Physiology, and Biochemistry with a total of 40 marks of each subject in each paper. Internal assessment (30 marks) of theory papers, calculated based on the performance throughout the year will be added to it, to make annual theory assessment of one Block a total of 150 marks.

6. Similarly, the annual practical examination for each block will be 120 marks. This will include observed & unobserved OSPE stations, and Viva voce for the subjects of Anatomy, Physiology, and Biochemistry. Internal assessment of practical exams (10 marks for each major subject), conducted throughout the year will be added to it, to make annual practical assessment of 150 marks for each block exam.

7. The qualifying score is 50% of maximum marks, in theory and practical separately.

Schedule of examinations:

a) Continuous assessments schedule

Schedule provided by each department in Timetable.

b) Formative Assessment: Will be conducted by the department in the form of written/OSPE/Presentation/quizzes/Assignments/Journals with a 20% weightage counted towards the internal assessment.

Curricular Map

Block	Duration of Module	Teaching Methodology	Assessment Methodology
Block I	**Modules:** **1.** Introduction to medicine (2 weeks) **2.** cell structure& function (7weeks) **3.** Musculoskeletal System I (MSK-I) (05 weeks) **Classes** = 12 weeks (02+07+05) **EOB** = 01 week	• Lectures • CBL • SDL • Practical • Dissection	Test in Module 1 integrated test Final Integrated EOB exam Theory, OSPE, Practical, Viva Voce
Block II	**Modules:** **4.** Cardiovascular System (09 weeks) **Classes** = 8 weeks **EOB** = 1 weeks	• Lectures • CBL • SDL • Practical • Dissection	Test in Module 2 integrated tests Final Integrated EOB exam Theory, OSPE, Practical, Viva Voce
Block III	**Modules:** **5.** Respiratory System (04 weeks) **6.** Musculoskeletal System II (MSK-II) (05 weeks) **Classes** = 9 weeks (04+05) EOB 1week **Pre Annual prep** = **02 weeks** **Pre Annual exam=02 weeks** **Annual prep leaves =02 weeks**	• Lectures • CBL • SDL • Practical • Dissection	Test in Module 2 integrated tests Final Integrated EOB exam Merged with Pre-Annual Exam Theory, OSPE, Practical, Viva Voce

Academic Year Calendar

Principal: (F. I. P)

Tentative Forecast –1st Year MBBS Class (Session 2024-25)

Block I			
Module	**Duration**	**Dates**	
		From	**To**
Introduction to Medicine	01 Week	10 Feb 2025	16 Feb 2025
Foundation Block	03 Weeks	17 Feb 2025	16 Mar 2025
Sports Week	01 Week	24 Feb 2025	28 Feb 2025
MSK – I	07 Weeks	17 Mar 2025	04 May 2025
Integrated Modular Test (MSK – I)	-	14 Apr 2025	
Blood & Lymphatics	02 Weeks	05 May 2025	18 May 2025
End of Block I Exam	01 Week	Theory Paper: 19 May 2025 Viva Voce: 20 – 24 May 2025	
Block II			
Module	**Duration**	**Dates**	
		From	**To**
CVS	08 Weeks	26 May 2025	03 Aug 2025
Integrated Modular Test - 1 (CVS)	-	23 Jun 2025	
Integrated Modular Test - 2 (CVS)	-	28 Jul 2025	
Summer Break	02 Weeks	28 Jun 2025	13 Jul 2025
Respiratory System	01 Week	04 Aug 2025	10 Aug 2025
End of Block II Exam	01 Week	Theory Paper: 11 Aug 2025 Viva Voce: 12 – 16 Aug 2025	
Block III			
Module	**Duration**	**Dates**	
		From	**To**
Respiratory System	03 Weeks	18 Aug 2025	07 Sep 2025
Integrated Modular Test (Respiratory System)	-	08 Sep 2025	
MSK – II	06 Weeks	08 Sep 2025	19 Oct 2025
Integrated Modular Test (MSK – II)	-	06 Oct 2025	
End of Block III Exam	01 Week	Theory Paper: 20 Oct 2025 Viva Voce: 21 – 25 Oct 2025	
Pre-Annual and Annual Professional Exams Plan			
Pre Annual Prep Leaves	02 Weeks	26 Oct 2025	09 Nov 2025
Pre Annual Exam	02 Weeks	Theory Paper: 10, 12 & 14 Nov 2025 Viva Voce: 17 – 21 Nov 2025	
Annual Prep Leaves	02 Weeks	22 Nov 2025	07 Dec 2025
Annual Exam	08 Dec 2025		

