

AVICENNA MEDICAL & DENTAL COLLEGE



STUDY GUIDE

2026

ENDOCRINOLOGY & REPRODUCTION

BLOCK- 5 MODULE-8



Program:	MBBS Integrated Curriculum
Year:	2nd Professional Year
Batch No:	M-24
Session:	2025-2026

Table of Contents

About Avicenna Medical College	3
Infrastructure Resources	3
Message from the Principal	5
Message from the Chairman	6
Vision & Mission	7
List of Abbreviations	8
Curriculum Framework	13
Introduction to the Study Guide	14
Objectives of the Study Guide	14
7-Star Doctor Competencies (PMDC)	15
Introduction to Module-8	15
Module Committee	16
Curriculum Map	18
Academic Calendar	19
Time Table:	20
Allocation of Hours	25
Module Outcome	26
Learning Objectives	28
Operational Definition	68
Assessment Policy	70
Assessment Criteria and Weighting	71
Assessment Procedures	71
Appeal Process	72
Attendance Requirement & Internal Assessment Criteria	72
Assessment Guidelines	72
Assessment Schedule:	74
Table of Specification	75
Recommended Books & Reading Resources	76

Avicenna Medical & Dental College is a purpose-built, fully equipped institution with experienced and excellence-driven faculty to train high-quality dental professionals in Pakistan.

Avicenna Medical & Dental College runs under the umbrella of Abdul Waheed Trust. Abdul Wahid Trust is a non-profit social welfare organization and registered under the Societies Act with the Registrar of Societies. The Trust is legalized through a Trust Deed that bears necessary rectifications. The Trust Deed is further supported by its Memorandum and Article of Association that authorizes the establishment and operation of the Medical College, the Dental College, the Nursing College, the Allied Health Sciences College, and other activities in the healthcare sector.

In 2009, Avicenna Medical & Dental College was recognized by the Pakistan Medical & Dental Council. With the advent of advanced tools and technology in every field of health science, medicine today has shot up to the greater end of the gamut with superior choice and promises in medical therapy in the very vicinity of the common man. AVMDC promises to be one such neighborhood.

Message from the Principal



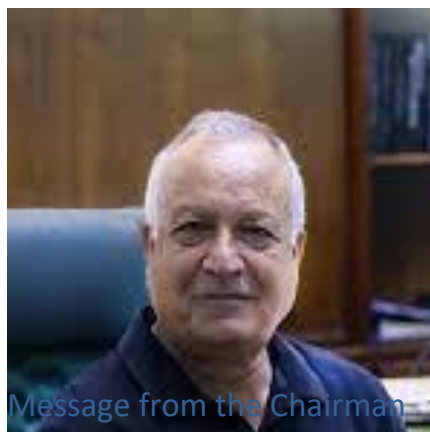
As a Co-Founder and Co-Chairperson, I have been involved in planning, construction and accreditation of Avicenna Medical College by the Pakistan Medical and Dental Council (PM&DC) and its affiliation with the esteemed University of Health Sciences (UHS). It is a pleasure to see Avicenna Medical College develop, progress and achieve maximum academic excellence in a short period since its inception in 2009. The institution has lived up to its mission of training and producing medical graduates of international standards. Three batches have passed out as Doctors, who currently are serving in the country and abroad while several have opted for post-graduation and are on road to progress. We have achieved several milestones since 2009 including the recognition of our College for FCPS training by College of Physicians and Surgeons of Pakistan (CPSP), establishment of College of Nursing and Avicenna Dental College.

Principal

Prof. Dr. Gulfreen Waheed

MBBS, FCPS, MHPE, PhD Scholar - HPE

Avicenna Medical & Dental College



The Avicenna Medical & Dental College is a project of Abdul Waheed Trust which is a Non-profitable, Non-governmental, Non-political & Social organization, working for the welfare of Humanity and based on Community empowerment. Avicenna Medical College has its own 530 bedded Avicenna teaching Hospital (Not for Profit hospital) within the College Campus & 120 bedded Aadil Hospital, at 15 minutes' distance. Separate comfortable hostels for boys & girls are provided on the campus.

Our students benefit from the state of the art College Library with facilities of Internet & online Journals that remain open 15 hours a day, for our students & faculty members. I am particularly pleased with the hard work by the Faculty and Students in the achievement of historic 100% results for all the classes. It is a rare achievement and speaks of dedication of the Faculty and Staff. Our motto is Goodness prevails and we aim at producing Doctors' who are knowledgeable, competent in clinical skills and ethical values.

Avicenna Medical College & Hospital was founded to provide quality health care services to the deserving patients belonging to the rural areas near Avicenna Hospital as well as to provide quality medical education of international standard to our students. The Hospital provides all medical services and Lab diagnostics to the local population at minimal cost. So far by the grace of Allah Almighty the number of patients being treated and operated upon at our Hospital is increasing every day as there is no other public or charity hospital in the circumference of 20km. We have already established two Satellite Clinics in the periphery which are providing outdoor care while admission cases are brought to the Hospital in Hospital transport.

Following the success of our reputable Medical College and Hospital, we were able to successfully establish Avicenna Dental College which is recognized by the Pakistan medical & Dental Council & University of Health Sciences. To date, we have enrolled five batches in our dental college and we aim to achieve the same level of success for our dental students as our medical students.

Chairman
Abdul Waheed Sheikh
Avicenna Medical & Dental College



Avicenna Medical & Dental College



Vision

The vision of **Avicenna Medical & Dental College** is to become a college that thrives to achieve improvement in healthcare of masses through creative delivery of educational programs, innovative research, commitment to public service and community engagement in a environment that supports diversity, inclusion, creative thinking, social accountability, life-long learning and respect for all.

Mission

The mission of **Avicenna Medical and Dental College** is to educate and produce competent, research oriented healthcare professionals with professional commitment and passion for life-long learning from a group of motivated students through quality education, research and service delivery for the improvement of health status of the general population.

List of Abbreviations

Letter	Abbreviations	Subjects
A	A	Anatomy
	ABCDE	Airway, Breathing, Circulation, Disability, Exposure
	ABG	Arterial blood gas
	ACS	Acute Coronary Syndromes
	Ag	Aging
	AKI	Acute kidney injury
	ALT	Alanine transaminase
	AMI	Acute Myocardial Infarction
	AMP	Adenosine monophosphate
	ANA	Antinuclear Antibody
	ANCA	Anti-neutrophil Cytoplasmic Antibodies
	ANS	Autonomic Nervous System
	AO	Association of osteosynthesis
	APTT	Activated Partial Thromboplastin Clotting Time
	ARDS	Acute Respiratory Distress Syndrom
	ARVC	Arrhythmogenic Right ventricular Cardiomyopathy
	ASD	Atrial Septal Defect
	AST	Aspartate aminotransferase
	ATLS	Advanced Trauma Life Support
	Au	Autopsy
	AUC	Area under the curve
	AV	Atrioventricular
B	B	Biochemistry
	BhS	Behavioral Sciences
	BHU	Basic Health Unit
	BSL	Biological Safety Level
C	C	Civics
	C-FRC	Clinical-Foundation Rotation Clerkship
	C.burnetii	Clostridium burnetii
	C.neoformans	Clostridium neoformans
	C.pneumoniae	Clostridium pneumoniae
	C.psittaci	Clostridium psittaci
	C.trachomatis	Clostridium trachomatis
	CA	cancer
	CABG	coronary artery bypass grafting
	CAD	coronary artery disease
	CBC	Complete Blood Count
	CCR5	cysteine-cysteine chemokine receptor
	CD31	cluster of differentiation 31
	CD34	cluster of differentiation 34
	CD4	cluster of differentiation 4
	CF	cystic fibrosis
	CK	Creatine kinase
	CLED	cystine lactose electrolyte deficient
	CLL	chronic lymphocytic leukemia
	CM	Community Medicine

