



SECOND YEAR MBBS INTEGRATED CURRICULUM (2025-2026)

INTRODUCTION

PREAMBLE

The word *curriculum* comes from the Latin *curare*, meaning a racecourse, reflecting the structured path of learning. In general, it refers to a course of study; in medical education, it is defined as a planned set of learning experiences aimed at achieving specific outcomes. Curriculum is dynamic, constantly adapting to societal needs, professional requirements, and emerging knowledge.

A narrow view sees it as a list of subjects, while a broader view considers all learning experiences students encounter, including formal, informal, and hidden aspects. Globally, several models exist, such as apprenticeship, discipline-based, integrated, problem-based, and outcome-based. In Pakistan, the most common are the Traditional, Integrated, and Hybrid curricula.

Integrated Medical Curriculum

This model links scientific knowledge with clinical training by organizing learning around themes or organ systems rather than isolated subjects. Its goal is to remove the divide between basic and clinical sciences, improving understanding, retention, and skills.

Forms of Integration:

- **Horizontal Integration:** Coordination among basic science subjects, usually delivered in organ-system–based blocks.
- **Vertical Integration:** Combines basic, clinical, socio-humanistic, and population health themes across all years, with early clinical exposure and emphasis on professional values.

Traditional Medical Curriculum

A discipline-based model where students learn basic sciences (Anatomy, Physiology, Biochemistry) in the first two years through lectures, followed by clinical teaching from the third year onward. Its main limitation is the lack of early clinical relevance, making it harder for students to connect theory with patient care.

Hybrid Curriculum

A blended model that mixes didactic basic science teaching with early clinical exposure, system-based modules, or integrated sessions. It is practical for institutions transitioning toward full integration while maintaining elements of the traditional structure.

Framework for Curriculum Planning and Development (Based on International & National Standards)

Sr. No.	Step	Description

1	Identification of Core Issues & Broad Needs	Analyse existing gaps, stakeholder expectations and healthcare priorities.
2	Specific Needs Assessment	Focused assessment of students, faculty, community and regulatory demands.
3	Learning Outcomes & Objectives	Define measurable objectives and competencies aligned with standards. Reflect Knowledge, skills, attitudes, professionalism and ethics.
4	Educational Strategies	Select instructional methods: PBL, simulation, skills lab, integrated modules.
5	Implementation Plan	Include academic calendar, clinical rotations, resource allocation (labs, wards, e-learning) and interdepartmental coordination.
6	Evaluation & Feedback	Collect student & faculty feedback, analyse assessments and review curriculum.

Rationale for MBBS Curriculum at CMH LMC & IOD

The MBBS curriculum at CMH Lahore Medical College & Institute of Dentistry (CMH LMC & IOD) is designed to develop competent, ethical, and socially accountable medical graduates capable of addressing diverse and evolving healthcare needs. It is fully aligned with the NUMS MBBS Curriculum (2026) and the Pakistan Medical & Dental Council (PM&DC) Standards (2024), ensuring quality, uniformity, and compliance with national accreditation requirements.

This hybrid curriculum incorporates key elements from Harden's Level 7 Integration (Correlation). Whereas, 4th and final year MBBS curricula are still traditional. From first to 3rd year, vertically aligned themes span across these years of the MBBS programme, each comprising a set of sub-themes organized into modules for both horizontal and vertical integration. These modules are further divided into blocks to ensure balanced content distribution and temporal coordination. Specific topics within each module are designated for integrated sessions, in accordance with the requirements of Harden's Level 7 (Correlation) model where there is occasional vertical integration along with horizontal integration however, disciplinary boundaries are maintained in both teaching and assessment.

The sequencing and alignment of courses and modules—reflected in the curriculum map—are based on guidelines issued by the Pakistan Medical & Dental Council (PM&DC) and the Higher Education Commission (HEC). This educational structure begins with intensive basic science teaching enriched with early clinical exposure and gradually transitions toward advanced clinical learning as students' progress. Vertical themes ensure that key concepts are revisited throughout subsequent years, giving the curriculum a spiral, progressively integrated character.

Although subject boundaries are maintained, most discipline-specific content is taught in the relevant year, while selected components are integrated vertically across subsequent years. This approach supports meaningful conceptual linkages across subjects, fostering interconnected learning and reinforcing one of the core goals of integration: enhancing relevance and understanding.

Assessment strategies are aligned with the block-wise structure of the curriculum, ensuring coherence and supporting comprehensive evaluation of students' competencies in knowledge, skills, and professional attitudes.

Through progressive learning experiences, beginning with foundational sciences, advancing through applied clinical sciences, and culminating in two years of intensive clinical training, the program prepares students for postgraduate education and real-world medical practice. Graduates are expected to demonstrate clinical competence, ethical judgment, communication proficiency, scientific reasoning, and commitment to lifelong learning.

Hybrid Curriculum (Modular + Discipline-Based Structure)

The MBBS programme at CMH LMC & IOD has a hybrid curriculum,

Years I–III: Modular, System-Based Structure

During the first three years, the curriculum is delivered through integrated, system-based modules. Each module draws content from multiple foundational and applied basic science disciplines, including Anatomy, Physiology, Biochemistry, Pathology, Pharmacology, and Community Medicine, to promote a holistic understanding of normal and abnormal human structure and function.

This modular design supports:

- Horizontal integration across foundational basic sciences
- Vertical integration with applied clinical concepts
- Reduced content fragmentation
- Strengthened conceptual cohesion

Teaching and learning activities include interactive lectures, case-based discussions, early clinical exposure, practical skill development, simulation-based sessions, and formative assessments. These approaches help students relate theoretical knowledge to real clinical situations from the earliest stages of their training.

Years IV–V: Discipline-Based Structure with Clinical Immersion

In the final two years, the curriculum transitions to a discipline-based format to accommodate increasing clinical depth and learner maturity.

- **Year IV** focuses on specialized subjects such as Special Pathology, Community Medicine & Public Health, Ophthalmology, and ENT. Learning remains clinically anchored to enhance application and reasoning.
- **Year V** emphasizes intensive, supervised clinical rotations in core disciplines—Medicine, Surgery, Obstetrics & Gynaecology, Paediatrics, and allied specialties. This phase prioritizes workplace-based learning, diagnostic and therapeutic reasoning, procedural proficiency, patient communication, interprofessional collaboration, and professional identity formation.

Longitudinal Themes Across All Years

To ensure holistic professional development, the hybrid model integrates multiple longitudinal themes throughout the programme, including:

- Professionalism and medical ethics
- Communication skills
- Evidence-based medicine (EBM)
- Research methodology and critical appraisal
- Digital literacy and health informatics

- Infection control and patient safety
- Leadership, teamwork, and reflective practice

These themes reinforce students' growth as ethical, socially responsible, and competent future physicians.

MBBS Curriculum Philosophy

The curriculum philosophy blends constructivist, cognitivist, and behaviorist approaches. It allows students to construct their own knowledge based on what they already know and to use that knowledge in purposeful activities requiring decision making, problem solving, and judgments.

Constructivist Approach

- Case-based learning
- Problem-solving
- Collaborative learning
- Reflective practice

Cognitivist Approach

- Structured modular planning
- Spiral curriculum
- Integration and contextual learning

Behaviourist Elements

- Demonstrations
- Skills training
- Feedback-based learning
- Standardized assessments

Spiral Progression

- **Spiral I (Y1–2):** Normal structure and function
- **Spiral II (Y3):** Abnormal structure & function, pathology, microbiology, pharmacology
- **Spiral III (Y4):** Systemic pathology, applied clinical sciences, community health
- **Year V:** Full-time **clinical training** and workplace-based learning

The MBBS curriculum follows Harden's 7 Levels of Integration, with Level 7 (Correlation).

1.PREAMBLE

The Pakistan Medical and Dental Council's recently revised standards place a strong emphasis on integrating major subjects both horizontally and longitudinally. In keeping with these PM&DC 2024 standards, this curriculum has been updated to incorporate Correlation as the minimum level of integration across the MBBS program. At its core, this is an outcome-based curriculum, one that is patient-centered, community-relevant, and grounded in the principles of health promotion and disease prevention. By the time our students complete the program, they will have acquired the competencies expected of a graduate doctor, as recognized and defined internationally. This curriculum has been developed through the collective efforts of faculty from both basic and clinical sciences, working alongside their respective Health Professions Education teams from constituent and affiliated colleges, in close collaboration with the NUMS Academic Directorate.

2. CURRICULUM PERSPECTIVE

The NUMS curriculum draws on constructivist and behaviorist principles, with elements of cognitivist thinking woven in where appropriate. Rather than treating learning as the passive reception of information, it is built around the idea that students construct meaningful knowledge by building on what they already know and then applying that knowledge in purposeful, real-world contexts that call for decision-making, problem-solving, and clinical judgment.

3. LEVEL OF INTEGRATION

Across the first three years of the MBBS program, NUMS implements Correlation equivalent to Level 7 on Harden's Integration Ladder. While discipline-based teaching remains the foundation, an integrated component runs alongside it, drawing connections across subjects to strengthen clinical relevance and deepen conceptual understanding. At CMH Lahore Medical College, the same Level 7 integration is applied in the Third Year. This takes shape through horizontal integration across Pathology, Pharmacology, Forensic Medicine, and Community Medicine, as well as vertical integration through structured early clinical exposure. Clerkships are introduced in the Third Year and carry through to the Final Year, eventually transitioning into full-time clerkships in MBBS Year V.

4. CURRICULAR ORGANIZATION AND STRUCTURE

- a. The first three years of the NUMS MBBS curriculum are delivered in a System-Based Modular Format, with clinical relevance embedded throughout. In Years III and IV, students gain clinical exposure through ward and OPD rotations, progressing to full clerkships in Year V.
- b. Year I is organized into three blocks, each comprising a series of modules. The number and complexity of objectives determine the duration of each module, which is designed to achieve.
- c. Curriculum delivery is the responsibility of modular teams made up of multidisciplinary basic science faculty alongside relevant clinical faculty, ensuring that learning remains both grounded and contextually relevant.
- d. Planning and delivery are coordinated by Year Coordinators, who guide and support Module Coordinators within their respective years to ensure smooth and effective implementation.
- e. The Module Coordinator oversees teaching and assessment throughout each module and is appointed by the Heads of Departments in coordination with the HPE team.
- f. All NUMS colleges are required to provide students with a dedicated study guide for each module.

- g.** Integration across the MBBS program is achieved through teaching organized around three spirals.
- h.** Spiral I - Basis of Medicine (Years I & II) brings together Anatomy, Physiology, and Medical Biochemistry, horizontally integrated around body systems with consistent clinical relevance. Where content does not naturally fit within the central theme of a module, it is incorporated as an additional chunk within that module.
- i.** Longitudinal themes, including Quran Kareem, Introduction to Computers, and Research Methodology & EBM, run as an integral part of Year I. Assessment of HEC generic subjects, however, remains the responsibility of the individual institute.
- j.** Islamiyat and Pakistan Studies are assessed by the University as part of the Second Professional Examination.
- k.** Beyond attending scheduled daily sessions, students are expected to take ownership of their learning through regular self-directed study in order to meet the desired objectives

5. COMPETENCIES

This curriculum is centered on developing the roles of a general physician as defined by the PMC: a practitioner who is skilful and knowledgeable, a promoter of community health, a critical thinker, a professional and role model, and a researcher and leader.

The competencies specifically emphasized in Years I and II are:

- a.** Medical Knowledge
- b.** Procedural Skills
- c.** Problem Solving
- d.** Communication Skills
- e.** Professionalism
- f.** Research

6. LEARNING OUTCOMES

By the end of Years I and II, students should be able to:

- a.** Correlate the anatomical, physiological, and biochemical foundations of major body systems to explain normal human structure and function within clinically relevant contexts.
- b.** Perform basic physiological and biochemical laboratory procedures accurately and safely, while upholding the principles of professionalism and patient safety.
- c.** Identify soft and bony landmarks through palpation to map deep-seated anatomical structures on living subjects.
- d.** Interpret topographic anatomy using models and prosected specimens, demonstrating effective communication and a collaborative approach to learning.
- e.** Communicate effectively with peers and instructors through academic discussions, reflective sessions, and shared learning activities.

- f. Engage in self-directed learning and reflective practice as a means of building professional identity, supporting personal growth, and cultivating a commitment to continuous improvement.
- g. Demonstrate an understanding of the Quran and apply its moral and ethical principles across personal, academic, and professional domains.
- h. Apply Islamic ethical principles, or equivalent moral frameworks for non-Muslim students, to clinical, professional, and social decision-making.
- i. Demonstrate knowledge of Pakistan's history, culture, and governance, and connect these to contemporary social and healthcare contexts.
- j. Communicate ideas clearly and with purpose in academic and professional settings through well-structured written expression.
- k. Demonstrate digital literacy and the responsible use of information and health data systems in support of learning and professional communication.
- l. Apply the basic principles of clinical photography and videography to document clinical information ethically and professionally.