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06 Feb 2025

Asst Prof
DD Trg
(Dr. Attia Sheikh)

Structured Summary of Blocks & Modules

Block I

Theme	Subject	Topics
1. Introduction to medicine (2 weeks)	**Introduction**	• Anatomy and various disciplines. • Plan of instruction and assessment as per criteria laid by NUMS • Recognizing the role of different medical disciplines, departments, and faculty. • Acknowledging the interdisciplinary nature of medical education.
2. Foundation I (4 weeks)	**Gen. Anatomy**	• Terms of position and movements • Bone &Cartilage • Joints • Muscles • CVS & Lymphatics
	Gen. Histology	• Microscope handling. • Cell • Epithelial Tissue
	Gen. Embryology	• Gametogenesis • Chromosomal Aberrations • Ovulation, Fertilization • First Week of Development
3. Musculoskeletal System I (MSK-I) (06 weeks)	**Gen. Anatomy**	• Neurology-I
	Gen. Histology	• Connective Tissue • Muscular Tissue
	Gen. Embryology	• Second Week of Development
	Gross Anatomy	• Bones of Shoulder Girdle and Upper Limb • Pectoral Region and Breast • Scapular Region • Axilla • Arm & Forearm • Hand • Wrist Joint • Cutaneous Innervation of Upper Limb • Injuries to Brachial Plexus and its branches • Venous and Lymphatic Drainage of Upper Limb • Surface marking
	Gen. Embryology	• Third Week of Development • The Embryonic Period (Third to Eight week)

Block II

Theme	Subject	Topics
4. Cardiovascular System (09 weeks)	**Histology**	• Lymphoid Organs • Circulatory System
	Embryology	• Fetal Period (3mo – birth) • Placenta and Fetal Membranes • Multiple Pregnancies • Development of Body Cavities • Cardiovascular System ○ Heart, vascular system, fetal circulation
	Gen. Anatomy	• General Organization of Circulatory System

	Gross Anatomy	• Thoracic Wall
		  ○ Sternum, Ribs Vertebrae
		  ○ Thoracic Inlet, Outlet
		  ○ Muscles of Thoracic cage
		  ○ Intercostal Space
		  ○ Neurovascular Supply of Thoracic Wall
		  ○ Movement of Thoracic Wall in Respiration
		  ○ Diaphragm
		• Thoracic Cavity
		  ○ Mediastinum (parts, relations, contents)
		  ○ Structures at transverse thoracic plane
		  ○ Pericardium & Heart
		  ○ Trachea, Bronchi
		  ○ Pleura & Lungs
		  ○ Great Vessels of Thoracic Cavity
		  ○ Nerves of Thoracic Cavity
		  ○ Radiology
		  ○ Surface Anatomy