	CML	chronic myeloid leukemia
	CMV	cytomegalo virus
	CNS	Central Nervous System
	CO	Carbon monoxide
	CO2	Carbon dioxide
	CODIS	combined DNA index system
	COPD	Chronic obstructive pulmonary disease
	COVID-19	Corona Virus Disease 2019
	COX	Cyclooxygenase
	CPR	Cardiopulmonary Resuscitation
	CR	Clinical Rotation
	CRP	Clinical Rotation CSF C- Reactive Protein
	CSF	Cerebro Spinal Fluid
	CT	Computed tomography
	CV	Cardiovascular
	CVA	Cerebral vascular accident
D	CVS	Cerebrovascular system
	D.medinensis	Dracunculus Medinensis
	DALY	Disability-Adjusted Life Year
	DCIS	Ductal Carcinoma in situ
	DCM	Dilated Cardiomyopathy Dorsal Colu
	DCMLS	Dorsal column medial lemniscus system
	DLC	Differential Leukocyte Count
	DMARDs	Disease Modifying Anti Rheumatic Drugs
	DNA	DeoxyRibonucleic Acid
	DOTS	Directly Observed Treatment Short-course
	DTP	Diphtheria, Tetanus, Pertussis
	DVI	Disaster Victim Identification
	DVT	Deep Vein Thrombosis
E	E.coli	Escherichia coli
	ECF	Extracellular Fluid
	ECG	Electrocardiography
	ECP	Emergency contraceptive pills
	ED50	Median Effective Dose
	EEG	Electroencephalogram
	EIA	Enzyme Immunoassay
	ELISA	Enzyme Linked Immunosorbent Assay
	EnR	Endocrinology & Reproduction
	ENT	Ear Nose Throat
	EPI	Expanded Programme on Immunization
	ER	Emergency Room
F	F	Foundation
	FAST	Focused Assessment with Sonography
	FEV1	Forced Expiratory Volume 1
	FM	Family Medicine
	For	Forensic Medicine
	FPIA	Fluorescent Polarization Immunoassay
	FS	Forensic Serology
	FSc	Forensic Science

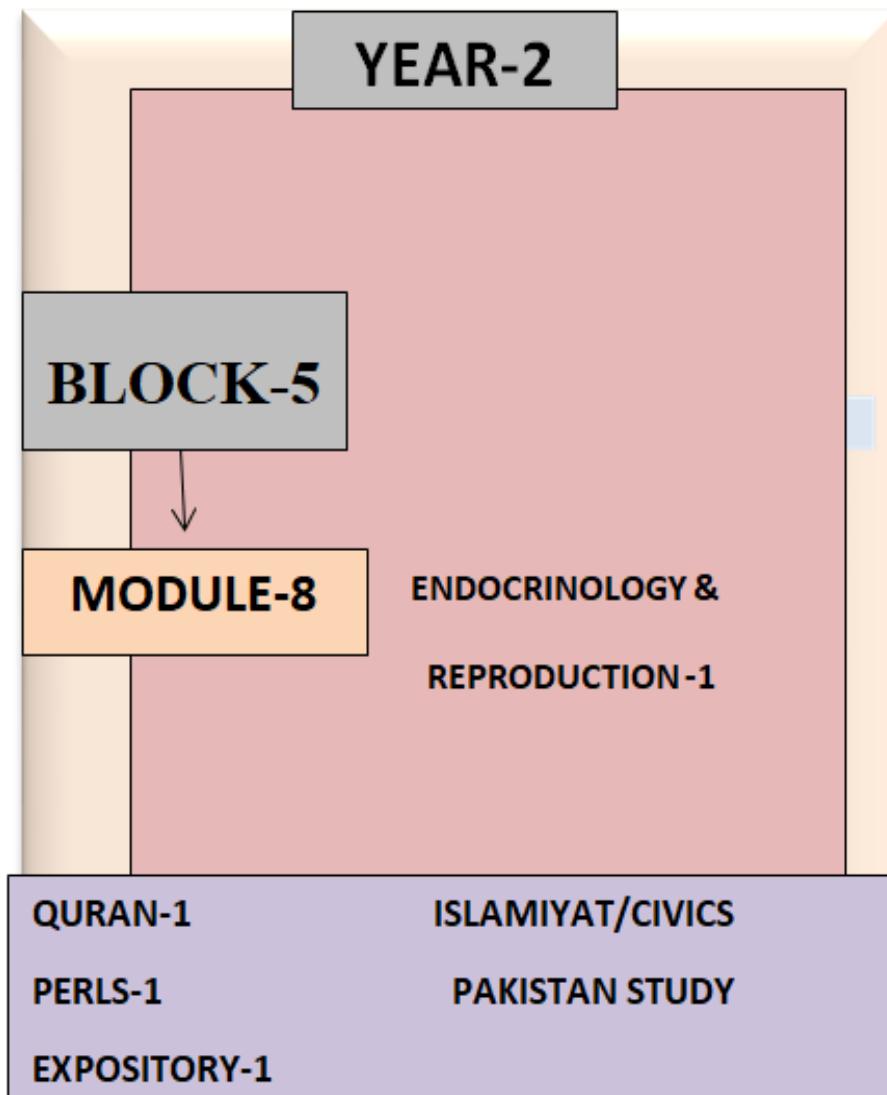
	FVC	Forced Vital Capacity
G	GCS	Glasgow Coma Scale
	GFR	Glomerular Filtration Rate
	GIT	Gastrointestinal tract
	GL-MS	Gas Liquid Mass Spectrometry
	GLC	Gas Liquid Chromatography
	GLP	Guanosine Monophosphate
	GMP	Guanosine monophosphate
	GO	Gynecology and Obstetrics
	GP	General Practitioner
	GPE	General Physical Examination
	GTO	Golgi Tendon Organ
	Gynae & Obs	Gynecology and Obstetrics
H	H & E	Hematoxylin and eosin
	H. influenzae	Haemophilus influenzae
	H.pylori	Helicobacter pylori
	HAI	Healthcare Associated Infections
	HbC	Hemoglobin C
	HbS	Sickle Hemoglobin
	HbSC	Hemoglobin Sickle C Disease
	HCL	Hydrochloric Acid
	HCM	Hypertrophic Cardiomyopathy
	HHV	Human Herpesvirus
	HIT	Hematopoietic, Immunity and Transplant
	HIV	Human Immunodeficiency Virus
	HL	Hematopoietic & Lymphatic
	HLA	Human Leukocyte Antigen
	HMP	Hexose Monophosphate
	HNSS	Head & Neck and Special Senses
	HPLC	High Pressure Liquid Chromatography
I	ICF	Intra Cellular Fluid
	ID	Infectious Diseases
	IE	Infective Endocarditis
	IL	Interleukin
	ILD	Interstitial Lung Disease
	IN	Inflammation
	INR	International Normalized Ratio
	INSTIs	Integrase Strand Transfer Inhibitors
	IPV	Intrauterine Device
	IUD	Intrauterine device
	IUGR	Intra-Uterine Growth Restriction
J	JVP	Jugular Venous Pulse
L	L	Law
	LD50	Median Lethal Dose
	LDH	Lactate Dehydrogenase
	LSD	Lysergic acid diethylamide
M	M	Medicine
	MALT	Mucosa Associated Lymphoid Tissue
	MBBS	Bachelor of Medicine, Bachelor of Surgery
	MCH	Mean corpuscular hemoglobin