Contact Hours Distribution Year-II

SUBJECTS	Subject Teaching
Anatomy	250
Physiology	225
Medical biochemistry	125
Basic of Radiology	10
Medicine & Allied	55
Surgery & Allied	55
Research Methodology & EBM	15
Behavioral Sciences	45
Communication Skills	20
Leadership and Management	15
Professionalism	15
Quran Kareem	25
Pakistan Studies	25
Co- curricular activities/sports	40
Total Hours	920

BLOCK COORDINATORS FOR SECOND YEAR MBBS

BLOCK	BLOCK COORDINATOR	MODULE		MODULE COORDINATOR
IV	Dr. Hira Saeed (Biochemistry Department)	VII	Anatomy	Dr. Aymen Sana
			Physiology	Dr. Amna Nadeem
			Biochemistry	Dr. Ghufuranullah
		VIII	Anatomy	Dr. M. Bahadur Baloch
			Physiology	Dr. Shafia Rasool
			Biochemistry	Dr. Danyal Faisal
V	Prof. Dr. Amna Nadeem (Physiology Department)	IX	Anatomy	Dr. M. Bahadur Baloch
			Physiology	Dr. Ujala
			Biochemistry	Dr. Ghufuran
VI	Dr. M. Bahadur Baloch (Anatomy Department)	X	Anatomy	Dr. Maryam Shahid
			Physiology	Dr. Shafia Rasool
			Biochemistry	Dr. Rida Bibi
		XI	Anatomy	Dr. Owais Khalid
			Physiology	Dr. Ujala
			Biochemistry	Dr. Danyal Faisal

ACADEMIC CALENDER MBBS 2ND YEAR 2025-2026

Weeks	Details	Dates	
		From	To
Block IV (12+1 weeks)			
	Start of New Class	12 Jan 2026	
1-5	Academic Classes Block IV Module VIII (Digestive System & Metabolism I) (05 wks)	12 Jan 2026	13 Feb 2026
	29 Jan 2026	Drug Awareness Seminar	
	Kashmir day Holiday	05 Feb 2026	
6-10	Academic Classes Block IV Module IX (Genitourinary System) (5/7 wks)	16 Feb 2026	19 Mar 2026
	Eid ul Fitr	20 Mar 2026	22 Mar 2026
	Pakistan Day	23 Mar 2026	
11	Spring Vacations	24 Mar 2026	27 Mar 2026
12-13	Academic Classes Block IV Module IX (Genitourinary System) (2/7 wk)	30 Mar 2026	10 Apr 2026
14	Block IV Exam (1 Week)	13 Apr 2026	17 Apr 2026
Block V (09+01 weeks)			
15-20	Academic Classes Block V Module X (Genetics & Neurosciences 1) (6/9 wks)	20 Apr 2026	26 May 2026
	Labor Day	01 May 2026	
	Nawa e Sarosh (CMH Literary Festival)	13 May 2026	
	Annual Sports Day	20 May 2026	
	Eid ul Azha (Tentative)	27-29 May 2026	
21-24	Summer Vacations (4x weeks)	01 June 2026	26 June 2026
	Ashura (Tentative)	24 -25 June 2026	
25-27	Academic Classes Block V Module X (Genetics & Neurosciences 1) (3/9 wks)	29 June 2026	17 July 2026
	Life-line Symposium	01 July 2026	
	Annual GK Quiz Competition	07 July 2026	
	Irteqa	09 July 2026	
	Purpose Over Popularity	15 July 2026	
	Olympiad	17 July 2026	
28	Block V Exam (1 Week) (Date Sheet will be finalized by IEC in YCC meeting)	20 July 2026	24 July 2026
	Trifecta (Opening Ceremony)	24 July 2026	
	Trifecta (Closing Ceremony)	26 July 2026	
Block VI (10+1 weeks)			
29-33	Academic Classes Block VI Module XI (Maxillofacial & Special Senses) (05 wks)	27 July 2026	28 Aug 2026
	Annual Research Conference	30 July 2026	
	Inter Med Fest	03 Aug 2026	

	Independence Day Event	13 Aug 2026	
	Independence Day	14 Aug 2026	
	Qiraat & Naat Competition & Eid Milad-un-Nabi	20 Aug 2026	
34-38	Academic Classes Block VI Module XII (Endocrinology) (05 wks)	31 Aug 2026	02 Oct 2026
39	Block VI Exam (1 Week) (Date Sheet will be finalized by IEC in YCC meeting)	05 Oct 2026	09 Oct 2026
40	Pre-Annual/ Send-up Leave	12 Oct 2026	16 Oct 2026
41-42	Pre-Annual/ Send-up Exam (Theory) (Date Sheet will be finalized by IEC in YCC meeting)	19 Oct 2026	30 Oct 2026
43-44	Prep Leave Annual Exam	02 Nov 2026	13 Nov 2026
	NUMS Annual Professional Exam	16 Nov 2026	

2ND YEAR MBBS WEEKLY SCHEDULES



2nd year MBBS Jan
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<https://docs.google.com/spreadsheets/d/1gOQsr-rFVu4bVluvpQMv8hUZ2yseikqz/edit?usp=sharing&oid=112023879061475515463&rtpof=true&sd=true>

LECTURE SCHEDULE OF ANATOMY

Date & Day	Time	Topic	Instructional Modality	Facilitator
16-02-2026 (Monday)	11:00–11:50	Development of Urogenital System–I	Interactive Lecture-Embryology	Dr. M Bahadur Baloch
17-02-2026 (Tuesday)	08:00–08:50	Kidney–I	Interactive Lecture- Histology	Dr. Anum Farooq
17-02-2026 (Tuesday)	08:50–10:30	Posterior Abdominal Wall – Fascia & Muscles	SGD	All Faculty
18-02-2026 (Wednesday)	02:00–03:00	Inferior Vena Cava, Aorta & Para-aortic Lymph Nodes	SGD	All Faculty
20-02-2026 (Friday)	08:50–09:40	Development of Urogenital System–II	Interactive Lecture-Embryology	Dr. M Bahadur Baloch
20-02-2026 (Friday)	11:20–12:30	Kidney & Suprarenal Gland	SGD	All Faculty
18 to 20-02-2026		Kidney	Histology Practical	Dr. Tayyaba Mahmud / Dr. Javaria Bukhari / Dr. Sabika Nadeem
23-02-2026 (Monday)	11:00–11:50	Development of Urogenital System–III	Interactive Lecture-Embryology	Dr. M Bahadur Baloch
24-02-2026 (Tuesday)	08:00–08:50	Kidney–II	Interactive Lecture- Histology	Dr. Anum Farooq
24-02-2026 (Tuesday)	08:50–10:30	Ureter & Urinary Bladder	SGD	All Faculty
25-02-2026 (Wednesday)	02:00–03:00	Lumbar Vertebrae & Sacrum	SGD	All Faculty
27-02-2026 (Friday)	08:50–09:40	Development of Urogenital System–IV	Interactive Lecture-Embryology	Dr. M Bahadur Baloch
27-02-2026 (Friday)	11:20–12:30	Male & Female Bony Pelvis, Pelvic Cavity & Walls	SGD	All Faculty
25 to 27-02-2026		Ureter & Urinary Bladder	Histology Practical	Dr. Tayyaba Mahmud / Dr. Javaria Bukhari / Dr. Sabika Nadeem
02-03-2026 (Monday)	11:00–11:50	Development of Urogenital System–V	Interactive Lecture-Embryology	Dr. M Bahadur Baloch
03-03-2026 (Tuesday)	08:00–08:50	Testis & Epididymis	Interactive Lecture- Histology	Dr. Anum Farooq
03-03-2026 (Tuesday)	08:50–10:30	Pelvic Diaphragm, Fascia & Pelvic Floor	SGD	All Faculty
04-03-2026 (Wednesday)	02:00–03:00	Neuro-vasculature of Pelvis	SGD	All Faculty
04 to 06-03-2026		Male Genital Organs	Histology Practical	Dr. Tayyaba Mahmud / Dr. Javaria Bukhari / Dr. Sabika Nadeem

CMH LMC & IOD ANATOMY DEPARTMENT
2nd Year MBBS 2025-26
Neuroscience I & Genetics Module Teaching Plan

Updated:27-April-26

DATE/DAY	TIME	TOPIC	ACTIVITY TYPE	FACILITATOR
20-04-26 (Monday)	1100 - 1150	Histology- Peripheral Nerve & Ganglia	Lecture Histo	Dr. Tayyaba Mahmud
21-04-26 (Tuesday)	0800 - 0850	Meninges + Dural Venous Sinuses	Lecture	Dr. M. Bahadur Baloch
21-04-26 (Tuesday)	0850 - 1030	Sutures, Fontanelle & Cranial Cavity - I	SGD	All Faculty
22-04-26 (Wednesday)	1400 - 1500	Cranial Cavity - II	SGD	All Faculty
23-04-26 (Thursday)	1400 - 1500	Spinal Cord (external and internal features)	Lecture	Dr. M. Bahadur Baloch
24-04-26 (Friday)	1120 - 1230	Introduction to Tracts	SGD	All Faculty
27-04-26 (Monday)	1100 - 1150	Ascending Tracts of Spinal Cord	Lecture	Prof. Dr. Ansa Rabia
28-04-26 (Tuesday)	0800 - 0850	Descending Tracts of Spinal Cord	Lecture	Prof. Dr. Ansa Rabia
28-04-26 (Tuesday)	0850 - 1030	Spinal Cord - Lesions	SGD	All Faculty
29-04-26 (Wednesday)	1400 - 1500	Blood Supply of Spinal cord	SGD	All Faculty
01-05-26 (Friday) Labour Day				
04-05-26 (Monday)	1100 - 1150	Medulla Oblongata	Lecture	Dr. Rabia Latif
05-05-26 (Tuesday)	0800 - 0850	Histology- Spinal Cord & Cerebellum	Lecture Histo	Dr. Tayyaba Mahmud
05-05-26 (Tuesday)	0850 - 1030	Medulla Oblongata & Clinicals + Cranial Nerves (IX, X, XI, XII)	SGD	All Faculty
06-05-26 (Wednesday)	1400 - 1500	Pons & Clinicals + Cranial Nerves (V, VI, VII, VIII)	SGD	All Faculty
08-05-26 (Friday)	1120 - 1230	Student Presentation	SGD	All Faculty
11-05-26 (Monday)	1100 - 1150	Development of CNS - I	Lecture Embryo	Dr. Anum Farooq

DATE/DAY	TIME	TOPIC	ACTIVITY TYPE	FACILITATOR
12-05-26 (Tuesday)	0800 - 0850	Development of CNS - II	Lecture Embryo	Dr. Anum Farooq
12-05-26 (Tuesday)	0850 - 1030	Midbrain & Clinicals + Cranial Nerves (III, IV)	SGD	All Faculty
13-05-26 (Wednesday)	1310 - 1400	Cerebellum	Lecture	Prof. Dr. Shaista Arshad
13-05-26 (Wednesday)	1400 - 1500	Cerebellum & Clinicals + 4 th Ventricle	SGD	All Faculty
15-05-26 (Friday)	0850 - 0940	Development of CNS - III	Lecture Embryo	Dr. Anum Farooq
18-05-26 (Monday)	1100 - 1150	MODULAR EXAM - I (WRITTEN)		
19-05-26 (Tuesday)	0800 - 0850	Paper Discussion	Lecture	All Faculty
19-05-26 (Tuesday)	INTEGRATED SEMINAR			
26-05-26 (Tuesday)	0850 - 1030	Revision - Brainstem	SGD	All Faculty
SUMMER BREAK				
29-06-26 (Monday)	1100 - 1150	Development of CNS - IV	Lecture-Embryo	Dr. Anum Farooq
30-06-26 (Tuesday)	0800 - 0850	Histology- Cerebral Cortex	Lecture-Histo	Dr. Tayyaba Mahmud
30-06-26 (Tuesday)	0850 - 1030	Cerebral Cortex (Sulci Gyri)	Small Group Discussion	All Faculty
01-07-26 (Wednesday)	1400 - 1500	Functional Areas of Cerebrum	Small Group Discussion	All Faculty
03-07-26 (Friday)	0850 - 0940	Development of CNS - V	Lecture-Embryo	Dr. Anum Farooq
03-07-26 (Friday)	1120 - 1230	Cerebrum - White Matter + Lateral Ventricle	Small Group Discussion	All Faculty
06-07-26 (Monday)	1100 - 1150	Thalamus	Lecture	Dr. Hamna Umar
07-07-26 (Tuesday)	0850 - 1030	Modular Exam - II (VIVA)		All Faculty
08-07-26 (Wednesday)	1400 - 1500	Olfactory Nerve + Optic Nerve & Its Lesions	Small Group Discussion	All Faculty
10-07-26 (Friday)	1120 - 1230	Hypothalamus + 3 rd Ventricle + Clinicals	Small Group Discussion	All Faculty

DATE/DAY	TIME	TOPIC	ACTIVITY TYPE	FACILITATOR
13-07-26 (Monday)	1100 -1150	Development of Skull	Lecture-Embryo	Dr. Anum Farooq
14-07-26 (Tuesday)	0850 - 1030	Arterial Supply of Brain	Lecture	Dr. Tayyaba Mahmud
14-07-26 (Tuesday)	0800 - 0850	Basal Ganglia & CSF Circulation	Small Group Discussion	All Faculty
15-07-26 (Wednesday)	1400 - 1500	Venous Drainage of Brain	SGD	All Faculty
17-07-26 (Friday)	1120 - 1230	Limbic System & Reticular Formation Gross OSPE Revision	SGD	All Faculty

Venues: The SGD will take place in the Dissection Hall, while the Lectures will be held in Lecture Hall C.