Block III

Theme	Subject	Topics
4. Respiratory System (04 weeks)	**Histology**	• Histology of Respiratory System
	Embryology	• Development of Respiratory System • Development of Vertebral columns, ribs, & sternum
5. Musculoskeletal System – II (05 weeks)	**Gen. Histology**	• Histology of Bone • Histology of Cartilage
	Gen. Embryology	• Development of Limbs • Development of Muscles • Birth Defects
	Gross Anatomy	• Hip Bone, Femur, Tibia, Fibula, Patella • Hip Joint • Fascia of the Lower Limb • Gluteal Region • Thigh • Femoral Triangle • Popliteal Fossa • Knee Joint • Leg • Tibiofibular Joints • Ankle Joint • Articulated Foot • Foot-Dorsum • Foot-Sole • Cutaneous Innervation of Lower limb • Nerve and Plexus of Lower Limb • Arterial Supply of Lower Limb • Venous Drainage of Lower Limb • Lymphatic Drainage of Lower Limb • Surface Marking

List of Practical Classes

Block 1 (incl. Foundation Module)

- Histology and its Methods of Staining
- Microscope Handling and use
- Surface Epithelium 1 - Simple
- Surface Epithelium 2 - Compound
- Glandular Epithelium
- Loose Connective Tissue
- Dense Connective Tissue
- Reticular Connective Tissue
- Adipose Tissue
- Muscle

Block 2

- The Circulatory System-I (Heart / Cardiac Muscle)
- The Circulatory System-II (Arterial System)
- The Circulatory System-III (Venous System & Capillaries)
- Immune System (Lymph node, Spleen, Thymus, Tonsils)

Block 3

- Histology of Bronchial Tree (Trachea & Bronchi)
- Histology of Lung -I
- Histology of Lung -II
- Bone
- Cartilage

LEARNING RESOURCES

BOOKS:

Gross Anatomy:

1. Snell's Clinical anatomy by regions': Richard S. Snell (10th Edition)
2. Last's Anatomy: Regional and Applied by R.J. Last (12th Edition)
3. Clinically oriented anatomy by Keith L. Moore (8th Edition)
4. Gray's Anatomy: The anatomical Basis of Clinical Practice by Susan Standring (42nd Edition)
5. Atlas of Human Anatomy by Frank H. Netter (8th Edition)
6. Cunningham's Manual of Practical Anatomy (17th Edition)
7. Gray's Anatomy for Students: Text book by Adam W. M Mitchell and Richard Drake (5th Edition)

Histology

1. Junqueira's Basic Histology Text and Atlas by Lulz Carlos, Uchoa Junqueira (17th Edition)
2. Medical Histology by Laiq Hussain Siddiqui (8th Edition)

Embryology

1. Langman's medical Embryology by Thomas W. Sadler (15th Edition)
2. The Developing Human – Clinically Oriented Embryology, by Keith L Moore (11th Edition)

General Anatomy

1. General Anatomy by Laiq Hussain Siddiqui (6th Edition)

ELECTRONIC MODES

1. E-library Maintained at CIMS
2. Lecture Notes / Presentations Maintained at Computer Lab CIMS & Google Classroom
3. HEC Library Access
4. Wiley and Elsevier Access

Forecast

Principal: (F. I. P)

Tentative Forecast –1st Year MBBS Class (Session 2024-25)

Block I			
Module	**Duration**	**Dates**	
		From	**To**
Introduction to Medicine	01 Week	10 Feb 2025	16 Feb 2025
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Pre Annual Exam	02 Weeks	Theory Paper: 10, 12 & 14 Nov 2025 Viva Voce: 17 – 21 Nov 2025	
Annual Prep Leaves	02 Weeks	22 Nov 2025	07 Dec 2025
Annual Exam	08 Dec 2025		

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06 Feb 2025

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(Dr. Attia Sheikh)

Year I – Block I

Module 1. Foundation of Medicine

Duration: 2 week

Module Coordinator: Dr. Sadaf Iqbal Dr Arshad Khalid

Members: Dr. Amna Ilyas, Dr. Maham Ubaid , Dr. Ramisha khan Dr. Ahmed Cheema

Week	LGIS	Dissection H.	CBL	Histology	Embryology
Orientation week 10/02 -14/02	Orientation to Learn Anatomy				
	Introduction to Practical & CBL				
Week 1 17-02- 21-02	Interactive learning	NUMS annuals inter college sports			
	Introduction to DH				
Week 24-02 – 28-02	Terms & anatomical planes	Sports Gala			