	MCHC	Mean Corpuscular Hemoglobin Concentration
	MCV	Mean Corpuscular Volume
	MHO2001	Mental Health Ordinance 2001
	MoA	Mechanism of action
	MRI	Mechanism of action
	MS	Musculoskeletal
	MSD	Musculoskeletal disorders
	MSDS	Minimum Service Delivery Standards
	MSK	Musculoskeletal
N	N	Neoplasia
	NEAA	Non-Essential Amino Acids
	NK cells	Natural Killer Cells
	NNRTI	Non-nucleoside Reverse Transcriptase Inhibitors
	NRTIs	Nucleoside Reverse Transcriptase Inhibitors
	NS	Neurosciences
O	NSAIDs	Non-steroidal Anti-Inflammatory Drugs
	O	Ophthalmology
	OA	Osteoarthritis
	OPC	Organophosphate
	OPV	Oral poliovirus vaccine
	Or	Orientation
P	Orth	Orthopaedic
	P	Physiology
	P.jiroveci	Pneumocystis jiroveci
	Pa	Pathology
	PAD	Pathology
	PAF	Platelet activating factor
	PBL	Problem Based Learning
	PCH	Psychiatry
	PCR	Polymerase Chain Reaction
	PDA	Patent Ductus Arteriosus
	PDGF	Platelet derived growth factor
	Pe	Pediatrics
	PEM	Protein Energy Malnutrition
	PERLs	Professionalism, Ethics, Research, Leadership
	PET	Positron Emission Tomography
	Ph	Pharmacology
	Ph	Pharmacology
	PI	Personal Identity
	PID	Pelvic inflammatory disease
	PIs	Protease inhibitors
	PMC	Pakistan Medical Commission
	PMDC	Pakistan Medical and Dental Council
	PMI	Post-Mortem Interval
	PNS	Peripheral Nervous System
	PPD	Paraphenylenediamine
	PPE	Personal Protective Equipment
	Psy	Psychiatry
	PT	Prothrombin Time

	PVC	Premature Ventricular Contraction
	PVD	Peripheral Vascular Diseases
Q	QALY	Quality-Adjusted Life Year
	QI	Quran and Islamiyat
R	R	Renal
	Ra	Radiology
	RA	Radiology
	RBCs	Red Blood cells
	RCM	Restrictive Cardiomyopathy
	RDA	Recommended Dietary Allowance
	Re	Respiratory
	RF	Rheumatoid factor
	RFLP	Restriction Fragment Length Polymorphism
	Rh	Rheumatology
	RHC	Rural Health Center
	RIA	Radioimmunoassay
	RMP	Resting Membrane Potential
	RNA	Ribonucleic Acid
	RTA	Road Traffic Accident
S	S	Surgery
	S.pneumonia	Streptococcus pneumoniae
	SA	Sinoatrial
	SCC	Squamous-cell carcinoma
	Se	Sexology
	Sec	Section
	SIDS	Sudden Infant Death Syndrome
	SLE	Systemic Lupus Erythematosus
	SOP	Standard Operating Procedure
T	TB	Tuberculosis
	TBI	Traumatic Brain Injury
	TCA	Tricarboxylic acid cycle
	TCBS	Thiosulphate Citrate Bile salts Sucrose
	TD50	Median Toxic Dose
	TGA	Transposition of the Great Arteries
	Th	Thanatology
	TLC	Thin Layer Chromatography
	TNF	Tumor Necrotic Factor
	TNM	Tumor Necrotic Factor
	TOF	Tetralogy of Fallot
	Tox	Toxicology
	Tr	Traumatology
	TSI	Triple Sugar Iron
U	USG	Ultrasonography
	UTI	Urinary Tract Infections
	UV	Ultraviolet
V	VAP	Ventilator-Associated Pneumonia
	Vd	Volume of Distribution
	VEGF	Vascular Endothelial Growth Factor
	VSD	ventricular septal defect
W	W. bancroft	Wuchereria bancroft

	WBCs	White Blood Cells
	WHO	World Health Organization
Z	ZN Staining	Ziehl-Neelsen Staining

Curriculum Framework



Introduction to the Study Guide

Welcome to the Avicenna Medical & Dental College Study Guide!

This guide serves as your essential resource for navigating the complexities of your medical education at Avicenna Medical & Dental College. It integrates comprehensive details on institutional framework, curriculum, assessment methods, policies, and resources, all meticulously aligned with UHS, PMDC and HEC guidelines.

Each subject-specific study guide is crafted through a collaborative effort between the Department of Medical Education and the respective subject departments, ensuring a harmonized and in-depth learning experience tailored to your academic and professional growth.

Objectives of the Study Guide

- **Institutional Understanding:**
 - Gain insight into the college's organizational structure, vision, mission, and graduation competencies as defined by PMDC, setting the foundation for your educational journey.
- **Effective Utilization:**
 - Master the use of this guide to enhance your learning, understanding the collaborative role of the Department of Medical Education and your subject departments, in line with PMDC standards.
- **Subject Insight:**
 - Obtain a comprehensive overview of your courses, including detailed subject outlines, objectives, and departmental structures, to streamline your academic planning.
- **Curriculum Framework:**
 - Explore the curriculum framework, academic calendar, and schedules for clinical and community rotations, adhering to the structured guidelines of UHS & PMDC.
- **Assessment Preparation:**
 - Familiarize yourself with the various assessment tools and methods, including internal exam and external exam criteria, and review sample papers to effectively prepare for professional exams.
- **Policies and Compliance:**
 - Understand the institutional code of conduct, attendance and assessment policies, and other regulations to ensure adherence to college standards and accrediting body requirements.
- **Learning Resources:**
 - Utilize the learning methodologies, infrastructure resources, and Learning Management System to maximize your educational experience and academic success.

This guide, meticulously developed in collaboration with your subject departments, is designed to support your academic journey and help you achieve excellence in accordance with the highest standards set by PMDC and HEC.

7-Star Doctor Competencies (PMDC)

According to national regulatory authority PMDC, a Pakistani medical/dental graduate who has attained the status of a 'seven-star doctor' is expected to demonstrate a variety of attributes within

each competency. These qualities/ generic competencies are considered essential and must be exhibited by the individual professionally and personally.

- Skillful / Care Provider.
- Knowledgeable / Decision Maker.
- Community Health Promoter / Community Leader.
- Critical Thinker / Communicator
- Professional / Lifelong learner.
- Scholar / Researcher
- Leader/ Role Model / Manager

Introduction to Module-8

- The module 8 is designed to build upon and consolidate the foundational knowledge acquired in the earlier years of medical education, particularly from the Foundation-I module.
- As students transition into their clinical years, it is crucial to reinforce and deepen their understanding of basic medical sciences to support the integration of new, clinically relevant concepts.
- This module serves as a bridge, revisiting core topics in general Pharmacology, Pathology, and Forensic medicine with an emphasis on their clinical applications.
- By doing so, it ensures that students develop a more comprehensive understanding, which is vital for the advanced study of organ systems in subsequent modules (e.g., CVS 2, Respiratory-2, GIT-2, Neurosciences-2, and Reproduction 2).
- Mastery of these topics is essential before students can effectively approach the complexities of clinical scenarios.
- The revisiting of these concepts throughout the curriculum ensures a robust and integrated understanding, laying a solid foundation for clinical competence.
-