All Faculty:

- Dr. M. Bahadur Baloch
- Dr. Aymen Sana
- Dr. Syeda Javeria
- Dr. Maryam Shahid

Supervised by:

for A. Sana

(Dr. M. Bahadur Baloch)

27/5/26
Head of Department Anatomy
(Prof. Dr. Ansa Rabi)

Prepared by: M. Naveed

LECTURE SCHEDULE OF BIOCHEMISTRY

BLOCK IV (12+1 Weeks) (12 January 2026 —17 April 2026)						
Kashmir Day 5 Feb Eid-ul-Fitr 19-22 Mar 2026 Pakistan Day 23 Mar Spring Vacation 30 Mar – 3 Apr						
Sr.	Topic	Facilitator	No. of Lec	Dates	Practical	Tutorial
MODULE VIII (Digestive system and Metabolism – I) 5 weeks						
1.	GIT	Prof. Huma Ashraf	4	12,13,19,20,21 Jan 2026	5	5
2.	Nutrition	Prof. Huma Ashraf	3	9,10,13 Feb 2026		
3.	Protein Metabolism	Dr. Hira Saeed	7	14,15,26,27,28 Jan 2026 2,3 Feb, 2026		
4.	Mid-Module Test 1	2 nd year Team	1	11 February, 2026		
5.	Mid-Module Test 2	2 nd year Team	1	18 February, 2026		
MODULE IX (Genitourinary System Module) 7 Weeks						
6.	Physiochemical Aspects	Dr. Mehvesh Rehan/ Dr. Huma	2	16,17 February 2026	7	7
7.	Water pH, Electrolytes & Buffers	Dr. Mehvesh Rehan/ Dr. Hira Saeed	5	23,24,25 Feb 2026, 02,03 Mar 2026		
8.	Acid-Base Disorders	Dr. Aamenah Malik	7	09,10,16,17,30 Mar & 6,7 April 26		
9.	Mid-Module Test 3	2 nd year team	1	31 March, 2026		
10.						
EXAM BLOCK 1V OSPE		13 Apr 2026 – 17 Apr 2026				

BLOCK V (20 April 2026 — 17 July 2026)						
Labor Day 1 May, 2026 Eid-ul-Adha 26-27, May 2026 Summer Vacation 8 June 2026 03 July 2026						
MODULE X (Neurosciences I & Genetics) 8 Weeks						
10.	Nucleotide Chemistry	Dr. Mehvesh Rehan	4	23,29 April 8, 12 May 26	7	7
11.	Nucleotide Metabolism	Dr. Hira Saeed	7	20,21,27,28 April 4,5, 11 May 26		
12.	Mid-Module Test 4	2 nd year team	1	20 May 2026		
13.	Genetics	Dr. Hira Sohail	10	29,30 June 6,7,13,14 July 26		
14.	Biotechnology	Dr. M. Ghufanullah	3	18,25,26 May 26		
EXAM BLOCK V OSPE		13 July 2025 – 17 July 2025				

MODULE XI (Maxillofacial & Special Senses) 06 Weeks

16.	Xenobiotic	Dr. Hira Saeed	3	20,21,22 July, 2026	6	6
17.	Neurotransmitter	Dr. Hira Saeed	3	27,28,29 July, 2026		
18.	Cancer, Aging, Tumor Markers	Dr. Mehvesh Rehan	5	3,4,5,10,11 August, 2026		
19.	Mid-Module Test 5	2 nd year team	1	12 August, 2026		

MODULE XII (Endocrinology) 5 Weeks

20.	Endocrinology	Dr. Huma Ashraf	9	17,18,19,24,26,31 August, 2026 1,2,7 September 2026	5	5
21.	Integration of Metabolism	Dr. Hira Sohail	3	7,8,9 September 2026		
22.	Eicosanoids Metabolism	Dr. Hira Sohail	3	14,15,16 September 2026		
23.	Mid-Module Test 6	2 nd year team	1	23 September, 2026		
24.	Revision	2 nd year team	8	21,22,28,29,30 September 2026 5,6,7 October, 2026		

Block VI Exam **05 Oct 2026 – 09 Oct 2026****Sendup Exam OSPE****Send Up Prep Leave** 12 Oct 2026 --- 16 Oct 2026**Sendup Exam** 19 Oct 2026 --- 30 Oct 2026**Prep leave NUMS** 02 Nov 2026 ---13 Nov 2026**NUMS Annual Exam** 16 November, 2026 Onwards

LECTURE SCHEDULE OF PHYSIOLOGY

CMH Lahore Medical College & Hospital

Department of Physiology

First Year MBBS (2025-2026)

Lecture Schedule

	Dates	Topic	Lecturer	No. of Lectures	SGD	Module	SIGN
Block-I (12 weeks)	23 rd Feb to 10 th March	Cell	Dr. Aamina Qudus	9	1	1	<i>[Signature]</i>
	11 th March to 18 th March	Blood: RBC	Prof. Dr. Qudsia Umaira	7			<i>[Signature]</i>
	1 st April to 9 th April	Blood: Immunity	Prof. Dr. Ambreen Tauseef	6	1		<i>[Signature]</i>
	10 th April to 29 th April	Blood: Coagulation and ABO	Prof. Dr. Qudsia Umaira	7	1	1	<i>[Signature]</i>
	30 th April to 26 th May	Nerve and Muscle	Prof. Dr. Ambreen Tauseef	11	1	2	<i>[Signature]</i>
Block-II (9 weeks)	6 th July to 22 nd July	Heart	Dr. Aamina Qudus	5	2	1	<i>[Signature]</i>
		EKG	Dr. Anna Nadeem	4			<i>[Signature]</i>
	27 th July to 4 th September	Circulation-I	Dr. Masooma	9	2	1	<i>[Signature]</i>
		Circulation-II	Dr. Anna Nadeem	10	1	1	<i>[Signature]</i>
Block-III (9+2 Weeks)	14 th to 18 th September	Resp-I	Prof. Dr. Ambreen Tauseef	4	1		<i>[Signature]</i>
	18 th Sep to 28 th Oct	Resp- II	Prof. Dr. Farhat Khurram	16	2	2	<i>[Signature]</i>
	2 nd Nov to 12 th Nov	MSK-II	Dr. Sarah Saad	9	1		<i>[Signature]</i>

[Signature]
(Prof. Dr. Ambreen Tauseef)
Professor and Head
Department of Physiology
CMH Lahore Medical College.

Lecture Schedule

	Topic	Teacher Name	No of Lec.	Sign
Block - IV Week	Renal Physiology	Prof. Dr. Ambreen Tauseef 15 th Jan to 05 th Mar	18	M-I SGD-3 Test -3
	Body fluid & acid base	Dr. Aamina Quddus 12 th , 13 th , 14 th Jan	3	
Block - V Week (8+1)	G.I.T Physiology	Dr. Aamina Quddus 09 th Mar to 2 nd April	12	M-II SGD-3 Test -1
	CNS	Dr. Amna Nadeem 20 th April - 26 th may	19	M-I SGD-2
	HMF+ ANS	Dr. Masooma Sajjad	29 th June - 17 th July 8	M-II M-III SGD-2
Block - VI Week (11+1)	Sp. Senses	Dr Sarah Saad 27 th July to 13 th August	10	M-I SGD-II
	Endocrinology	Prof. Dr. Farhat Khurram 17 th August to 18 th September	16	SGD-2 M-II
	Reproduction	Prof. Dr. Qudsia Umaira 21 st sep to 2 nd oct	9	M-III

(Prof. Dr. Ambreen Tauseef)
Professor and Head
Department of Physiology
CMH Lahore Medical College,
Lahore - Pakistan

LECTURE SCHEDULE OF LEADERSHIP & MANAGEMENT

Sr. No.	Date	Timings	Topic	Facilitator
1	12/01/26	1150-1240 hrs	Professionalism in Healthcare: Building Trust, Ethics & Excellence	Dr.Amina Ahmad
2	16/01/26	0850-0940 hrs	Communication Types in Healthcare+ Clinical Practice	Dr. Shakila Mushtaq
3	19/01/26	1150-1240 hrs	Accountability in Healthcare: A Professional Obligation	Dr. Rizwana Kamran
4	23/01/26	1320-1410hrs	Lifelong Learning/ Role of Punctuality in Healthcare Professionalism	Dr.Amina Ahmad
5	26/01/26	1150-1240 hrs	Self-awareness and Professional Identity in Healthcare	Dr. Shakila Mushtaq
6	02/02/26	1150-1240 hrs	Understanding Resilience & Adaptability in Healthcare Settings	Dr.Rizwana Kamran
7	09/02/26	1150-1240 hrs	Resilience Building Techniques: Coping with Stress& Uncertainty	Dr.Amina Ahmad

LECTURE SCHEDULE OF RESEARCH METHADODOLOGY

2nd year MBBS for the Year 2026 Block IV (12+1 weeks)

Sr. No	Date	Time	Topic	Instructor Name
1	Thursday, 15 January, 2026	01:10 - 02:00	Quantitative and qualitative research	Prof. Dr. Tahseen Haider
2	Thursday, 22 January, 2026	01:10 - 02:00	Study designs	Prof. Dr. Tahseen Haider
3	Thursday, 29 January, 2026	01:10 - 02:00	Study Population and its selection	Prof. Dr. Tahseen Haider
	Thursday, 5 February, 2026	Kashmir Day Holiday		
4	Thursday, 12 February, 2026	01:10 - 02:00	Sampling Techniques	Dr Sana Abid
5	Thursday, 19 February, 2026	01:10 - 02:00	Ethical Issues in Research	Dr. Tahira Ahsan
6	Thursday, 5 March, 2026	11:40 - 12:20	Research Ethics	Dr Sana Abid
7	Thursday, 19 March, 2026	11:40 - 12:20	Data Collection Methods	Dr. Iqra Fatima
8	Thursday, 2 April, 2026	01:10 - 02:00	Descriptive Data Analysis	Dr. Iqra Fatima
	Eid ul Fiter 19th March to 22nd March			
	23rd March Pakistan Day			
9	Thursday, 23 April, 2026	01:10 - 02:00	Statistical Data Analysis	Dr. Iqra Fatima
	Spring Vaccations 30th March to 3rd April			
10	Thursday, 7 May, 2026	01:10 - 02:00	Proposal Writing	Dr. Iqra Fatima
	13th May to 17th April Block Exam			
	Block V (8+1 Week)			
11	Tuesday, 2 June, 2026	01:10 - 02:00	Research Methodology	Dr Sana Abid
12	Tuesday, 9 June, 2026	01:10 - 02:00	Research Methodology	Dr. Iqra Fatima

13	Tuesday, 16 June, 2026	01:10 - 02:00	Research Methodology	Dr. Iqra Fatima
14		01:10 - 02:00	Research Methodology	
15		01:10 - 02:00	Research Methodology	

LECTURE SCHEDULE OF MEDICINE

DEPARTMENT OF MEDICINE, CMH LAHORE MEDICAL COLLEGE			
Lecture Schedule in Medicine for 2 nd Year MBBS 2025-26			
Days/Time: Thursday (08:00-08:50)		Friday (01:20-02:10)	
Lecture Hall-C			
Sr.	Date	Topic	Instructor
1	19-02-2026 (08:00-08:50)	Dysphagia / Achalasia	Brig. Javed Iqbal (R)
2	26-02-2026 (08:00-08:50)	GERD, Esophagitis, Barret's esophagus + Esophageal varices	Dr. Mehreen Kamran
3	05-03-2026 (08:00-08:50)	Pancreatitis	Dr. Saba Saif
4	12-03-2026 (08:00-08:50)	Diarrhea (IBS, IBD)	Brig. M. Khalid Azam (R)
5	19-03-2026 (08:00-08:50)	Constipation	Dr. Aniq Ashfaq
Eid Ul Fitr 20 March to 22 March 2026			
Pakistan Day 23 March 2026			
Spring Vacations 24 March to 27 March 2026			
5	02-04-2026 (08:00-08:50)	Malabsorption (Celiac, SIBO, Sprue)	Prof. Rizwana Kitchlew
	09-04-2026 (08:00-08:50)	Gastritis / Peptic Ulcer	Dr. Saba Saif
5	10-04-2026 (01:20-02:10)	Fatty Liver, Liver Cirrhosis	Dr. Wardah Salman
Block IV Exam 13 April to 17 April 2026			
The Lecture should start with a Clinical Scenario followed by Interactive Session. The faculty is encouraged to consult Guyton Textbook of Physiology.			
Dr. Muhammad Siddique Prof. & Head Department of Medicine CMH Lahore Medical College			