Year I – Block I
Module 2. Cell structure & function

Duration: 4 weeks

Module Coordinator: Dr. Sadaf Iqbal Dr Arshad Khalid

Members: Dr. Amna Ilyas, Dr. Maham Ubaid, Dr. Ramisha Khan, Dr. Ahmed Cheema

Week	LGIS	Dissection H.	CBL	Practical/Skill
Week 1 3-3-25 – 7-3-25	Histology of cell membrane	General Anatomy of Bone cartilage	Introduction to CBLs	**Histology**
	Cell organelles	General Anatomy of muscles		Introduction to Microscopy
	Gametogenesis I	General Anatomy of Joints		**Embryology**
				Gametogenesis
Week 2 10-03-25 -_14-03 25	Chromosomal anomalies I	General Anatomy of skin & fascia	Osteomyelitis	**Histology**
	Chromosomal anomalies II	General anatomy of nervous system I		Staining
	Cell organelles II	General anatomy of Nervous System II		**Embryology**
	Epithelium I			Spermatogenesis Interactive session
Week 3 17-03 25_ 21-03-25	Epithelium II	Clavicle	Down Syndrome	**Histology**
	Ovulation	Scapula		Simple Epithelium
	Fertilization	Humerus		**Embryology**
	Epithelium III			Oogenesis & Follicular Dev Assessment .

Year 1 – Block I
Module 3. MSK-I

Duration: 6 weeks

Module Coordinator: Dr. Sadaf Iqbal Dr. Arshad Dr. Shabnam

Team members: Dr. Amna Ilyas, Dr. Maham Ubaid, Dr. Ramisha Khan, Dr. Ahmed Cheema

Week 4 24-03-25_ 28-03-25	2nd week of development	Pectoral region	In vitro fertilization	**Histology**
	3rd week of development	Breast		Stratified epithelium
	Polarity of epithelial cells	Scapular region		**Embryology**
				1st week of development assessment session
29-03-25_ 06-04-25	**Eid ul fitar holidays**			

Week	LGIS	Dissection H.	CBL	Practical / Skill
Week 5 07-04-25_ 11-04-25	Polarity of epithelial cells	**Shoulder joint**	Ectopic pregnancy	**Histology**
	Connective tissue I	**Axilla**		Glandular Epithelium
	Embryonic period	Brachial plexus		**Embryology**
	Brachial plexus injuries			2nd week of development Assessment session
Week 6 14-04-25_ 18-04-25	Connective tissue II	1st integrated test	Clavicular fracture	**Histology**
	Embryonic period			Areolar tissue Adipose tissue
	Embryonic period			**Embryology**
	Connective tissue proper			3rd week of development Assessment session
Week 7 21-04-25_ 25-04-25	Histology of muscles	Radial attachment & clinical	CA breast	**Histology**
	Embryonic period ectoderm derivatives	Ulna I		Revision
	Embryonic period mesoderm derivatives	Ulna II		**Embryology**
	Embryonic period endoderm derivatives			Notochord formation
Week	**LGIS**	**Dissection H.**	**CBL**	**Practical / Skill**
Week 8 28-4-25-	Fetal period	Forearm ant. Compartment	Brachial plexus injuries Erb's &	**Histology**

	Elbow joint	Forearm post compartment	Klumpke's Paralysis	Revision
	Wrist joint	Sup. & inf radioulnar joint		**Embryology**
	retinacula			Neurulation
Week 9 05-05-25 _ 09-05 25	Cubital fossa	Wrist & carpel bones	Shoulder dislocation	**Histology**
	Carpal tunnel syndrome	**Articulated hand**	Frozen shoulder	Revision
	Superficial & deep palmer arches	Palmer aspects of hands I		**Embryology**
	Palmer spaces			Development of somites
Week 10 12-05 25 _ 16-05 25	Cutaneous innervation of upper limb	Dorsum of hand	Fracture of Humerus	**Histology**
	Lymphatic drainage of upper limb	Ligaments & joints of hands		Revision
	Nerve injuries of upper limb	Surface marking I		**Embryology**
	Venous drainage of upper limb	Surface marking II		Formation & migration of neural crest cells