Module Committee

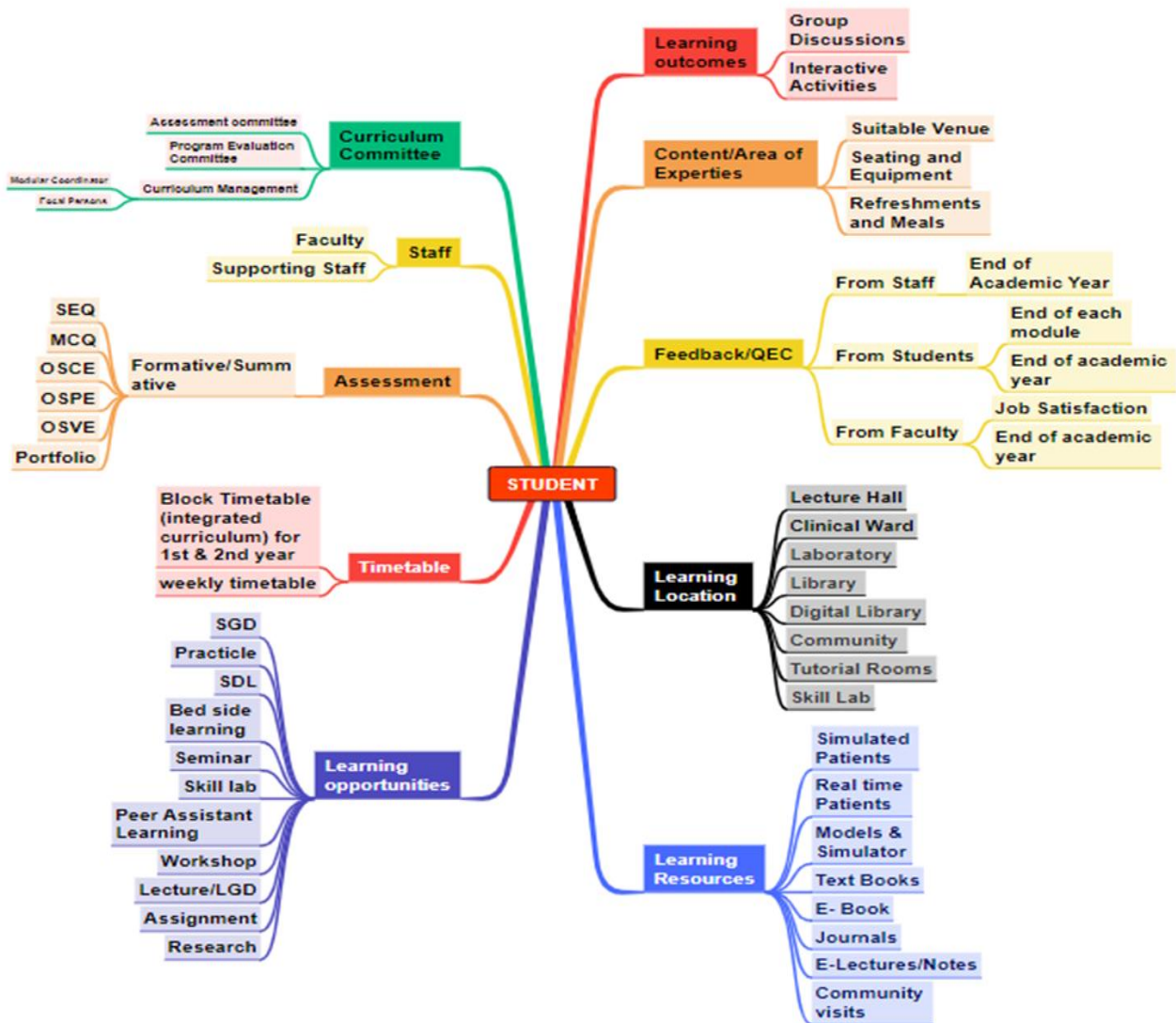
Name	Designation	Department
------	-------------	------------

Prof. Dr. Gulfreen Waheed	Principal & Director DME	Medical Education
Dr. Saba Iqbal	Associate Professor	Medical Education
Dr. Syed Hussain Raza Zaidi	Assistant Professor	Medical Education
Dr. Ijlal Zehra	HOD	Assessment Cell
Dr. Javaid Shabkhez Rab	Coordinator	Medical Education
Dr. Huma Fatima	Demonstrator	Medical Education
Mr. Adeel	Incharge	Student Affairs
Prof. Dr. Razia	HOD	Anatomy
Dr. Kalsoom	Focal Person	Anatomy
Prof. Dr. Sadia Zafer	HOD	Physiology
Dr. Shaheena	Focal Person	Physiology
Prof. Sadia Amir	HOD	Biochemistry
Dr. Yusra	Focal Person	Biochemistry
Prof. Dr. Saeed Afzal	HOD	Pathology
Dr. Nadia salam	Focal Person	Pathology

Prof. Dr. Asma Saeed	HOD	Pharmacology
Dr. Azka	Focal Person	Pharmacology
Prof. Dr.Rana Akhtar	HOD	Community Medicine
Dr. Sana	Focal Person	Community Medicine
Dr. Uzma	Focal Person	General Surgery
Prof. Dr. Muzammil	HOD	Medicine Unit-1
Dr. Asim	Focal Person	General Medicine
Dr. Farhat Mihas	HOD	Behavioural Sciences

Curriculum Map

This pictorial, vertical and horizontal presentation of the course content and extent shows the sequence in which various systems are to be covered. Curricular map to cover all the subjects and modules and the time allocated to study of the systems for the undergraduate programs offered at four colleges at campus are as follows:



Academic Calendar

Avicenna Medical & Dental College Calendar 2025-2026 2nd year MBBS																												
April 2026								May 2026								June 2026							SESSION START: 6th April 2026					
Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat	Gazetted Holidays					
			1	2	3	4	Week-04						iv-1	2	Week-8		1	2	3	4	5	6	i- Kashmir Holiday - 5th Feb, 2026					
Week-01	5	6	7	8	9	10	Week-5	3	4	5	6	7	8	9	Week-9	7	8	9	10	11	12	13	ii- Eid-ul-Fitr- 18th March - 20th March, 2026					
Week-02	12	13	14	15	16	17	Week-6	10	11	12	13	14	15	16	Week-10	14	15	16	17	18	19	20	iii - Pakistan Day -23rd March, 2026					
Week-03	19	20	21	22	23	24	Week-7	17	18	19	20	21	22	23	Week-11	21	22	23	24	25	26	27	iv- Labor Holiday- 1st May, 2026					
Week-04	26	27	28	29	30		End week	24	25	26	27	28	29	30	Week-12	28	29	30					v- Eid- Ul- Adha- 27th May - 29th May, 2026					
								31															vi- Youm-e-Takbeer Holiday - 16th May, 2026					
July 2026								August 2026								September 2026							vii- Ashura- 25th & 26th June, 2026					
Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat	viii- Independence Day- 14th Aug, 2026					
Week-12			1	2	3	4								1	Week-17			1	2	3	4	5	ix- Milad un Nabi- 25th Aug, 2026					
Week-13	5	6	7	8	9	10	Summer vacations	2	3	4	5	6	7	8	Week-18	6	7	8	9	10	11	12	x- Qaid-e-Azam Day/Christmas- 25th Dec, 2026					
Summer vacations	12	13	14	15	16	17	Week-14	9	10	11	12	13	14	15	Week-19	13	14	15	16	17	18	19	xi- Kashmir Holiday - 5th Feb, 2027					
Summer vacations	19	20	21	22	23	24	Week-15	16	17	18	19	20	21	22	Week-20	20	21	22	23	24	25	26	Vacations					
Summer vacations	26	27	28	29	30	31	Week-16	23	24	25	26	27	28	29	Week-21	27	28	29	30				Spring Vacations - 16th March - 23rd March, 2026					
							Week-17	30	31														Summer Vacation - 18th July -16th					
October 2026								November 2026								December 2026							Events					
Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat	World Oral Health Day International Day of Happiness World TB Day World Autism Awareness Day World Health Day White Coat Ceremony Music Fest - 2026 Spring Fest World Hand Hygiene Day International Nursing Day World Hypertension Day Debate & MCQ Class Trips World Environment Day Fun Fair International Self-Care Day Independence Day Oral & Nasal Competition Blood Cancer Awareness Day World First Aid Day World Patient Safety Day World Heart Day Sports Fest - 26 World Mental Health Day Breast Cancer Awareness Talent Hunt & Dream Circle Art & Craft Yoga & Aerobic Character Day & Bake Sale Golden Week					
Week-21				1	2	3	Week-26	1	2	3	4	5	6	7	Week-30			1	2	3	4	5	Block Exam					
Week-22	4	5	6	7	8	9	Week-27	8	9	10	11	12	13	14	Week-31	6	7	8	9	10	11	12	a. Block-4 Exam : 9th July, 2026 b. Block-5 Exam : 17th November, 2026 c. Block-6 Exam : 9th February, 2027					
Week-23	11	12	13	14	15	16	Week-28	15	16	17	18	19	20	21	Week-32	13	14	15	16	17	18	19	LSE/ Send-Up					
Week-24	18	19	20	21	22	23	Week-29	22	23	24	25	26	27	28	Week-33	20	21	22	23	24	25	26	Send Up = 12th Feb 2027 to 24th Feb 2027					
Week-25	25	26	27	28	29	30	Week-30	29	30							27	28	29	30	31			Prof Exam					
January 2027								February 2027								March 2027												
Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat						
Week-33					1	2			1	2	3	4	5	6			1	2	3	4	5	6						
Week-34	3	4	5	6	7	8	Send Up	7	8	9	10	11	12	13		7	8	9	10	11	12	13						
Week-35	10	11	12	13	14	15		14	15	16	17	18	19	20		14	15	16	17	18	19	20						
Week-36	17	18	19	20	21	22		21	22	23	24	25	26	27		21	22	23	24	25	26	27						
Week-37	24	25	26	27	28	29		28								28	29	30	31									