LECTURE SCHEDULE OF SURGERY

S NO	DATE	DAY	TIME	TOPIC	INSTRUCTOR
BLOCK – IV					
MODULE VIII - GIT					
1.	19/01/26	Mon	0800-0850	Abdominal Examination (Clinical Perspectives)	Dr. Rashid Usman
2.	22/01/26	Thu	0940-1030	Acute Abdomen	Dr. Rashid Usman
3.	26/01/26	Mon	0800-0850	Acid Peptic Disease Surgical aspects	Dr. Rashid Usman
4.	29/01/26	Thu	0940-1030	Intestinal Obstruction	Dr. Rashid Usman
5.	02/02/26	Mon	0800-0850	Acute Appendicitis	Dr. Rashid Usman
Holiday - Kashmir day					
6.	09/02/26	Mon	0800-0850	Gall stones disease Clinical perspectives	Dr. Rashid Usman
7.	12/02/26	Thu	0940-1030	Acute Appendicitis	Dr. Rashid Usman
8.	13/02/26	Fri	0800-0850	Abdominal Wall hernias	Dr. Rashid Usman
9.	13/02/26	Fri	0850-0940	Inguinoscrotal Hernias	Dr. Rashid Usman
MODULE IX: Genitourinary					
10.	16/02/26	Mon	0800-0850	Symptomatology of Urinary pathologies	Dr. Rashid Usman
11.	19/02/26	Thu	0940-1030	Symptomatology of Genital pathologies	Dr. Rashid Usman
12.	23/02/26	Mon	0800-0850	Renal Trauma	Dr. Rashid Usman
13.	26/02/26	Thu	0940-1030	Congenital GU anomalies - I	Brig. Adnan Khalid (Retd)
14.	02/03/26	Mon	0800-0850	Hematuria	Dr. Rashid Usman
15.	05/03/26	Thu	0940-1030	Congenital GU anomalies - II	Brig. Adnan Khalid (Retd)
16.	09/03/26	Mon	0850-0940	Integrated Seminar	
17.	12/03/26	Thu	0940-1030	Dysuria / Pyuria	Dr. Rashid Usman
18.	16/03/26	Mon	0800-0850	Urolithiasis / Obstructive uropathy	Dr. Rashid Usman
19.	19/03/26	Thu	0940-1030	Urinary Bladder trauma	Dr. Rashid Usman
Pakistan day & Eid-ul-Fitr & Spring Vacations 23/03/26 to 27/03/26					
20.	30/03/26	Mon	0800-0850	Urethral trauma	Dr. Rashid Usman
21.	02/04/26	Thu	0940-1030	Genital Trauma	Dr. Rashid Usman
22.	06/04/26	Mon	0800-0850	Urinary Bladder pathologies	Dr. Rashid Usman
23.	09/04/26	Thu	0940-1030	Prostate Pathologies	Dr. Rashid Usman
Block IV Exam 13/04/26 – 17/04/26					
BLOCK V					
MODULE X – Genetics and Neurosciences					
24.	20/04/26	Mon	0800-0850	Neural tube defects	Prof Dr Rashid Usman
25.	27/04/26	Mon	0800-0850	Hydrocephalus – clinical aspects	Prof Dr Rashid Usman
26.	04/05/26	Mon	0800-0850	Space occupying lesions (SOL) Brain	Prof Dr Rashid Usman
27.	11/05/26	Mon	0800-0850	Head Injury – I	Prof Dr Rashid Usman
28.	18/05/26	Mon	0800-0850	Head Injury – II	Prof Dr Rashid Usman
29.	25/05/26	Mon	0800-0850	Cervical Spine injury and airway control	Prof Dr Rashid Usman
Eid-ul-Azha & Summer Vacations 27/05/26 to 26/06/26					

30	29/06/26	Mon	0800-0850	Spinal cord Trauma	Prof Dr Rashid Usman
31.	06/07/26	Mon	0800-0850	Spinal / Epidural Anesthesia	Prof Dr Rashid Usman
Block V Exam 13/07/26 – 17/07/26					

LECTURE SCHEDULE OF BEHAVIORAL SCIENCES

Week	Date	Topic Block IV (12+1) weeks	Instructional Strategy/ Assessment	Name of Instructor
Module-VIII (Digestive system & Metabolism) 5 weeks				
Module-IX (Genitourinary system) 6/7 weeks				
Week 1	Monday 16-2-26	<u>Neurobiological and Psychological Basis of Behavior: Language</u>	Interactive lecture/ MCQ, SAQ	Dr. Iram Mansoor
	Wed 18-2-26	<u>Understand individual human differences: Personality theories- and assessment</u>	Interactive lecture/ MCQ, SAQ	Dr. Ali Ather
Week 2	Monday 23-2-26	<u>Understand individual human differences</u> Personality theories- Piaget cognitive theory	Interactive lecture/ MCQ, SAQ	Dr. Iram Mansoor
	Wed 25-2-26		Interactive lecture/ MCQ, SAQ	Dr. Fareha Azam
Week 3	Monday 2-3-26	<u>Understand individual human differences</u> Personality theories-Freud theory	Interactive lecture/ MCQ, SAQ	Dr. Iram Mansoor
	Wed 4-3-26		Interactive lecture/ MCQ, SAQ	Dr Ali
Week 4	Monday 9-3-26	<u>Understand individual human differences</u> Personality theories- Erickson	Interactive lecture/ MCQ, SAQ	Dr. Iram Mansoor
	Wed 11-3-26		Interactive lecture/ MCQ, SAQ	Dr. Iram Mansoor
Week 5	Monday 16-3-26	<u>Understand individual human differences: Personality disorders</u>	Interactive lecture/ MCQ, SAQ	Dr. Iram Mansoor

	Wed 18-3-26		Interactive lecture/ MCQ, SAQ	Dr. Iram Mansoor
Week 6	Monday 30-3-26	<u>History of Mental Health Acts in Pakistan</u> <u>Recent Psychiatric health laws in Pakistan</u>	Interactive lecture/ MCQ, SAQ	Dr. Iram Mansoor
	Wed 1-3-26	<u>Describe Neurobiological and Psychological Basis of Behavior:</u> Learning (Classical conditioning)	Interactive lecture/ MCQ, SAQ	Dr. Samia Khan
Week 7	Monday 6-4-26	Medically Psychosocial Aspects of Health and Disease	Interactive lecture/ MCQ, SAQ	Dr. Ali Athar
	Wed 8-4-26	<u>Describe Neurobiological and Psychological Basis of Behavior:</u> Learning (operant conditioning)	Interactive lecture/ MCQ, SAQ	Dr. Samia Khan
BLOCK V (8+1) weeks Module-X (Genetics & Neurosciences) 7/8 weeks				
Week 1	Monday 20-4-26	Psychological reactions to Illness and Hospitalization-I	Interactive lecture/ MCQ, SAQ	Dr. Ali Athar
	Wed 22-4-26	Memory: Stages and Anatomy	Interactive lecture/ MCQ, SAQ	Dr. Samia Khan
Week 2	Monday 27-4-26	Psychological reactions to Illness and Hospitalization-II	Interactive lecture/ MCQ, SAQ	Dr. Ali Ather
	Wed 29-4-26	Memory: Types and Pathology	Interactive lecture/ MCQ, SAQ	Dr. Samia Khan
Week 3	Monday 4-5-26	Stress and its types Job-related Stress & Burnout	Interactive lecture/ MCQ, SAQ	Miss Hira Javaid
	Wed 6-5-26	Memory: forgetting & improving	Interactive lecture/ MCQ, SAQ	Dr. Samia Khan
Week 4	Monday 11-5-26	Stress management	Interactive lecture/ MCQ, SAQ	Miss Hira Javaid
	Wed 13-5-26	Perception-Abnormalities	Interactive lecture/ MCQ, SAQ	Dr. Samia Khan
Week 5	Monday 18-5-26	Psychotrauma	Interactive lecture/ MCQ, SAQ	Dr. Ali Ather
	Wed 20-5-26	Thinking: Concepts & problem solving	Interactive lecture/ MCQ, SAQ	Dr. Samia Khan
Week 6	Monday 25-5-26	Discourse of the Psychosocial. Aspects of Death and Dying	Interactive lecture/ MCQ, SAQ	Dr. Ali Ather
	Wed 27-5-26	Thinking: Decision making and Creative thinking	Video based Interactive discussion/ MCQ, SAQ	Dr. Samia Khan
Week 7	Monday 1-6-26	Psychosocial Aspects of Terrorism	Interactive lecture/ MCQ, SAQ	Dr. Ali Ather
	Wed 3-6-26	Emotions	Video based Interactive discussion/ MCQ, SAQ	Dr. Samia Khan

Summar vacations (4 weeks) 8 June-3 July				
Week 8	Monday 6-7-26	Psychosocial Aspects of Aging	Interactive lecture	Dr. Ali Ather
	Wed 8-7-26	Motivation: Maslow Hierarchy	Interactive lecture	Dr. Samia Khan
Block VI (11+1) weeks Module XI (Maxi facial & special sense) 06 weeks				
Week 1	Monday 20-7-26	Defense mechanisms	Interactive lecture	Dr. Ali Ather
	Wed 22-7-26	Intelligence: IQ & Background	Video based Interactive discussion/ MCQ, SAQ	Dr. Samia Khan
Week 2	Monday 27-7-26	Ethical dilemma-euthanasia	Interactive lecture/ MCQ, SAQ	Dr. Ali Ather
	Wed 29-7-26	Intelligence: EQ & Concepts	Interactive lecture/ MCQ, SAQ	Dr. Samia Khan
Week 3	Monday 3-8-26	Reproductive ethics	Interactive lecture/ MCQ, SAQ	Dr. Ali Ather
	Wed 5-8-26	Language & Arousal	Interactive lecture/ MCQ, SAQ	Dr. Samia Khan
Week 4	Monday 10-8-26	Ethical dilemmas	Video based Interactive discussion/ MCQ, SAQ	Dr. Ali Ather / Dr Ali/ Dr. Fareha Azam
	Wed 12-8-26	Sleep Stages	Video based Interactive discussion/ MCQ, SAQ	Dr. Samia Khan
Week 5	Monday 17-8-26	Ethical dilemma-confidentiality	Interactive lecture/ MCQ, SAQ	Dr. Ali Ather
	Wed 19-8-26	Sleep Disorders & Hygiene	Interactive lecture/ MCQ, SAQ	Dr. Samia Khan
Week 6	Monday 24-8-26	Demonstrations Counselling skills-I	Scenario base role playing/ OSPE	Dr Iram/Dr. Ali Ather / Dr Ali/ Dr. Fareha Azam
	Wed 26-8-26	Demonstrations Counselling skills-II	Scenario base role playing OSPE	Dr Iram/Dr. Ali Ather / Dr Ali/ Dr. Fareha Azam
Module XII (Endocrinology) 5 weeks				
Week 1	Tuesday 31-8-26	Demonstrations Breaking bad news-I	Scenario base role playing OSPE	Dr. Ali Ather / Dr Ali/ Dr. Fareha Azam
	Wed 2-9-26	Demonstrations Breaking bad news-I	Scenario base role playing OSPE	Dr. Ali Ather / Dr Ali/ Dr. Fareha Azam
Week 2	Monday 7-9-26	Demonstrations communication skills-I	Scenario base role playing OSPE	Dr Iram/Dr Ali/ Dr. Fareha Azam
	Wed 9-9-26	Demonstrations communication skills-I	Scenario base role playing OSPE	Dr Iram / Dr Ali/ Dr. Fareha Azam
Week 3	Monday 14-9-26	Communication skills	Scenario base role playing OSPE	Dr Iram/Dr. Ali Ather / Dr Ali/ Dr. Fareha

				Azam
	Wed 16-9-26	Demonstrations	Scenario base role playing OSPE	Dr Iram/Dr. Ali Ather / Dr Ali/ Dr. Fareha Azam
Week 4	Monday 21-9-26	Demonstrations	Scenario base role playing OSPE	Dr Iram/Dr. Ali Ather / Dr Ali/ Dr. Fareha Azam
	Wed 23-9-26	Demonstrations	Scenario base role playing OSPE	Dr Iram/Dr. Ali Ather / Dr Ali/ Dr. Fareha Azam
Week 5	Monday 28-9-26	Demonstrations	Scenario base role playing OSPE	Dr Iram/Dr. Ali Ather / Dr Ali/ Dr. Fareha Azam
	Wed 30-9-26	Demonstrations	Scenario base role playing OSPE	Dr Iram/Dr. Ali Ather / Dr Ali/ Dr. Fareha Azam