Week	LGIS	Dissection H.	CBL	Practical / Skill	Clinical Lectures
Week 4 22-04-2024 26-04-2024	Histology of Spleen	Palmer Aspect of Hand II	Carpal Tunnel Syndrome	**Histology**	Nerve Injuries of Upper Limb
	Placenta & Fetal Membranes	Dorsal Aspect of Hand		Thymus + Spleen	
	Twinning	Surface Anatomy		**Embryology**	
	Nerve Injuries of Upper Limb			Placenta & Fetal Membranes	

WEEKLY TRG PROGRAMME OF 1ST YEAR MBBS CLASS SESSION (2024 – 29)
CMH MULTAN INSTITUTE OF MEDICAL SCIENCES MULTAN CANTT
WEEK 04 (BLOCK – 01)

DAY	0800-0850	0850-0940	0940-1000	1000-1100	1100-1315		1315-1345	1345-1500
MON 14-04-2025	Physiology-1 Neuromuscular Junction Dr. Iqra Imtiaz	Anatomy-1 Connective Tissue – II Dr. Sadaf Iqbal	Tea Break	SDL	1st Integrated Modular Test of Block I Course Contents: Topics covered till 11 Apr 2025 in Block – 01 in all 3 disciplines. Venue: Exam Hall		LUNCH / PRAYER BREAK	Practical Skills Histology: C Physiology: D Biochemistry: A Computer Sciences Class: B Venue: E Library
TUE 15-04-2025	Biochemistry-1 Carbohydrate Chemistry – I Dr. Nasreen Aman (Dr. Sadia Akram, Dr. Rida)	Physiology-2 Hemoglobin & Iron Metabolism Dr. Faiza		Medicine Clinical Correlate Iron Deficiency Anemia Brig Dr. Faisal Naveed Akhtar	DH (Axillary Vessels – I) A – Dr. M Arshad Khalid B – Dr. Maham Ubaid C – Dr. Ahmad Ali Cheema D – Dr. Amna Ilyas	CBL/SDL Anatomy: B Physiology: C Biochemistry: D SDL: A Venue: E Library		Practical Skills Histology: B Physiology: C Biochemistry: D Computer Sciences Class: A Venue: E Library
WED 16-04-2025	Physiology-3 Properties of Action Potential Dr. Sidra Arshad	Anatomy-2 Embryonic Period – I Prof Dr. Santosh Kumar		Biochemistry-2 Carbohydrate Chemistry – II Dr. Nasreen Aman (Dr. Humna, Dr. Bushra)	DH (Compartment of Arm) A – Dr. M Arshad Khalid B – Dr. Maham Ubaid C – Dr. Ahmad Ali Cheema D – Dr. Amna Ilyas	CBL/SDL Anatomy: C Physiology: D Biochemistry: A SDL: B Venue: E Library		Practical Skills Histology: A Physiology: B Biochemistry: C Computer Sciences Class: D Venue: E Library
THU 17-04-2025	Physiology-4 Applied Aspects of Skeletal Muscle Physiology – I Dr. Iqra Imtiaz	Anatomy-3 Embryonic Period-II Prof Dr. Santosh Kumar		Islamiyat Mr. Munawar Hussain	SDL In Lecture Hall 01	CBL/SDL Anatomy: D Physiology: A Biochemistry: B SDL: C Venue: E Library		Practical Skills Histology: D Physiology: A Biochemistry: B Computer Sciences Class: C Venue: E Library
FRI 18-04-2025	Quran Lesson Mr. Munawar Hussain	Anatomy-4 Connective Tissue Proper Dr. Sadaf Iqbal		Physiology-5 Applied Aspects of Skeletal Muscle Physiology – II Dr. Iqra Imtiaz	1050-1215	1215-1315	1315-1400	1400-1500
					Practical Embryology 3rd Week of Development 1st Year Demonstrator	English Mrs. Umbreen Qureshi	LUNCH / PRAYER BREAK	CBL/SDL Anatomy: A Physiology: B Biochemistry: C SDL: D Venue: E Library