Time Table:

AVICENNA MEDICAL & DENTAL COLLEGE													
TIME TABLE WEEK-12		M-24 2nd Year MBBS		SESSION 2025-2026				Theme:					
DATE	DAY							BLOCK # V		MODULE - 08			
29-Jun-26	Mon	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 11:30	11:30 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30	3:30 - 5:00	5:00 - 6:00		
		<u>Lecture</u> Physiology	SGD Anatomy		BREAK	<u>Lecture</u> Biochemistry	<u>Lecture</u> PERL Professionalism	<u>Practical</u> Histology Biochemistry Pathology		BREAK	CFRC		
30-Jun-26	Tues	08:00 - 09:00	09:00 - 10:00	10:00-11:00		11:30 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30		<u>Practical</u> Histology Biochemistry Pathology	5:00 - 6:00	
		<u>Lecture</u> Biochemistry	<u>Lecture</u> Gross Anatomy	<u>Lecture</u> Physiology		<u>Lecture</u> Embryology	English Expository Writing	CFRC					
1-Jul-26	Wed	08:00 - 09:00	09:00 - 10:00	10:00-11:00		11:30 - 12:30	12:30-01:30		1:30 - 2:30		2:30 - 3:30	5:00 - 6:00	
		<u>Lecture</u> Embryology	<u>Lecture</u> Physiology	<u>Lecture</u> Biochemistry		<u>Lecture</u> Physiology	<u>Lecture</u> Islamiyat		<u>Practical</u> Histology Biochemistry Pathology		CFRC		
2-Jul-26	Thur	08:00 - 11:00		11:00-12:30		12:30 - 2:00		2:00-3:30		5:00 - 6:00			
		MODULE - 07 THEORY		MODULE - 07 OSPE / OSVE BATCH - C		MODULE - 07 OSPE / OSVE BATCH - A		MODULE - 07 OSPE / OSVE BATCH - B		CFRC			
3-Jul-26	Fri	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00-12:00	12:00-1:00	1:00-2:30		2:30 - 3:30	5:00 - 6:00			
		<u>Lecture</u> Histology	<u>Lecture</u> Physiology	<u>Lecture</u> Biochemistry	<u>Lecture</u> Physiology	<u>Lecture</u> Pathology	JUMMA BREAK		Club Activity	CFRC			
AVICENNA MEDICAL & DENTAL COLLEGE													
TIME TABLE WEEK-13		M-24 2nd Year MBBS		SESSION 2025-2026				Theme:					
DATE	DAY							BLOCK # V		MODULE - 08			
6-Jul-26	Mon	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 11:30	11:30 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30	3:30 - 5:00	5:00 - 6:00		
		<u>Lecture</u> Biochemistry	<u>Lecture</u> Embryology	<u>Lecture</u> Physiology	BREAK	SGD Anatomy		<u>Tutorial</u> Anatomy Biochemistry Physiology	<u>Practical</u> Histology Biochemistry Pathology	BREAK	CFRC		
7-Jul-26	Tues	08:00 - 09:00	09:00 - 10:00	10:00-11:00		11:30 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30		<u>Tutorial</u> Anatomy Biochemistry Physiology	<u>Practical</u> Histology Biochemistry Pathology	5:00 - 6:00
		<u>Lecture</u> Physiology	<u>Lecture</u> Embryology	<u>Lecture</u> Biochemistry		<u>Lecture</u> Physiology	<u>Lecture</u> Pathology	CFRC					
8-Jul-26	Wed	08:00 - 11:00				11:30 - 12:30	12:30-01:30		1:30-2:30		2:30 - 3:30	5:00 - 6:00	
		BLOCK - IV THEORY		Computer Science		<u>Lecture</u> PERL Professionalism	<u>Lecture</u> Islamiyat		<u>Lecture</u> Quran		CFRC		
9-Jul-26	Thur	08:00 - 10:30			10:30-11:00			11:00 - 01:00		01:00-01:30	1:30-3:30	5:00 - 6:00	
		BLOCK - IV OSPE / OSVE BATCH B			BREAK			BLOCK - IV OSPE / OSVE BATCH C		BREAK	BLOCK - IV OSPE / OSVE BATCH A		CFRC
10-Jul-26	Fri	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00-12:00	12:00-1:00	1:00-2:30		2:30 - 3:30	5:00 - 6:00			
		<u>Lecture</u> Histology	<u>Lecture</u> Physiology	<u>Lecture</u> Gross Anatomy	<u>Practical</u> Histology Biochemistry Pathology	<u>Tutorial</u> Anatomy Biochemistry Physiology	JUMMA BREAK		Club Activity	CFRC			

AVICENNA MEDICAL & DENTAL COLLEGE											
TIME TABLE WEEK-14		M-24 2nd Year MBBS		SESSION 2025-2026				Theme:			
DATE	DAY							BLOCK # V		MODULE - 08	
		08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 11:30	11:30 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30	3:30 - 5:00	5:00 - 6:00
10-Aug-26	Mon	Lecture Histology	Lecture Physiology	Lecture Embryology	BREAK	Lecture Pathology	Practical Histology Physiology Pathology		Tutorial Anatomy Biochemistry Physiology	BREAK	CFRC
11-Aug-26	Tues	08:00 - 09:00	09:00 - 10:00	10:00-11:00		11:30 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30		5:00 - 6:00
		Lecture Physiology	Lecture Gross Anatomy	Lecture Pathology		Lecture Physiology	Practical Histology Physiology Pathology		Tutorial Anatomy Biochemistry Physiology		CFRC
12-Aug-26	Wed	08:00 - 09:00	09:00 - 10:00	10:00-11:00		11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3:30		5:00 - 6:00
		Lecture Biochemistry	Lecture Physiology	Lecture Embryology		Practical Histology Physiology Pathology		Clinical Skill	Lecture Quran		CFRC
13-Aug-26	Thur	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3:30	5:00 - 6:00		
		Lecture Pathology Integration	Lecture Gross Anatomy	Lecture Biochemistry	Lecture Pharmacology	Lecture PERL Research		Clinical Skill	Tutorial Anatomy Biochemistry Physiology	CFRC	
14-Aug-26	Fri	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00-12:00	12:00-1:00	1:00-2:30	2:30 - 3:30	3:30 - 5:00	5:00 - 6:00	
INDEPENDENCE DAY											

AVICENNA MEDICAL & DENTAL COLLEGE											
TIME TABLE WEEK-15		M-24 2nd Year MBBS		SESSION 2025-2026				Theme:			
DATE	DAY							BLOCK # V		MODULE - 08	
		08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 11:30	11:30 - 12:30	12:30-01:30	1.30-2.30	2.30 - 3.30	3.30 - 5.00	5:00 - 6.00
17-Aug-26	Mon	<u>Lecture</u> Histology	<u>Lecture</u> Physiology	<u>Lecture</u> Biochemistry	BREAK	<u>Lecture</u> Pharmacology	<u>Practical</u> Histology Pharmacology Pathology		<u>Tutorial</u> Anatomy Biochemistry Physiology	BREAK	CFRC
18-Aug-26	Tues	08:00 - 09:00	09:00 - 10:00	10:00-11:00		11:30 - 12:30	12:30-01:30	1.30-2.30	2.30 - 3.30		5:00 - 6.00
		<u>Lecture</u> Physiology	SGD Anatomy			<u>Lecture</u> Physiology	<u>Practical</u> Histology Pharmacology Pathology		<u>Tutorial</u> Anatomy Biochemistry Physiology		CFRC
19-Aug-26	Wed	08:00 - 09:00	09:00 - 10:00	10:00-11:00		11:30 - 12:30	12:30-01:30	1.30 - 2.30	2.30 - 3.30		5:00 - 6.00
		<u>Lecture</u> Biochemistry	<u>Lecture</u> Physiology	<u>Lecture</u> Embryology		<u>Practical</u> Histology Pharmacology Pathology		<u>Clinical Skill</u>	<u>Tutorial</u> Anatomy Biochemistry Physiology		CFRC
20-Aug-26	Thur	08:00 - 09:00	09:00 - 10:00	10:00-11:00		11:30 - 12:30	12:30-01:30	1.30 - 2.30	2.30 - 3.30		5:00 - 6.00
		<u>Lecture</u> Physiology	SGD Anatomy			<u>Lecture</u> Community Medicine	<u>Lecture</u> PERL Research	<u>Clinical Skill</u>	<u>Lecture</u> Quran		CFRC
21-Aug-26	Fri	08:00 - 09:00	09:00 - 10:00	10:00-11:00		11:00-12:00	12:00-1.00	1.00-2.30			2.30 - 3.30
		<u>Lecture</u> Gross Anatomy	<u>Lecture</u> Physiology	<u>Lecture</u> Biochemistry	<u>Lecture</u> Pathology	Computer Science	JUMMA BREAK	Club Activity		CFRC	