ASSESSMENT AND BLUEPRINT

PAPER - I							
Weightings; MCQs (70 %) & SAQ/SAQs (30%)							
Total Marks: theory paper Assessments (20%) =30 Pass Marks				=150 Marks Marks of =120 Internal = 75			
				Paper Components Part-A : 84 x MCQs (1 mark each), (84 marks) Time = 90 min Part B: 09 x SAQs (4 marks each), (36 marks) Time = 90 min Total Duration Time =180 min Cognitive level o MCQs: Recall: Application Ratio = 30: 70. o SAQs: 100% Application			
No.	Modules	Subjects (min 45 % in each subject)					
		Anatomy (including 4 MCQ of Surgery)		Physiology (including 3 MCQ of Medicine)		Biochemistry (including 1 MCQ of Medicine)	
		MCQs	SAQ/SAQ	MCQs	SAQ/ SAQ	MCQs	SAQ/ SAQ
1	GIT & Metabolism I	13	1	10	1	14	1

PAPER - III Weightings; MCQs (70 %) & SAQs (30%)
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Total Marks: paper (20%) =30 Pass Marks				=150 Marks Marks of theory =120 Internal Assessments = 75				Paper Components Part-A : 84 x MCQs (1 mark each), (84 marks) Time = 90 min Part B: 09 x SAQs (4 marks each), (36 marks) Time = 90 min Total Duration Time =180 min Cognitive level ○ MCQs: Recall: Application Ratio = 30:70. ○ SAQs: 100% Application			
No.	Modules	Subjects (min 45 % in each subject)									
		Anatomy (including 4 MCQ of Surgery)		Physiology (including 3 MCQ of Medicine)		Biochemistry (including 1 MCQ of Medicine)					
		MCQs	SAQ/SAQ	MCQs	SAQ/ SAQ	MCQs	SAQ/ SAQ				
1	Maxillofacial & Special Senses	25	03	10	01	15	01				
2	Endocrinology	03	-	18	02	13	02				
Total		28	3x4=12	28	3x4=12	28	3x4=12				
* MCQ for Medicine/ Surgery may be selected from NUMS Medicine/ Surgery MCQ bank. However, paper setting shall be done by the Basic Science faculty along with Medical educationist											

BLUEPRINT, YEAR II-BLOCK IV - ANATOMY

Sr. No.	Topic	Learning Outcomes	(I x F)	Category	Total Weight	MCQs (Marks=28)	SAQ (Marks=12)
1	Abdominal Wall	Relate the gross anatomy of anterolateral & posterior abdominal wall with to its clinical significance	3 X 3 = 9	Must Know	0.07	2	
2	Peritoneum	Interpret the functional and clinical significance of peritoneum based on its arrangement in form of folds, omenta, reflections and spaces in the abdomen	2 X 2 = 4	Good To Know	0.03	1	

3	Esopagus & Stomach	Relate the gross features of esophagus & stomach to its clinical significance	$3 \times 3 = 9$	Must Know	0.07	2	1 X 4
		Relate the developmental events of esophagus & stomach to its congenital anomalies	$2 \times 2 = 4$	Good To Know	0.03	1	
		Relate the histomorphological features of esophagus & stomach to its functions	$2 \times 2 = 4$	Good To Know	0.03	1	
4	Small Intestine	Relate the gross features of small intestine to its clinical significance	$3 \times 3 = 9$	Must Know	0.07	1	
		Relate the developmental events of small intestine to its congenital anomalies	$2 \times 2 = 4$	Good To Know	0.03	1	
		Relate the histomorphological features of small intestine to its functions	$2 \times 1 = 2$	Nice To Know	0.02	1	
5	Large Intestine	Relate the gross features of large intestine to its clinical significance	$3 \times 3 = 9$	2	1 X 4		

		Relate the developmental events of large intestine to its congenital anomalies	$2 \times 1 = 2$	Nice To Know	0.02	0	
		Relate the histomorphological features of large intestine to its functions	$2 \times 2 = 4$	Good To Know	0.03	0	
6	Liver, Gall Bladder, Pancreas, Spleen	Relate the gross features of Liver, Biliary Tree, pancreas & spleen to their clinical significance	$3 \times 3 = 9$	Must Know	0.07	2	
		Relate the developmental events of Liver, Biliary Tree, pancreas & spleen to their congenital anomalies	$1 \times 1 = 1$	Nice To Know	0.01	1	
		Relate histomorphological features of Liver, Biliary Tree, pancreas & spleen to their functions	$2 \times 2 = 4$	Good To Know	0.03	0	
7	Urinary System	Relate the gross features of urinary system to its clinical significance	$3 \times 3 = 9$	Must Know	0.07	2	
		Relate the developmental events of urinary system to its congenital anomalies	$1 \times 1 = 1$	Nice To Know	0.01	0	
		Relate the histomorphological features of urinary system to its functions	$2 \times 2 = 4$	Good To Know	0.03	1	

8	Pelvis	Relate the gross features and boundaries of bony pelvis with its functional & clinical importance	$3 \times 3 = 9$	Must Know	0.07	2	1 X 4
		Relate the gross features of pelvic organs to their clinical significance	$3 \times 3 = 9$	Must Know	0.07	2	
9	Male Reproductive System	Relate the gross features of male reproductive system to its clinical significance	$1 \times 1 = 1$	Nice To Know	0.01	0	

		Relate the developmental features of male reproductive system to its congenital anomalies	$2 \times 1 = 2$	Nice To Know	0.02	1	
		Relate the histomorphological features of male reproductive system to its functions	$1 \times 1 = 1$	Nice To Know	0.01	0	
10	Female Reproductive System	Relate the gross features of female reproductive system to its clinical significance	$3 \times 3 = 9$	Must Know	0.07	2	
		Relate the developmental features of female reproductive system to its congenital anomalies	$2 \times 2 = 4$	Good To Know	0.03	1	
		Relate the histomorphological features of female reproductive system to its functions	$2 \times 2 = 4$	Good To Know	0.03	1	
11	Perineum	Relate the gross features of anal & urogenital triangles to their clinical significance	$2 \times 2 = 4$	Good To Know	0.03	1	
		TOTAL	131		1.00	28	3
		TOTAL	131		1.00	28	3

BLUEPRINT, YEAR II-BLOCK IV - PHYSIOLOGY

<u>GIT</u>							
Topic	Learning Outcomes subject-wise	Impact X Frequency= (I X F)	Category	Weighing IF/98	MCQ weightings	No of MCQs	SAQ
Foundation of GIT	Discuss the physiological basis and regulation of gastrointestinal functions	3x3=9	Must Know	0.09	1.08	1	
		3x3=9	Must Know	0.09	1.08	1	
Oral Cavity &	Explain the physiological processes involved in mastication and salivation	1x1=1	Nice to Know	0.009	0.10	F	
Esophagus	Describe the mechanisms of peristalsis, & regulation of food passage from oral cavity to stomach, Law of Gut Discuss disorders of swallowing & their clinical presentations	3x3=9	Must Know	0.09	1.08	1	
Stomach	Explain the hormonal and neuronal processes regulating gastric motility and gastric emptying Describe mechanism (stimuli, pathways, center) and clinical significance of vomiting reflex	3x3=9	Must Know	0.09	1.08	1	
	Describe the mechanism of development of gastric ulcers, erosions and role of H pylori	3x3=9	Must Know	0.09	1.08	1	1

Identify common stomach disorders					
Describe the motility patterns of the small intestine, including segmentation and peristalsis	2x2=4	Good to Know	0.03	0.36	1
Describe the motility patterns of large intestine including haustrations and mass movements	3x2=6		0.06	0.72	
Describe the common types, pathophysiology and presentations of diarrhea and constipation	3x3=9	Must Know	0.09	1.08	1
Explain defecation reflex and its nervous regulation	3x3=9	Must Know	0.09	1.08	1
Identify common disorders of large intestine	2x2=4	Good to Know	0.04	0.48	1
Correlate different functions of GIT with liver physiology Identify common disorders of the liver	3x3=9	Must Know	0.09	1.08	1
Explain the main functions of Gall bladder	3x3=9	Must Know	0.09	1.08	1
Outline the regulation of exocrine secretions of the pancreas	1X2=2	Nice to Know	0.02		1
Total					12
					1

Genitourinary

Topic	Learning Outcomes	Impact x Frequency (IF)	Category	Weightage= IF/	MCQs weight	MCQs (Marks=28)	3 x SAQ/ SAQ (4 x Marks each)
Body Fluids	Relate the exchange of fluids between different body compartments along with development and prevention of edema.	2x2=4	Good to Know	0.05	0.85	1	
Functional Anatomy of Kidney	Correlate the functions with the anatomy of kidneys. (including hormones)	1x1=1	Nice to Know	0.01	0.17	1	1
GFR	Discuss the determinants of the GFR with its regulatory mechanisms and	3x3=9	Must Know	0.13	2.21	2	
Renal clearance	Identify the use of clearance methods to quantify kidney function establish its link with renal clearance	2x2=4	Good to Know	0.05	0.85	1	
Micturition	- Discuss the micturition reflex and facilitation or inhibition of micturition by the brain - Correlate micturition reflex with its abnormalities	2x2=4	Good to Know	0.05	0.85	1	
Formation of Dilute and Concentrated Urine	Compare and contrast the role of various nephron segments in formation of dilute and concentrated urine with reference to the effect of different hormones	3x3=9	Must Know	0.13	2.21	2	1

Osmo-receptor-ADH feedback system		Elaborate osmo-receptor-ADH feedback system in maintaining ECF osmolarity and quantify free water clearance	2x2=4	Good to Know	0.05	0.85	1		
Renal regulation of Ions		Summarize the role of kidneys in regulation of sodium, potassium, calcium, phosphate and magnesium ions.	1x1=1	Nice to Know	0.01	0.17	2		
		Correlate the hazardous effects of high and low sodium and potassium serum levels with their clinical features							
Renal failure		Correlate RFTs with clinical presentation (Oliguria/ Uraemia/ Renal Failure)	3x3=9	Must Know	0.13	2.21	2		
		Describe the principles of Dialysis(Artificial kidney, Hemodialysis and peritoneal dialysis)							
		Discuss the pathophysiology of Nephrotic Syndrome	3x3=9	Must Know	0.13	2.21			
Acid Base Balance		Interpret acid base imbalance through ABGs analysis and relate it with renal and respiratory compensation	3x3=9	Must Know	0.13	2.21	3		
Total								16	2
		Describe the caloric and nutritional requirement of carbohydrate, protein and lipids	2x2=4	Good to Know	0.02	0.56	1		
		Describe a balanced diet with the different dietary reference intakes	2x2=4	Good to Know	0.02	0.56	1		

5	Nutrition	Explain the nutritional requirements in Pregnancy, cirrhosis, hypertension, end-stage renal disease	3x3=9	Must Know	0.04	1.12	1
		Explain the Protein Quality and Biomedical importance of Protein (PEM)					
		Compare and contrast between Marasmus and Kwashiorkor					
6	Protein Metabolism	Describe Protein turnover, amino acid Pool, Nitrogen Balance,	3x3=9	Must Know	0.04	1.12	1
		Apply the knowledge of protein metabolism for understanding relevant metabolic disorders					
		Describe various reactions of amino acids in the body mechanisms					
		Describe the transport of ammonia	3x3=9	Must Know	0.04	1.12	1
		Describe Urea Cycle, its regulation and enumerate enzymatic defects					
		Explain Ammonia Intoxication					
		Describe Carbon skeleton metabolism and its importance	3x3=9	Must Know	0.04	1.12	1
		Describe various metabolic fates of an amino acid and specialized products of amino acids except branched chain amino acid and creatine					

Sr. No .	Topic	Learning Outcomes	Impact x Frequency (IF)	Category	Weightage= IF/	MCQs weight	MCQs (Marks= 28)	SAQ Weight	3 x SAQ/ SAQ (4 x Marks each)
1	Oral Cavity	Discuss the biochemical composition of saliva and its role in digestion and oral health.	1x1=1	Nice to Know	0.01	0.28			
2	Stomach	Describe the role of the stomach in the initial stages of protein digestion and the production of intrinsic factor for vitamin B12 absorption.	1x2=2	Nice to Know	0.01	0.28			
		Correlate a case of gastritis with pernicious anemia with biochemical basis							
		Describe the composition, mechanism of synthesis and biochemical regulation of gastric secretions	2x2=4	Good to Know	0.02	0.56	1	0.27	1
3	Small Intestine	Explain the processes of digestion and absorption of the macro nutrients in the small intestine Identify common Digestion and Absorption disorders of the small intestine	2x2=4	Good to Know	0.02	0.56	1		
4	Liver and Pancreas	Describe the composition, functions, daily secretion, stimulants and depressants of Bile juice and related disorders: Cholelithiasis & Cholecystitis)	3x3=9	Must Know	0.04	1.12	1		
		Describe the composition, functions, daily secretion, stimulants and depressants of Pancreatic Juice	3x3=9	Must Know	0.04	1.12	1		
		Describe Functions, pathways of amino acid, degradation and genetic disorders of all individual amino acids except branched chain amino acid and creatine							