Venue – All Lectures will be delivered in Lecture Hall 01.

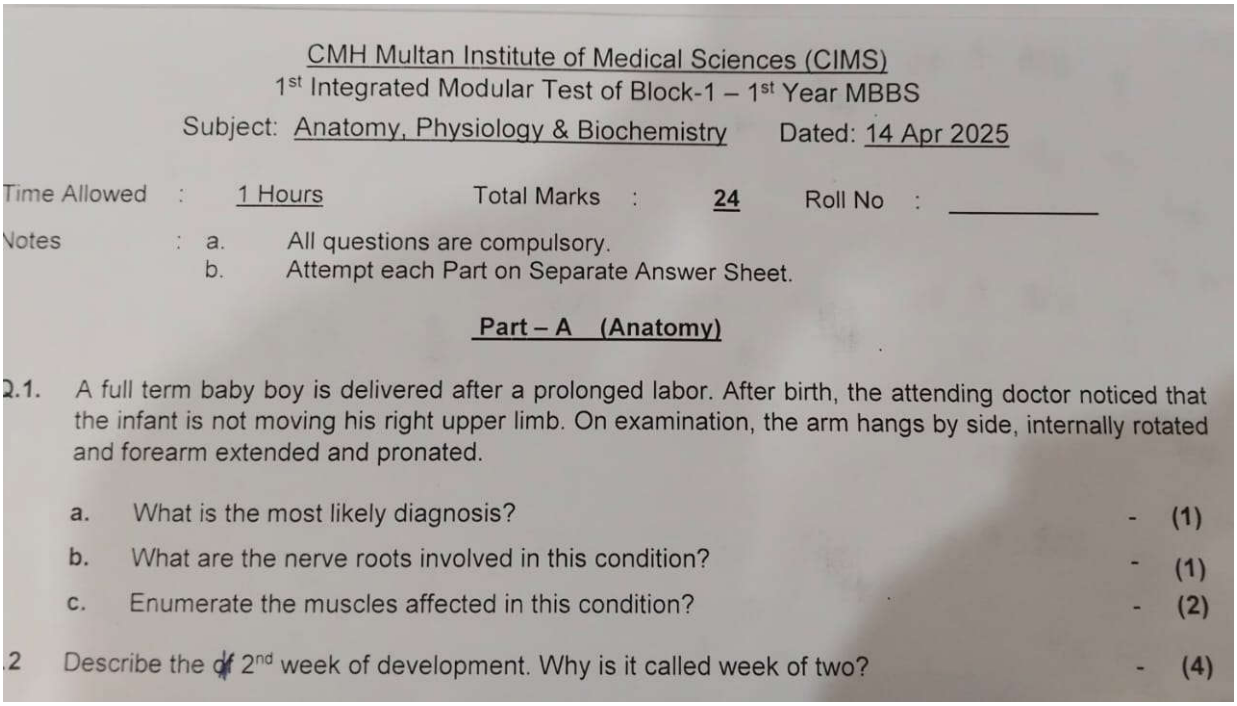
		Anatomy	Physiology	Biochemistry
SGD/CBL	Facilitators' Names	Dr. Maham Ubaid, Dr. Amna Ilyas	Dr. Naila Jamal, Dr. Huda Asif	Prof Dr. Nakhshab Ch, Dr. Sadia, Dr. Bushra
	Venue	Anatomy Museum, Lecture Hall 01, Skill Lab	Physiology Lab, Tutorial Room 5 & 6	Biochemistry Lab, Tutorial Room 1 & 2
	Topic	Clavicular Fracture	Iron Deficiency + Megaloblastic Anima	Diabetes Mellitus
Practical	Facilitators' Names	Dr. Shabnam Riaz	Dr. Mahnoor Fatima, Dr. Hina Akram	Dr. Rida, Dr. Nasreen Aman, Dr. Nawal
	Venue	Histology Lab	Physiology Lab	Biochemistry Lab
	Topic	Areolar Tissue + Adipose Tissue	Red Cell Indices	Benedict's Test
DH	Venue	Anatomy Museum, Tutorial Room 3, Lecture Hall 01, Skill Lab		