AVICENNA MEDICAL & DENTAL COLLEGE											
TIME TABLE WEEK-16		M-24 2nd Year MBBS		SESSION 2025-2026				Theme:			
DATE	DAY							BLOCK # V		MODULE - 08	
24-Aug-26	Mon	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 11:30	11:30 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30	3:30 - 5:00	5:00 - 6:00
		Lecture Histology	Lecture Physiology	Lecture Biochemistry	BREAK	Practical Histology Biochemistry Pathology		English Expository Writing	Tutorial Anatomy Biochemistry Physiology	BREAK	CFRC
25-Aug-26	Tues	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 11:30	11:30 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30	3:30 - 5:00	5:00 - 6:00
		Eid Milad un Nabi Holiday									
26-Aug-26	Wed	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 11:30	11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3:30	3:30 - 5:00	5:00 - 6:00
		Lecture Biochemistry	Lecture Physiology	Lecture Embryology	BREAK	Practical Histology Biochemistry Pathology		Clinical Skill	Tutorial Anatomy Biochemistry Physiology	BREAK	CFRC
27-Aug-26	Thur	08:00 - 09:00	09:00 - 10:00	10:00-11:00		11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3:30		5:00 - 6:00
		Lecture Physiology	SGD Anatomy			Practical Histology Biochemistry Pathology		Clinical Skill	Tutorial Anatomy Biochemistry Physiology		CFRC
28-Aug-26	Fri	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00-12:00	12:00-1:00	1:00-2:30	2:30 - 3:30			5:00 - 6:00
		Lecture Gross Anatomy	Lecture Embryology	Lecture Pathology	Lecture Physiology	Lecture PERL Leadership	JUMNA BREAK	Club Activity			CFRC

AVICENNA MEDICAL & DENTAL COLLEGE											
TIME TABLE WEEK-17		M-24 2nd Year MBBS		SESSION 2025-2026				Theme:			
DATE	DAY							BLOCK # V		MODULE - 08	
31-Aug-26	Mon	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 11:30	11:30 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30	3:30 - 5:00	5:00 - 6:00
		Lecture Histology	Lecture Physiology	Lecture Biochemistry	BREAK	Lecture PERL Leadership	Practical Histology Biochemistry Physiology Pathology		Tutorial Anatomy Biochemistry Physiology	BREAK	CFRC
1-Sep-26	Tues	08:00 - 09:00	09:00 - 10:00	10:00-11:00		11:30 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30		5:00 - 6:00
		Lecture Biochemistry	Lecture Embryology	Lecture Physiology		Lecture Pathology	Practical Histology Biochemistry Physiology Pathology		Tutorial Anatomy Biochemistry Physiology		CFRC
2-Sep-26	Wed	08:00 - 09:00	09:00 - 10:00	10:00-11:00		11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3:30		5:00 - 6:00
		Lecture Physiology	SGD Anatomy			Lecture Community Medicine	Practical Histology Biochemistry Physiology Pathology		Tutorial Anatomy Biochemistry Physiology		CFRC
3-Sep-26	Thur	08:00 - 09:00	09:00 - 10:00	10:00-11:00		11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3:30		5:00 - 6:00
		Lecture Gross Anatomy	Lecture Physiology	Lecture Biochemistry		Lecture Physiology	Practical Histology Biochemistry Physiology Pathology		Lecture Islamiyat		CFRC
4-Sep-26	Fri	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00-12:00	12:00-1:00	1:00-2:30	2:30 - 3:30	5:00 - 6:00		
		Lecture Physiology	Lecture Embryology	Lecture Pathology	Lecture Pakistan Studies	Computer Science	JUMMA BREAK	Club Activity	CFRC		

AVICENNA MEDICAL & DENTAL COLLEGE											
TIME TABLE WEEK-18		M-24 2nd Year MBBS		SESSION 2025-2026				Theme:			
DATE	DAY							BLOCK # V		MODULE - 08	
		08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 11:30	11:30 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30	3:30 - 5:00	5:00 - 6:00
7-Sep-26	Mon	<u>Lecture</u> Biochemistry	<u>Lecture</u> Embryology	<u>Lecture</u> Physiology	BREAK	<u>Lecture</u> PERL Professionalism	<u>Practical</u> Pathology Physiology Histology	<u>Practical</u> Pathology Physiology Pharmacology	<u>Tutorial</u> Anatomy Biochemistry Physiology	BREAK	CFRC
8-Sep-26	Tues	08:00 - 09:00 <u>Lecture</u> Physiology	09:00 - 10:00 SGD Anatomy	10:00-11:00		11:30 - 12:30 <u>Lecture</u> Community Medicine	12:30-01:30 <u>Practical</u> Pathology Physiology Histology	1:30-2:30 <u>Practical</u> Pathology Physiology Pharmacology	2:30 - 3:30 <u>Tutorial</u> Anatomy Biochemistry Physiology		5:00 - 6:00 CFRC
9-Sep-26	Wed	08:00 - 09:00 Integrated Formative Assessment 03	09:00 - 10:00 <u>Lecture</u> Physiology	10:00-11:00 <u>Lecture</u> Embryology		11:30 - 12:30 <u>Practical</u> Pathology Physiology Histology	12:30-01:30 <u>Practical</u> Pathology Physiology Pharmacology	1:30 - 2:30 <u>Clinical Skill</u>	2:30 - 3:30 <u>Tutorial</u> Anatomy Biochemistry Physiology		5:00 - 6:00 CFRC
10-Sep-26	Thur	08:00 - 09:00 <u>Lecture</u> Physiology	09:00 - 10:00 <u>Lecture</u> Gross Anatomy	10:00-11:00 <u>Lecture</u> Pathology		11:30 - 12:30 <u>Lecture</u> Physiology	12:30-01:30 <u>Lecture</u> Islamiyat	1:30 - 2:30 <u>Clinical Skill</u>	2:30 - 3:30 <u>Lecture</u> Quran		5:00 - 6:00 CFRC
11-Sep-26	Fri	08:00 - 09:00 <u>Lecture</u> Histology	09:00 - 10:00 <u>Lecture</u> Physiology	10:00-11:00 <u>Lecture</u> Biochemistry		11:00-12:00 <u>Lecture</u> Pakistan Studies	12:00-1:00 Computer Science	1:00-2:30 JUMMA BREAK	2:30 - 3:30 Club Activity		5:00 - 6:00 CFRC