7	Integration of Metabolisms	Describe Feed fast cycle and explain its adaptation by different tissues (liver, brain, kidney, muscles and adipose) to changing energy conditions of the body	3x3=9	Must Know	0.04	1.12	1		
8	Clinical Relevance	Apply biochemical basis of this module to understand clinical scenario	3x3=9	Must Know	0.04	1.12	1(Medic ine)		
9	Water and Electrolyte Balance	Describe different functions of water and its distribution in body along with regulation of water balance	3x3=9	Must Know	0.04	1.12	1	0.27	1
		Describe the sources, normal serum level and biochemical functions of sodium, potassium, calcium, chloride and magnesium	3x3=9	Must Know	0.04	1.12	1		
		Describe electrolyte balance & causes and clinical effects of imbalance of various electrolytes	3x3=9	Must Know	0.04	1.12	1		
10	Kidney	Enumerate various types of particles (crystalloids & Colloids) and solutions and their biochemical and clinical importance	2x2=4	Good to Know	0.02	0.56	1		
		Describe the importance of selectively permeable membranes and phenomena of osmosis & osmotic pressure, surface tension and viscosity	1x2=2	Nice to know	0.01	0.28			
		Explain the effects of adding isotonic, hypotonic and hypertonic solution (to ECF) on ICF and ECF compartments	3x3=9	Must Know	0.04	1.12	1		
		Relate the metabolic role of kidney in health and disease	3x3=9	Must Know	0.04	1.12	1		
		Interpret RFTs	3x3=9	Must Know	0.04	1.12	1		
		Explain the biochemical basics of dialysis	3x2=6	Must Know	0.03	0.84	1		
	Acid Base Balance	Describe Ionization of water & weak acids, bases, pH pK values, pH metery, pH scale, Dissociation constant & titration curve of weak acids	3x3=9	Must Know	0.04	1.12	1		

11	Describe application of Henderson - Hassel Balch equation	1x1=1	Nice to know	0.01	0.14	1	0.27	1
	Describe anion gap and its clinical significance	3x3=9	Must Know	0.04	1.12	1		
	Comprehend acid base disorders	3x3=9	Must Know	0.04	1.12	1		
	Explain the mechanism of chemical and physiological buffering and homeostasis	2x2=4	Good to Know	0.02	0.56	1		
	Identify and correlate imbalance of water, electrolytes and pH with clinical disorders	2x2=4	Good to Know	0.02	0.56	1		
Total						28		3

BLUEPRINT, YEAR II-BLOCK V - ANATOMY

Sr. No.	Topic	Learning Outcomes	(IxF)	Category	Weight	MCQs (28 marks)	SAQ (12 marks)
1	Histology of Nervous Tissue	Relate the histomorphological features of nervous tissue to their clinical significance	2 X 2 = 4	Good To Know	0.06	2	1 X 4
2	Development of CNS & Skull	Relate the developmental events of CNS to their congenital anomalies	2 X 2 = 4	Good To Know	0.06	2	
3	Spinal Cord	Relate the gross features of spinal cord & ascending, descending & intersegmental tracts to their clinical significance	3 X 3 = 9	Must Know	0.14	4	
4	Brainstem	Relate the gross features of brainstem to their clinical significance	3 X 2 = 6	Must Know	0.09	3	

5	Cerebellum	Relate the gross features of cerebellum & its connections to their clinical significance	2 X 2 = 4	Good To Know	0.06	2	1 X 4
6	Cerebrum	Relate the structural & functional localization of the cerebral cortex to its clinical significance	3 X 3 = 9	Must Know	0.14	3	
7	Reticular Formation & Limbic System	Relate the structure of reticular formation & limbic system to their functions	1 X 1 = 1	Nice To Know	0.02	0	
8	Basal Ganglia	Relate the basal nuclei & their connections to their clinical significance	1 X 2 = 2	Nice To Know	0.03	2	
9	Cranial Nerves	Relate nuclei and intracranial course of cranial nerves to their lesions	3 X 3 = 9	Must Know	0.14	4	
10	Thalamus	Relate the thalamus & its connections to their functions	2 X 1 = 2	Nice To Know	0.03	1	
11	Hypothalamus	Relate the hypothalamus & its connections to their functions	1 X 1 = 1	Nice To Know	0.02	0	
12	Meninges	Relate the meninges to the different forms of cerebral hemorrhage	2 X 2 = 4	Good To Know	0.06	1	

13	Ventricular System	Relate the structure of ventricular system & CSF to their clinical significance	2 X 2 = 4	Good To Know	0.06	1	
14	Blood Supply Of Brain & Spinal Cord	Relate the blood supply of brain & spinal cord to its clinical significance	2 X 3 = 6	Must Know	0.09	3	
Total						28	03

BLUEPRINT, YEAR II-BLOCK V - PHYSIOLOGY

NEUROSCIENCE							
Topic	Learning Outcomes subject-wise	Impact X Frequency = (I X F)	Category	Weighing IF/98	MCQ weightings	No of MCQs	SAQ
Synapses and their properties	Differentiate between different types of synapses and their properties	2x2=4	Good to Know	0.02	0.6	1	1 x motor system 1 x sensory system 1x higher mental functions and Autonomic Nervous System
Signal processing at neuronal pools	Summarize the properties of signal processing at neuronal pools						
Neurotransmitters	Summarize the functions of neurotransmitters	3x3=9	Must Know	0.08	2.2	1	
Sensory tracts	Compare and contrast the dorsal column medial lemniscal system and anterolateral pathways	3x3=9	Must Know	0.08	2.2	1	
Sensory receptors	Compare the signal transmission, properties and functions of various types of sensory receptors and nerve fibers	2x2=4	Good to Know	0.02	0.6	1	
Spinal Cord & Neuronal	Relate the role of sensory cortex in perception of sensory signals	3x3=9	Must Know	0.08	2.2	1	

Pathways						
Pain transmission	Compare the perception and transmission of the different types of pain including referred pain	2x2=4	Good to Know	0.02	0.6	2
Spinal Cord & Neuronal Pathways	Describe the clinical abnormalities of pain and other somatic sensations	3x3=9	Must Know	0.08	2.2	
Analgesia system	Summarize the pain suppression system and role of opioids, endorphins and enkephalin	2x2=4	Good to Know	0.02	0.6	
Proprioceptors	Compare the role of proprioceptors (muscle spindles and Golgi tendon organs) in control of motor movements	3x3=9	Must Know	0.08	2.2	1

Proprioceptors	Compare the role of proprioceptors (muscle spindles and Golgi tendon organs) in control of motor movements	3x3=9	Must Know	0.08	2.2	1
Reflex motor control	Identify the reflexes of posture and locomotion in the spinal cord.	1x1=1	Nice to Know	0.009	0.25	F
Motor cortex	Relate the role of primary motor cortex, premotor area, and supplementary motor area with the control of voluntary motor movements.	3x3=9	Must Know	0.08	2.2	1
Spinal Cord & Neuronal Pathways	Compare the role of pyramidal and extrapyramidal tracts in the voluntary motor movements	3x3=9	Must Know	0.08	2.2	1
Spinal Cord & Neuronal Pathways	Determine the pathophysiological conditions: 1. Upper motor neuron and lower motor Neuron lesions 2. Hemiplegia, paraplegia and Quadripleg 3. total transection of spinal cord	3x3=9	Must Know	0.08	2.2	1
Brain stem	Identify the role of the brain stem in controlling motor function and role in posture of the body against gravity.	3x3=9	Must Know	0.08	2.2	1

Brain stem	Discuss the functions of brainstem in regulation of various vital functions in body	1x1=1	Nice to Know	0.009	0.25	
Cerebellum	Differentiate between the vestibulo, spino and cerebro cerebellum based on their individual functions	3x3=9	Must Know	0.08	2.2	2
Cerebellum	Correlate the clinical presentations of cerebellar disorders with anatomical and physiological basis	3x3=9	Must Know	0.08	2.2	1
Basal nuclei	Relate the direct and indirect circuits of basal ganglia with their functions	3x3=9	Must Know	0.08	2.2	1
Basal nuclei	List hyperkinetic disorders related with various basal nuclei like chorea, hemiballismus and athetosis,	3x3=9	Must Know	0.08	2.2	1
Basal nuclei	Describe Parkinson disease regarding etiology, pathophysiology, clinical features and treatment1	3x3=9	Must Know	0.08	2.2	1
Cerebrum	Relate the functions of specific cortical areas and association areas in the physiology of speech.	2x2=4	Good to Know	0.02	0.6	1
Diencephalon	Outline the functions of thalamus & hypothalamus	3x3=9	Must Know	0.08	2.2	1
Diencephalon	Correlate the role of the hypothalamus with the regulation of body temperature and its disorders	3x3=9	Must Know	0.08	2.2	1
Diencephalon	Differentiate between slow-wave sleep and REM Sleep and relate them with EEG	3x3=9	Must Know	0.08	2.2	1
Diencephalon	Differentiate between Grand mal, petit mal epilepsy, and focal epilepsy	3x3=9	Must Know	0.08	2.2	
Diencephalon	Classify memories based on type of sensory experience, time of retention, synaptic facilitation and habituation	3x3=9	Must Know	0.08	2.2	1
Diencephalon	Explain the process of consolidation of memory through chemical and anatomical changes occurring at the synapse.	3x3=9	Must Know	0.08	2.2	1

Diencephalon	Compare various types of amnesia including retrograde, anterograde amnesia, Alzheimer’s and dementia.	2x2=4	Good to Know	0.02	0.6	1	
Ventricular system	Differentiate between CSF and plasma	3x3=9	Must Know	0.08	2.2	1	
Autonomic Nervous System	Differentiate between sympathetic and parasympathetic nervous system based on structure, receptors , neurotransmitters and functions	3x3=9	Must Know	0.08	2.2	2	
Total						28	3

BLUEPRINT, YEAR II-BLOCK V – BIOCHEMISTRY

NEUROSCIENCES I & GENETICS							
Topic	LOs	IF	category	Weightage IF/105	Total Marks Weight* 28	No. of MCQs	No. of SAQs
Neurotransmitters	Describe synthesis, stimulus, mechanism of action and biochemical role of neurotransmitters	3 x 3 = 9	Must Know	0.08	2.24	2	1
Chemistry of Nucleotide	Describe the structure and function of nucleosides and nucleotides along with their role in health and disease	3 x 3 = 9	Must Know	0.08	2.24	2	
Metabolism of Nucleotides	Comprehend nucleotide metabolism and its correlation with related disorders	3 x 3 = 9	Must Know	0.08	2.24	2	
Genetics	Describe the structure & types of nucleic acids	3 x 3 = 9	Must Know	0.08	2.24	2	1
	Elaborate Prokaryotic and Eukaryotic replication	3 x 3 = 9	Must Know	0.08	2.24	2	
	Elaborate Prokaryotic and Eukaryotic transcription	3 x 3 = 9	Must Know	0.08	2.24	2	

	Elaborate Prokaryotic and Eukaryotic translation	3 x 3 = 9	Must Know	0.08	2.24	2	1
	Describe mutations, DNA Damage & Repair Mechanisms and related Genetic Diseases	3 x 3 = 9	Must Know	0.08	2.24	2	
	Comprehend the mechanisms and significance of post transcriptional and post translational modifications	2 x 2 =4	Good to Know	0.04	1.7	2	
	Outline the different mechanisms of regulation of gene expression and their role in various metabolic and genetic disorders	2 x 2 =4	Good to Know	0.04	1.7	2	
	Describe PCR, different blotting techniques, RFLP, cloning , Probes plasmids and their role in forensic, prenatal diagnosis and gene therapies	2 x 2 =4	Good to Know	0.04	1.7	2	3 (Including 1 MCQ from Medicine)
	Relate the nucleotide metabolism with clinical disorders like gout, Lesch-Nyhan syndrome, orotic aciduria, immunodeficiencies and other metabolic disorders	3 x 3 = 9	Must Know	0.04	1.7		
	Analyze the role of DNA structure, types and eukaryotic DNA organizations in genetic testing	2 x 2 =4	Good to Know	0.02	0.56	1	
	Analyze the role of DNA structure, types and eukaryotic DNA organizations in therapy	2 x 2 =4	Good to Know	0.02	0.56	1	
	Justify the importance of molecular medicine, genetics and biotechnology in diagnosing and treating genetic disorders, cancers and infectious diseases	2 x 2 =4	Good to Know	0.02	0.56	1	
	TOTAL					28	3
	Describe PCR, different blotting techniques, RFLP, cloning , Probes plasmids and their role in forensic, prenatal diagnosis and gene	2 x 2 =4	Good to Know	0.04	1.7	2	

	therapies						
	Relate the nucleotide metabolism with clinical disorders like gout, Lesch-Nyhan syndrome, orotic aciduria, immunodeficiencies and other metabolic disorders	3 x 3 = 9	Must Know	0.04	1.7	3 (Including 1 MCQ from Medicine)	
	Analyze the role of DNA structure, types and eukaryotic DNA organizations in genetic testing	2 x 2 =4	Good to Know	0.02	0.56	1	
	Analyze the role of DNA structure, types and eukaryotic DNA organizations in therapy	2 x 2 =4	Good to Know	0.02	0.56	1	
	Justify the importance of molecular medicine, genetics and biotechnology in diagnosing and treating genetic disorders, cancers and infectious diseases	2 x 2 =4	Good to Know	0.02	0.56	1	
	TOTAL					28	3