No. TW / 5 – A / CIMS
10 Apr 2025

Asst Prof
DD Trg
(Dr. Attia Sheikh)

To: Anatomy Dept, Physiology Dept, Biochemistry Dept, IT Dept

SEQ



CMH Multan Institute of Medical Sciences (CIMS)
1st Integrated Modular Test of Block-1 – 1st Year MBBS
Subject: Anatomy, Physiology & Biochemistry Dated: 14 Apr 2025

Time Allowed : 1 Hours Total Marks : 24 Roll No : _____

Notes : a. All questions are compulsory.
b. Attempt each Part on Separate Answer Sheet.

Part – A (Anatomy)

Q.1. A full term baby boy is delivered after a prolonged labor. After birth, the attending doctor noticed that the infant is not moving his right upper limb. On examination, the arm hangs by side, internally rotated and forearm extended and pronated.

a. What is the most likely diagnosis? - (1)
b. What are the nerve roots involved in this condition? - (1)
c. Enumerate the muscles affected in this condition? - (2)

.2 Describe the of 2nd week of development. Why is it called week of two? - (4)

MCQS

A35 yr old man after fall from stairs presents with pain and swelling on the right shoulder. X ray reveals fracture of Anatomical neck of humerus. Which nerve is most likely injured?

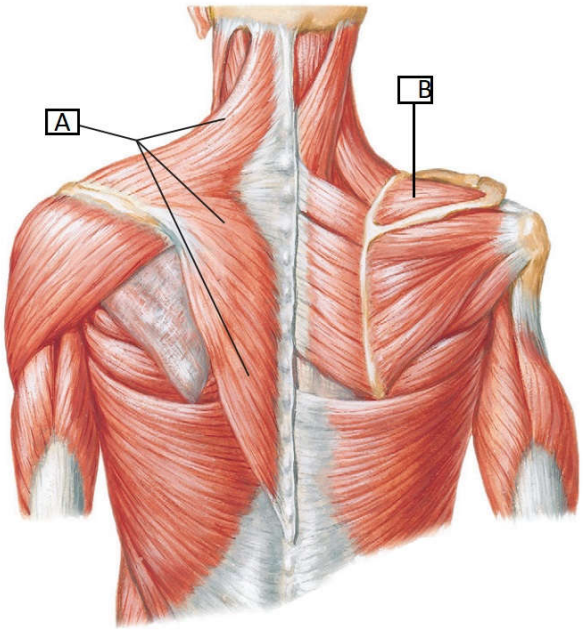
a. axillary
b. median
c. radial
d. ulnar

The following cell surface specializations have a core of actin filaments that are cross-linked by several actin-bundling proteins and are easily seen in the light microscope as a ‘brush border’is known as:

a. basal body
b. kinocilia
c. microvilli
d. Sterocilia

While examining an aborted conceptus, the teacher told the students that it belongs to 3rd week of development. She gave this statement on the basis of presence of which one of the following structures?

a. Amniotic cavity
b. Blastocyst cavity
c. Primary yolk sac
d. Primitive streak



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