AVICENNA MEDICAL & DENTAL COLLEGE											
TIME TABLE WEEK-19		M-24 2nd Year MBBS		SESSION 2025-2026				Theme:			
DATE	DAY							BLOCK # V		MODULE - 08	
		08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 11:30	11:30 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30	3:30 - 5:00	5:00 - 6:00
14-Sep-26	Mon	Lecture Physiology	Lecture Biochemistry	Lecture Embryology	BREAK	Lecture PERL Leadership	Practical Pathology Physiology Pharmacology	Practical Pathology Physiology Histology	Tutorial Anatomy Biochemistry Physiology	BREAK	CFRC
15-Sep-26	Tues	08:00 - 09:00	09:00 - 10:00	10:00-11:00		11:30 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30		5:00 - 6:00
		Lecture Gross Anatomy	Lecture Physiology	Lecture Pathology		Lecture Physiology	Practical Pathology Physiology Pharmacology	Practical Pathology Physiology Histology	Tutorial Anatomy Biochemistry Physiology		CFRC
16-Sep-26	Wed	08:00 - 09:00	09:00 - 10:00	10:00-11:00		11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3:30		5:00 - 6:00
		Lecture Physiology	Lecture Gross Anatomy	Lecture Biochemistry		Practical Pathology Physiology Pharmacology	Practical Pathology Physiology Histology	Clinical Skill	Tutorial Anatomy Biochemistry Physiology		CFRC
17-Sep-26	Thur	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3:30	5:00 - 6:00		
		Lecture Histology	Lecture Physiology	Lecture Gross Anatomy	Lecture Community Medicine	Lecture Islamiyat	Clinical Skill	Lecture Quran	CFRC		
18-Sep-26	Fri	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00-12:00	12:00-1:00	1:00-2:30	2:30 - 3:30	5:00 - 6:00		
		Lecture Biochemistry	Lecture Gross Anatomy	Lecture Physiology	Lecture Pakistan Studies	Computer Science	JUMMA BREAK	Club Activity	CFRC		

AVICENNA MEDICAL & DENTAL COLLEGE

Rectangular Sign

TIME TABLE WEEK-20		M-24 2nd Year MBBS		SESSION 2025-2026				Theme:			
DATE	DAY							BLOCK # V		MODULE - 08	
21-Sep-26	Mon	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 11:30	11:30 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30	3:30 - 5:00	5:00 - 6:00
		Lecture Physiology	Lecture Biochemistry	Lecture Physiology	BREAK	Lecture Embryology	Lecture Community Medicine	Lecture PERL Leadership	Tutorial Anatomy Biochemistry Physiology	BREAK	CFRC
22-Sep-26	Tues	08:00 - 09:00	09:00 - 10:00	10:00-11:00		11:30 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30		5:00 - 6:00
		Lecture Biochemistry	Lecture Physiology	Lecture Gross Anatomy		Lecture Physiology	Lecture Pathology	Lecture Pakistan Studies	Tutorial Anatomy Biochemistry Physiology		CFRC
23-Sep-26	Wed	08:00 - 09:00	09:00 - 10:00	10:00-11:00		11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3:30		5:00 - 6:00
		Integrated Formative Assessment 04	Lecture Gross Anatomy	Lecture Physiology		Lecture Gross Anatomy	Lecture Behavioural Science	Clinical Skill	Tutorial Anatomy Biochemistry Physiology		CFRC
24-Sep-26	Thur	08:00 - 09:00	09:00 - 10:00	10:00-11:00		11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3:30		5:00 - 6:00
		Lecture Histology	Lecture Physiology	Lecture Biochemistry		Lecture Physiology	Lecture Pathology	Clinical Skill	Lecture Quran		CFRC
25-Sep-26	Fri	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00-12:00	12:00-1:00	1:00-2:30	2:30 - 3:30			5:00 - 6:00
		SGD Anatomy	Lecture Physiology	Lecture Gynaecology AGING		Lecture Physiology	JUMMA BREAK	Club Activity			CFRC

Allocation of Hours

AVICENNA MEDICAL COLLEGE, LAHORE

2ND YEAR MBBS

Wk #	Anatomy			Biochemistry			Physiology			Path			Pharm		Bh.Sc.	C.M.	Clinical Lectures	PERL				Quran	Islamiyat	Pak Std	Clinical Skills	Clinical Rotations	Comp. Sc.	EEW	Sports	Exam	Total
	Lec	Tut	Prac	Lec	Tut	Prac	Lec	Tut	Prac	Lec	Tut	Prac	Lec	Prac				Prof	Ethics	Research	Lead										
1	9		2	6		2	5		2	1					1	1					1	1		2	5		1			39	
2	7	1	2	6	1	2	4	1	2	1					1			2			1			2	5	1				39	
3	7	2	2	5	1	2	3	1	2	1					1	1			2		1			2	5		1			39	
4	5	1	2	4	1	2	1	1		1		2	1		1					2	1		2	4					1	32	
5	8	1	2	7	1	2	2	1						2	1	1				1	1	1	1	2	5					39	
6	8	2	2	8	1	2	2	1	2						1	1			1				1	2	5					39	
7	4	1	2	3	1	2	6	1	2	2					1			1			1			5					7	39	
8	5	1	2	5	1	2	7	1	2	2			1		1			1					2	5				1		39	
9	4	1	2	5	1	2	8	1		2		2	1		1					1			2	5				1		39	
10	3	1	2	3	1	2	8	1		3			1	2		1			1	1			2	5				1	1	39	
11	2	1	2	2	1	2	2	1	2	1			1		1		1							3	1				1	24	
12	6		2	4		2	6			1		2					1				1			5		1	1	7		39	
13	6	1	1	2	1	1	4	1		1		1					1			1	1			5	1			1	10	39	
14	5	1	2	2	1		5	1	2	2		2	1					1		1			2	4						32	
15	7	1	2	3	1		6	1		1		2	1	2		1		1		1			2	5	1			1		39	
16	6	1	2	2	1	2	4	1		1		2							1			2	4		1		1	1		31	
17	6	1	2	3	1	2	6	1	2	2		2			1				1		1	1	5	1			1			39	
18	6	1	1	2	1		6	1	2	1		2		1		1		1		1	1	1	2	5	1			1	1	39	
19	6	1	1	3	1		6	1	2	1		2		1		1				1	1	1	1	2	5	1		1		39	
20	7	1		3	1		9	1		2					1	1	1			1	1		1	2	5			1	1	39	
21	12		2	1		2	4		2	1					1				1				5					1	7	39	
22	11	2	2	1	1	2	4	1	2	1					1			1					5					5		39	
23	9	2	2		1	2	3	1	2						1			1					4					11		39	
24	12	2	2		1	2	5	1	2	1					1		1			1		2	5						1	39	
25	13	2	2	1	1	2	4	1	2					1			1			1		2	5						1	39	
26	13	2	2		1	2	5	1	2					1		1		1				1	2	5						39	
27	8		1	2		1	8		1								1	2	1		1	1	5						7	39	
28	4	1	1	1	1	1	6	1	1										1	1	1	1	2	5		1			10	39	
29	9	1	1	3	1	1	9	1	1				1						1	1	1	2	5		1					39	
30	8	1	1	3	1	1	9	1	1	1									1	1	1	2	5	1	1					39	
31	8	1	1	2	1	1	9	1	1	1				1					1	1	1	2	5	1	1					39	
32	9	1	1	2	1	1	7	1	1		1			1	1					2		2	5	1	1			1		39	
33	4	1	1	2	1	1	8	1	1		1			1	1	6				1		1	2	5		1				39	
34	3		1	1						6		1	3	1		2			1		4	1	2	2	5	1	4		1	39	
35	2		1	1						6		1	3	1	1	1					2	1	1	2	5	1	2		8	39	
36																													17	17	
37																													34	34	
38																													27	27	
39																													14	14	
	242	36	56	98	29	48	181	29	41	43	2	21	14	10	15	21	9	9	6	7	15	28	13	13	52	169	12	16	28	157	1420
	AL	AT	AP	BL	BT	BP	PL	PT	PP	PtL	PtT	PtP	PhL	PhP	Bh.Sc.	C.M.	Clin Lec	Prof	Ethics	Research	Lead	Quran	Isl	PS	CI SK	CI Rota	CS	EEW	Sports	Exam	1263
	278	56	127	48			210	41		45		21		24						37											65
	334			175			251			66																					1328

Module Outcome

- Describe the microscopic features of nerve cells, muscle cells, general features of epithelia of the body.
- Appraise the functional characteristics of various components of cell membrane and organelles of cell.