BLUEPRINT, YEAR II-BLOCK VI - ANATOMY

Sr. No.	Topic	Learning Outcomes	Impact	Frequency	(I x F)	Category	Total Weight	MCQs (Marks=28)	SAQ (Marks=12)
1	Skull	Relate the gross features of skull to the presentation of patient with skull fractures	3	3	9	MK	0.08	2.00	
2	Scalp	Relate the muscles, sensory nerve supply, arterial supply, venous & lymphatic drainage of scalp to its clinical significance	2	2	4	GK	0.03	1.00	

3	Face	Relate the muscles, sensory nerve supply, arterial supply, venous & lymphatic drainage of face to its clinical significance	3	3	9	MK	0.08	2.00	1 X 4
		Correlate the development of Pharyngeal arches, pouches, face & palate with common congenital anomalies	2	1	2	NK	0.02	1.00	
4	Temporal, Infratemporal & Pterygopalatine Fossae	Explain the boundaries & contents of temporal, infratemporal & pterygopalatine fossae	2	1	2	NK	0.02	1.00	
5	Vessels & Lymphatic Drainage of Head & Neck	Relate the fascia, muscles, triangles, vessels & lymphatic drainage of head & neck to its clinical significance	3	3	9	MK	0.08	3.00	
6	Cranial Nerves	Relate the site of lesion in extracranial course of cranial nerves to the presentation of patient.	3	3	9	MK	0.08	2.00	
7	Salivary Glands	Relate the gross anatomy of salivary glands to their clinical significance	2	2	4	GK	0.03	1.00	
		Relate the histomorphological features of salivary glands to their function	2	2	4	GK	0.03	1.00	

8	Orbit & Eye	Relate the eyelids, lacrimal apparatus, orbit, nerves, vessels, eyeball movements & structure of eye to their clinical significance	3	3	9	MK	0.08	2.00
		Relate the development of eye to its congenital anomalies	1	1	1	NK	0.01	0.00
		Relate the histomorphological features of eye to its functions.	2	2	4	GK	0.03	1.00
9	Ear	Relate the gross features of ear to its clinical significance	2	2	4	GK	0.03	1.00
		Relate the developmental events of ear to its congenital anomalies	1	1	1	NK	0.01	1.00
		Relate the histomorphological features of ear to its functions	1	1	0.01	0.00		
	Oral Cavity, Lips, Tongue,	Relate the gross features of oral cavity, lips, tongue, pharynx & esophagus to its clinical importance	3	3	9	MK	0.08	2.00

10	Pharynx, Esophagus							
		Corelate the development of tongue with its congenital anomalies	2	2	4	GK	0.03	1.00
		Relate the histomorphological features of oral cavity, lips & tongue to its functions	2	2	4	GK	0.03	1.00
11	Nose, Paranasal Sinuses, Larynx, Trachea	Relate the gross features of nose, paranasal sinuses, larynx, & trachea to their clinical significance	3	3	9	MK	0.08	2.00
		Relate the development of nose to its congenital anomalies	1	1	1	NK	0.01	0.00
12	Integumentary System (including mammary gland)	Corelate the congenital anomalies of integumentary system (including mammary gland) with its developmental process	1	1	1	NK	0.01	0.00

		Corelate the abnormal clinical presentations of integumentary system (including mammary gland) with its histological features	1	1	1	NK	0.01	0.00	
13	Endocrine System	Relate the gross features of pituitary, pineal, thyroid, parathyroid and adrenal glands to their clinical significance.	3	3	9	MK	0.08	2.00	
		Relate the histomorphological functions of pituitary, pineal, thyroid, parathyroid and adrenal glands to their functions	2	2	4	GK	0.03	1.00	
		Relate the development of thyroid, parathyroid to their congenital anomalies	1	1	1	NK	0.01	0.00	
Total					115		1.00	28	03

BLUEPRINT, YEAR II-BLOCK VI - PHYSIOLOGY

[illegible]

Taste sensation	Describe the mechanism of stimulation of taste buds and transmission of different signals to the CNS	2x2=4	Good to Know	0.03	0.3	1
Disorders of taste	Discuss the disorders of taste perception					
Nose						
Sense of smell	Describe the mechanism of stimulation and transmission of olfactory signals into the central nervous system	1x2=2	Nice to Know	0.01	0.1	1
Disorders of Smell	Discuss the disorders of smell					
Ear						
Transmission of Sound	Trace the pathway of conduction of sound waves through the ear to the cochlea and explain the functional significance of each structure	2x2=4	Good to Know	0.03	0.3	1
Auditory Pathway	Explain the mechanism of detection and perception of sounds of various intensities and frequencies and its transmission to CNS	3x3=9	Must Know	0.09	0.9	1
Disorders of Hearing	Discuss presentation, investigation and management of perceptive and conductive deafness	3x3=9	Must Know	0.09	0.9	1
Endocrinology						
Hypothalamic Hormones	Describe the functions of hypothalamic hormones and role of hypothalamo - hypophysial portal system in the release of pituitary hormones	2x2=4	Good to Know	0.03	0.3	1
Growth Hormone	Discuss the physiological function of Growth hormone and its regulation	3x3=9	Must Know	0.09	0.9	1

Pituitary Hormones Disorders	Correlate the pathophysiology of hypo/hyper secretion of pituitary hormones with their clinical presentation and biochemical profile	2x2=4	Good to Know	0.03	0.3	1	
Thyroid Hormone	Explain the physiological functions of the thyroid hormones and their feedback control	3x3=9	Must Know	0.09	0.9	1	
Thyroid Disorders	Correlate the pathophysiology of hypo/hyper secretion of Thyroid hormones with the clinical presentation and biochemical profile	3x3=9	Must Know	0.09	0.9	1	
Parathyroid Hormone, Calcitonin	Explain the regulatory effect of parathyroid hormone, calcitonin, and Vit D on calcium and phosphate metabolism	3x3=9	Must Know	0.09	0.9	1	
Hypo & Hyperparathyroidism	Correlate the pathophysiology of Hypo and hyper parathyroidism with their clinical presentations and biochemical profile	1x2=2	Nice to Know	0.01	0.1	1	
Adrenal Hormones	Describe the functions of adrenocortical and medullary hormones and their regulations	3x3=9	Must Know	0.09	0.9	1	
Adrenal Hormones Disorders	Correlate the pathophysiology of Hypoadrenalism and Hyperadrenalism with its clinical presentation and biochemical profile	3x3=9	Must Know	0.09	0.9	1	
Pancreatic Hormones	Describe the functions of pancreatic hormones and their regulations	3x3=9	Must Know	0.09	0.9	1	

Regulation of Metabolism in Fed and Fasting State	Compare the interplay of insulin, glucagon and other	3x3=9	Must Know	0.09	0.9	1	
Regulation of Metabolism in Fed and Fasting State	Compare the interplay of insulin, glucagon and other	3x3=9	Must Know	0.09	0.9	1	
	hormones during starvation and fed state						
Disorders of Insulin Secretion	Correlate the pathophysiology of Hypo and hypersecretion of insulin with their clinical presentations, complications and biochemical profile						
Reproduction							
Sperm Maturation	Describe the process of spermiogenesis & spermatogenesis	1x2=2	Nice to Know	0.01	0.1	1	1
Testosterone	Describe the secretion and functions of testosterone and feedback loop regulating its secretion	3x3=9	Must Know	0.09	0.9		
Female Monthly Cycle	Correlate the functional role of gonadotropins in cyclical changes brought in ovaries and uterus during each monthly cycles	3x3=9	Must Know	0.09	0.9	1	
Female Sex Hormones	Compare the functions of female sex hormones	3x3=9	Must Know	0.09	0.9	1	
Pregnancy	Discuss the response of the mother's body to pregnancy keeping in view the function of placenta as an endocrine organ	3x3=9	Must Know	0.09	0.9	1	
Parturition	Explain parturition and onset of labor and the hormones regulating it	3x3=9	Must Know	0.09	0.9	1	
Lactation	Explain the mechanism of lactation and the hormones regulating it	3x3=9	Must Know	0.09	0.9	1	

Neonatal Physiology	Explain the adjustments of infant to extra-uterine life	1x2=2	Nice to Know	0.01	0.1	
Infertility	Correlate the pathophysiology of female infertility with hormonal profile	2x2=4	Good to Know	0.03	0.3	1
Contraception	Compare different contraceptive methods	3x3=9	Must Know	0.09	0.9	
Contraception	Compare different contraceptive methods	3x3=9	Must Know	0.09	0.9	

BLUEPRINT, YEAR II-BLOCK VI – MEDICAL BIOCHEMISTRY

Molecular Insights: Cancer Markers, Aging, Xenobiotics & Bioenergetics							
Topic	LOs	Weightage	Category	Weightage IF/34	Total Marks Weight* 10	No. of MCQs	No. of SAQ
Cancer and tumor markers	Correlate tumor markers in different malignancies	2x2=4	Good to Know	0.1	1	1	1
	Appraise the biochemical and genetic basis of cancer and the biochemical features of carcinogenesis	2x2=4	Good to Know	0.1	1	1	
	Enumerate the biochemical causes of genetic damage and genetic alterations affecting the regulation of 1key genes.	2x2=4	Good to Know	0.1	1	1	
	Describe Oncogenes and tumor suppressor genes and Highlight their key role in carcinogenesis Discuss Epigenetic mechanisms in carcinogenesis	2x2=4	Good to Know	0.1	1	1	
	Explain the biochemical basis of tumor metastasis	2x2=4	Good to Know	0.1	1	1	
Aging & free radicals	Outline the essential feature of aging and genetic factors effecting aging Describe different reactive oxygen species (ROS) produced by the human body and mechanism of their production along with their effect on cell injury, aging, health and disease Describe Mechanism of Scavenging of ROS	1x2=2	Nice to Know	0.05	0.5	1	

Explain Wear and tear theories of aging along with the Molecular repair mechanisms to combat wear and tear	1x2=2	Nice to Know	0.05	0.5	1
Determine the Biochemical role of antioxidant (Vit E, Vit C, Glutathione , Lipoic acid , CoQ10 and NADPH)	1x2=2	Nice to Know	0.05	0.5	1
Describe xenobiotics along with the phase 1 and phase 2 reactions	2x2=4	Good to Know	0.1	1	1
Discuss biochemical properties of Cytochrome P450 and its functions with relevant clinical importance	2x2=4	Good to Know	0.1	1	1
Define free energy and its biochemical significance; differentiate ΔG and ΔG°; distinguish endergonic and exergonic reactions with examples; and explain ATP's role as the universal energy currency that couples these reactions to drive metabolism	2 x 1 = 2	Nice to Know	0.05	1	1
Describe the structure, components, and sequence of the electron transport chain (ETC), its energetics, ATP yield, and spatial arrangement in the inner mitochondrial membrane. Explain the chemiosmotic hypothesis linking proton gradient formation to ATP synthesis and oxidative phosphorylation	3 x 3 = 9	Must know			2
Describe oxidative phosphorylation and its difference from substrate-level phosphorylation. Explain ATP synthase's role in energy conversion, identify ETC inhibitors and uncouplers with their effects, outline inherited defects of oxidative phosphorylation, and explain mitochondrial shuttle systems especially the G3P shuttle	3 x 3 = 9	Must know			2

	and its energetic significance						
Total						15	1
Endocrinology							
Topic	LOs	Impact x Frequency (IF)	Category	Weightage IF/162	Total Marks Weight* 18	No. of MCQs	No. of SAQ
Introduction to Endocrinology	Classify hormones on the basis of structure, receptors and mechanism of action	2x3=6	Must Know	0.03	0.5	1	2
	Describe principle features of endocrine glands, their specific secretions, their receptors and mechanisms of action	2x3=6	Must Know	0.03	0.9	1	
Hypothalamus and Pituitary Gland	Explain the structure, site of synthesis, stimulus for secretion, mechanism of action, regulation, receptors, intracellular effects, common regulatory hormones, target cells and biochemical roles of hypothalamus in hormonal regulation of pituitary gland	3x3-9	Must Know	0.05	0.9	1	
	Explain the structure, site of synthesis, stimulus for secretion, inhibitors, mechanism of action, mechanism of regulation, intracellular effects, target cells & biochemical role of Growth Hormone	3x3-9	Must Know	0.05	0.9	1	
Thyroid Gland	Explain the biochemical steps of synthesis, stimulus for secretion, mechanism of action, mechanism of regulation, intracellular effects, target cells and biochemical role of T3, T4, TSH	3x3-9	Must Know	0.05	0.9	2	
Parathyroid Gland	Explain the biochemical steps of synthesis, stimulus for secretion, mechanism of						

	action, mechanism of regulation, intracellular effects, target cells and biochemical role of parathyroid hormone and calcitonin	3x3-9	Must Know	0.05	0.9	2	
Endocrine Pancreas	Explain the biochemical steps of synthesis, stimulus for secretion, mechanism of action, mechanism of regulation, intracellular effects, target cells and biochemical role of Insulin, glucagon and somatostatins Discuss the biochemistry of the endocrine pancreas with clinical correlation to diabetes mellitus	3x3-9	Must Know	0.05	0.9	2	
Male Reproductive System	Explain the biochemical steps of synthesis, stimulus for secretion, mechanism of action, mechanism of regulation, intracellular effects, target cells and biochemical role of testosterone	2x3=6	Must Know	0.03	0.5	1	
Female Reproductive System	Explain the biochemical steps of synthesis, stimulus for secretion, mechanism of action, mechanism of regulation, intracellular effects, target cells and biochemical role of LH, FSH, Estrogen, Progestins, placental hormones, oxytocin, Anti-mullerian hormone and Prolactin	3x3-9	Must Know	0.05	0.9	1	
Clinical Relevance	Correlate the biochemical knowledge of endocrinology with clinical disorders	3x3-9	Must Know	0.05	0.9	1	
Total						13	2

Integrated Practical Exam – I

Subjects (min 45 % in each subject) – 4 minutes for each station

Marks of Practical and Viva = 120
 Internal Assessment = 20 %
 Total marks = 150
 Pass Marks = 75

Modules	Physiology		Medical Biochemistry	
	Observed	Unobserved	Observed/ Performance	Unobserved
GIT & Metabolism I	2 x 4 (8 Marks)	6 x2 (12 Marks)	1	2
			2	2
Genitourinary System	-		1	2
Total	2 x 4 (8 Marks)	6 x2 (12 Marks)	2 x 4 (8 Marks)	6 x2 (12 Marks)

Anatomy

Topic	OBSERVED			UN-OBSERVED			TOTAL MARKS
	Station-1	Station-2		Station-3	Station-4	Station-5	
Gross Anatomy	Osteology (Fossae of the skull)			8 spots (0.5 each)	2 spots Radiology (0.5 each)		09
Marks	04			04	01		
Marks		01	03			04	
Embryology					6 spots (0.5 each)		03
Marks					03		
Histology		Slide identification	Viva			Identification 4 slides (01 each)	08
TOTAL MARKS	04	04		04	04	04	20

INTEGRATED PRACTICAL -II

Marks of Practical and Viva	= 120
Internal Assessment	= 20 %
Total marks	= 150
Pass Marks	= 75

Modules	Physiology		Medical Biochemistry	
	Observed	Unobserved	Observed / Performance	Unobserved
Neuro-sciences 1 and Genetics	2 x 4 (8 Marks)	6 x2 (12 Marks)	2 x 4 (8 Marks)	6 x2 (12 Marks)
Total	2 x 4 (8 Marks)	6 x2 (12 Marks)	2 x 4 (8 Marks)	6 x2 (12 Marks)

Anatomy							
Topic	OBSERVED			UN-OBSERVED			TOTAL MARKS
	Station-1	Station-2		Station-3	Station-4	Station-5	
Gross Anatomy	Osteology (Fossae of the skull)			8 spots (0.5 each)	2 spots Radiology (0.5 each)		09
Marks	04			04	01		
Marks		01	03			04	
Embryology					6 spots (0.5 each)		03
Marks					03		
Histology		Slide identification	Viva			Identification 4 slides (01 each)	08
TOTAL MARKS	04	04		04	04	04	20
Anatomy							
Topics	OBSERVED			UN-OBSERVED			TOTAL MARKS
	Station-1	Station-2		Station-3	Station-4	Station-5	
Gross Anatomy	SurfaceMarking			8 spots (0.5 each)	2 spots Radiology(0.5 each)		07

Marks	02			04	01		
Histology		Slide identification	Viva			Identification 4 slides (01 each)	10
Marks		01	05			04	
Embryology					6 spots (0.5 each)		03
Marks					03		
TOTALMARKS	02	06		04	04	04	20

INTEGRATED PRACTICAL-III

Modules		Physiology		Medical Biochemistry			
		Observed	Unobserved	Observed / Performance		Unobserved	
Maxillofacial & Special Senses		2 x 4 (8 Marks)	6 x2 (12 Marks)	1		4	
Endocrinology				1		2	
Total		2 x 4 (8 Marks)	2 x 4 (8 Marks)	6 x2 (12 Marks)			
Anatomy							
Topics	OBSERVED			UN-OBSERVED			TOTAL MARKS
	Station-1	Station-2		Station-3	Station-4	Station-5	
Gross Anatomy	SurfaceMarking			8 spots (0.5 each)	2 spots Radiology(0.5 each)		07
Marks	02			04	01		
Histology		Slide identification	Viva			Identification 4 slides (01 each)	10
Marks		01	05			04	
Embryology					6 spots (0.5 each)		03
Marks					03		
TOTALMARKS	02	06		04	04	04	20

BLUEPRINT, YEAR II-BLOCK IV ANATOMY PRACTICAL

Sr. No.	Topic	Learning Outcomes	(I x F)	Category	Total Weight	Tools	OSPE Weight	Viva Voce Weight	OSPE (Marks=20)	Viva Voce (Marks=20)
1	Abdominal	Identify the muscles & neurovasculature of anterolateral abdominal wall on the given models & specimens	2 X 1 = 2	Nice To Know	0.02	OSPE	0.04	0	1	0

	Wall	Demonstrate the topographic anatomy of anterolateral & posterior abdominal wall on given models	2 X 2 = 4	Good To Know	0.04	Viva Voce	0	0.09	0	2
2	Peritoneum	Identify peritoneal folds, omenta, sacs, ligaments on the models of abdomen and pelvis	2 X 2 = 4	Good To Know	0.04	OSPE	0.08	0	2	0
		Trace the vertical and horizontal disposition of peritoneum on the models of abdomen and pelvis	2 X 1 = 2	Nice To Know	0.02	Viva Voce	0	0.04	0	1
3	Esophagus & Stomach	Identify the gross features of esophagus & stomach on given models, specimens & radiographs Differentiate between slides of	3 X 2 = 6	Must Know	0.06	OSPE	0.13	0	3	0
		esophagus & stomach under light microscope in H&E stain								
		Demonstrate the topographic and developmental anatomy of esophagus & stomach on given models	3 X 2 = 6	Must Know	0.06	Viva Voce	0	0.13	0	2

4	Small Intestine	Differentiate among various parts of small intestins on gross inspection of models, prosected specimens	3 X 2 = 6	Must Know	0.06	OSPE	0.13	0	2	0
		Differentiate among histomorphological features of small intestine under light microscope in H&E stain								
		Demonstrate the topographic and developmental anatomy of small intestine stomach on given models	2 X 2 = 4	Good To Know	0.04	Viva Voce	0	0.09	0	2
5	Large Intestine	Differentiate among various parts of large intestins on gross inspection of models & prosected specimens	2 X 2 = 4	Good To Know	0.04	OSPE	0.08	0	2	0
		Differentiate among histomorphological features of large intestine under light microscope in H&E stain								
		Demonstrate the topographic and developmental anatomy of largel intestine stomach on given models	2 X 2 = 4	Good To Know	0.04	Viva Voce	0	0.09	0	1

6	Liver, Gall Bladder, Pancreas, Spleen	Identify the gross features of Liver, Biliary Tree, pancreas & spleen on given models & specimens Differentiate among slides of Liver, Biliary Tree & pancreas under light microscope in H&E stain Outline Liver, spleen & Gallbladder by palpating the surface landmarks on the surface of given subject exhibiting ethics, effective communication skills and professionalism	3 X 3 = 9	Must Know	0.09	OSPE	0.19	0	4	0
		Demonstrate the topographic and developmental anatomy of Liver, Biliary Tree, Pancreas & Spleen on given models	3 X 3 = 9	Must Know	0.09	Viva Voce	0	0.19	0	4
7	Urinary System	Identify the gross features of kidneys, ureter and bladder on given models, specimens & radiographs Differentiate among slides of urinary system under light microscope in H&E stain	2 X 2 = 4	Good To Know	0.04	OSPE	0.08	0	2	0

		Demonstrate the topographic and developmental anatomy of urinary system on given models Outline kidneys & ureters by palpating the surface landmarks on the surface of given subject exhibiting ethics, effective communication skills and professionalism	3 X 2 = 6	Must Know	0.06	Viva Voce	0	0.13	0	3
8	Pelvis	Identify the gross features of bony pelvis & pelvic organs on given models & radiographs	3 X 2 = 6	Must Know	0.06	OSPE	0.13	0	2	0
		Demonstrate the topographic and radiographic anatomy of pelvis on given models	2 X 2 = 4	Good To Know	0.04	Viva Voce	0	0.09	0	2
9	Reproductive System	Identify the gross features of reproductive system on given models & specimens Identify the developmental features of reproductive system on given models & pictures Differentiate among slides of male & female reproductive systems under light microscope in H&E stain	3 X 2 = 6	Must Know	0.06	OSPE	0.13	0	2	0

		Demonstrate the topographic and developmental anatomy of reproductive system on given models	3 X 2 = 6	Must Know	0.06	Viva Voce	0	0.13	0	2
10	Perineum	Identify the gross features of perineum on given models	1 X 1 = 1	Nice To Know	0.01	OSPE	0.02	0	0	0
		Demonstrate the topographic anatomy of anal & urogenital triangles on given models	2 X 1 = 2	Nice To Know	0.02	Viva Voce	0	0.04	0	1
		TOTAL	95		1.00		1.00	1.00	20	20

BLUEPRINT, YEAR II-BLOCK V – ANATOMY PRACTICAL

Sr No.	Topic	Learning Outcomes	(IxF)	Total Weight	Tools	OSPE Weight	Viva Voce Weight	OSPE (20 marks)	Viva Voce (20 marks)
1	Histology of	Differentiate among various slides of nervous system under light microscope in H&E stain	3 X 2 = 6	0.05	OSPE	0.12	0	2	0

	nervous system	Explain the histomorphological features of nervous system	2 X 2 = 4	0.03	Viva Voce	0	0.06	0	1
2	Development of CNS & Skull	Identify the developmental stages of CNS & skull on the given models	2 X 2 = 4	0.03	OSPE	0.08	0	2	0
		Demonstrate the developmental stages of nervous system	2 X 1 = 2	0.02	Viva Voce	0	0.03	0	1
		Identify the bony landmarks of cranial fossae & their foramina	2 X 2 = 4	0.03	OSPE	0.08	0	2	0
		Demonstrate the bony landmarks & foramina of cranial cavity & their contents	3 X 3 = 9	0.08	Viva Voce	0	0.14	0	3
		Identify the gross features of spinal cord on the given models	2 X 1 = 2	0.02	OSPE	0.04	0	1	0
		Demonstrate the gross features of spinal cord on models	3 X 3 = 9	0.08	Viva Voce	0	0.14	0	3
		Identify the gross features of brainstem on the given models & specimens	2 X 2 = 4	0.03	OSPE	0.08	0	2	0
		Demonstrate the gross features of brainstem on models	3 X 2 = 6	0.05	Viva Voce	0	0.09	0	2
		Identify the gross features of cerebellum on the given models & specimens	2 X 1 = 2	0.02	OSPE	0.04	0	1	0
		Demonstrate the gross features of cerebellum on models	2 X 2 = 4	0.03	Viva Voce	0	0.06	0	1
		Identify the gross features of cerebrum on the given models & specimens	3 X 3 = 9	0.08	OSPE	0.18	0	3	0

Demonstrate the gross features of cerebrum on models	3 X 2 = 6	0.05	Viva Voce	0	0.09	0	2
Identify the gross features of limbic System & basal ganglia on the given models & specimens	1 X 1 = 1	0.01	OSPE	0.02	0	0	0
Demonstrate the gross features of limbic system & basal ganglia on models	1 X 1 = 1	0.01	Viva Voce	0	0.02	0	0
Identify the gross features of cranial nerves on the given models & specimens	3 X 2 = 6	0.05	OSPE	0.12	0	2	0
Demonstrate the gross features of cranial nerves on models	3 X 2 = 6	0.05	Viva Voce	0	0.09	0	2
Identify the gross features of Thalamus, Hypothalamus on the given models & specimens	1 X 1 = 1	0.01	OSPE	0.02	0	0	0
Demonstrate the gross features of thalamus & hypothalamus on models	1 X 1 = 1	0.01	Viva Voce	0	0.02	0	0
Identify the gross features of meninges on the given models & specimens	2 X 2 = 4	0.03	OSPE	0.08	0	2	0
Demonstrate the gross features of meninges on models	2 X 2 = 4	0.03	Viva Voce	0	0.06	0	1
Identify the gross features of ventricular System on the given models & specimens	2 X 1 = 2	0.02	OSPE	0.04	0	1	0
Demonstrate the gross features of ventricular System on models	2 X 2 = 4	0.03	Viva Voce	0	0.06	0	1

		Identify the gross features of vessels of brain & spinal cord on the given models & specimens	3 X 2 = 6	0.05	OSPE	0.12	0	2	0
		Demonstrate the gross features of vessels of brain & spinal cord on models	3 X 3 = 9	0.08	Viva Voce	0	0.14	0	3
TOTAL			116	1.00		1.00	1.00	20	20