- Differentiate between the dynamics of various transport mechanisms along the cell membrane.
- Compare the functional differences between RBCs, WBCs and blood groups.
- Explain the significance of homeostatic mechanisms in keeping the body's internal environment nearly constant.
- Appraise the formation and functions of the autonomic nervous system.
- Correlate the structural design of each organ to its function.
- Acquire information about the different fascial planes in the different regions of the body & their surgical importance.
- Use descriptive anatomical terms of position to describe the different body structures in relation to each other.
- Describe the movements of body using proper anatomical terms of movement.
- Describe and demonstrate the various bony landmarks.
- Describe the types of joints and correlate them to the mechanisms of movement.
- Classify the bone, joints and muscles based on the structure, function, phylogenetic origin.
- Describe the structures associated with muscles and explain their functional correlations.
- Classify and describe the cardiovascular system and correlate it functionally.
- Amplify the anatomical basis for radiological, cross-sectional, anatomy.
- Correlate clinicopathologically the apoptosis in health & diseases

MODULE OUTCOMES

- To describe gross and microscopic anatomy of different parts of gastrointestinal system and associated organs
- To describe the embryological development of different parts of gastrointestinal system and associated organs
- To describe the functional anatomy and physiology of different parts of gastrointestinal system and associated organs
- To describe the motility, secretory and digestive function of gastrointestinal system
- To describe the biochemical aspects of carbohydrate metabolism
- To discuss pathological aspect and management of gastrointestinal related diseases

- To discuss the pharmacological treatment of diarrhea
- To discuss the psychosocial impact of gastrointestinal diseases in society
- To discuss the preventive measures related to gastrointestinal diseases
- To comprehend concept of balanced diet and malnutrition

Learning Objectives

NORMAL STRUCTURE			
GROSS ANATOMY			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 35	
		DISCIPLINE	TOPIC

EnR-A-001	Describe the location, anatomy blood supply and functions of pituitary gland	Anatomy	Diencephalon (Endocrinology)
EnR-A-002	Describe the Thyroid, Parathyroid with their type, Relations, blood supply, and nerve supply.	Anatomy	Thyroid & Parathyroid gland
	Explain the anatomical basis for surgical removal of the glands of neck with special emphasis on the complications that can be encountered	Anatomy	
	Identify the Thyroid with their type, relations, blood supply, and nerve supply.	Anatomy	
EnR-A-003	Describe the structure, fascia, coverings, blood and nerve supply of testis	Anatomy	Testis
EnR-A-004	Describe the gross anatomical features and neuro-vasculature of epididymis and vas deferens, Seminal vesicles, Bulbourethral gland	Anatomy	Accessory Male organs
EnR-A-005	Describe the morphological features and neurovascular supply of prostate. Describe, Draw & Label Lobes of prostate gland Correlate the clinical manifestations of prostate with lobes and/or zones of prostate		Prostate

EnR-A-006	Describe the anatomical basis and manifestations of the following conditions: 1) Hydrocele of spermatic cord and/or testes 2) Hematocele of testes 3) Torsion of the spermatic cord 4) Varicocele Vestigial remnants of embryonic genital duct	Anatomy	Testis clinical conditions
	Describe the anatomical basis of vasectomy, & metastasis of cancer of testis and scrotum	Anatomy	

EnR-A-007	Describe shape, relations blood supply & nerve supply of suprarenal gland	Anatomy	Supra-Renal Gland
	Explain the anatomical causes of Adrenal Abnormalities	Anatomy	
EnR-A-008	Define Bony Pelvis (Girdle) and describe the structures forming it.	Anatomy	Pelvic Girdle
	Describe the bones and salient anatomical features of Bony pelvis (girdle)	Anatomy	
EnR-A-009	Describe the type, articulations and mechanics of movements {axes and planes} of the following joints: 1) Sacro-Iliac 2) Pubic Symphysis 3) Lumbosacral 4) Sacrococcygeal	Anatomy	Sacroiliac- Joint

EnR-A-010	List the contents of True and False Pelvis	Anatomy	Bony Pelvis (Girdle)
	Tabulate the differences between male and female pelvis	Anatomy	
	Describe different types of pelvises	Anatomy	
	Describes different diameters of pelvis and their application in obstetric practice	Anatomy (Obs & Gynae)	
EnR-A-011	Describe the anatomical basis of pelvic fractures and their consequences	Anatomy	Pelvic Girdle
	Describe the topographical anatomy of pelvic walls and its components	Anatomy	
	Describe the mechanics of changes occurring in pelvic ligaments and joint mobility in late pregnancy	Anatomy (Obs & Gynae)	
EnR-A-012	Describe the topographical anatomy of pelvic floor.	Anatomy	Pelvic floor
	Describe origin, insertion, nerve supply and actions of muscle forming pelvic floor	Anatomy	
EnR-A-013	Tabulate the attachments, innervations and actions of muscles forming the pelvic walls and floor	Anatomy	Pelvic Muscles
EnR-A-014	Describes injury to pelvic floor during child birth and its complications	Anatomy (Obs & Gynae)	Pelvic Girdle

EnR-A-015	Describe the peritoneal reflections in the male and female pelvis	Anatomy	Peritoneum peritoneal cavity of pelvis
------------------	--	----------------	---

EnR-A-016	Describe the gross anatomical features of Sacrum	Anatomy	Sacrum
EnR-A-017	Describe the gross anatomical features of pelvic fascia	Anatomy	Pelvic Fascia
EnR-A-018	Describe the boundaries of pelvic outlet and inlet	Anatomy	Pelvic Outlet and inlet
	Enumerate the structures passing through the pelvic inlet and pelvic outlet	Anatomy	
EnR-A-019	Tabulate the differences in peritoneal reflections in male and female pelvis	Anatomy	Peritoneal Reflection in Pelvis
EnR-A-020	Describe the origin, course, branches and distribution of common iliac artery	Anatomy	Pelvic Vessels
	Describe the origin, course, branches and distribution of external and internal iliac arteries	Anatomy	
	Describe the origin, course, tributaries and area of drainage of pelvic veins	Anatomy	
EnR-A-021	Describe the location, afferents and efferent of pelvic lymph nodes	Anatomy	Pelvic Lymph Nodes
	Tabulate the origin, course, distribution and anastomosis of arteries of the pelvis	Anatomy	

EnR-A-022	Describe the origin, root value, course, relations, branches and distribution of Pelvic nerves	Anatomy	Pelvic Vessels & Pelvic nerves
	Describe the anatomical basis and clinical picture for ligation of internal iliac artery and collateral circulation in pelvis	Anatomy	
	Describe the clinical picture and anatomical basis for the injury to pelvic nerves	Anatomy	
	Give anatomical justification for pelvic nerve blocks	Anatomy	
EnR-A-023	Describe the morphological features of urethra (male and female)	Anatomy	Pelvis
	Tabulate the parts of the male urethra with their location and salient features	Anatomy	
	Describe the clinical picture and anatomical justification for Ureteric Calculi, Cystocele, Suprapubic Cystotomy, Rupture of Bladder	Anatomy	

	Describe the clinical picture and anatomical justification for Hypertrophy of Prostate	Anatomy	
--	--	---------	--

	Describe the gross anatomical features of Ovaries and Fallopian Tubes with their relations, blood supply, nerve supply and lymphatic drainage Describe related clinical conditions: 1) Positions of ovaries 2) Cysts of ovaries 3) Ectopic pregnancy 4) Tubal ligation 5) Salpingitis	Anatomy	
	Describe the gross anatomical features, parts, peritoneal ligaments, blood supply, nerve supply & lymphatic & clinical aspects of Uterus and Vagina Describe related clinical conditions 1. Prolapse of uterus 2. Vaginal trauma 3. culdocentesis	Anatomy	
	Describe, identify, justify and demonstrate the supports of uterus	Anatomy	
	Describe the gross anatomical features of Boundaries & divisions of perineum	Anatomy	
	Draw and label the boundaries of perineum	Anatomy	
	List the contents of perineum	Anatomy	

EnR-A-024	Tabulate the differences between the Male and female perineum	Anatomy	Perineum
	Describe the attachments of the perineal membrane and list its relations	Anatomy	
	Discuss the formation of Superficial and Deep Perineal Pouches	Anatomy	
	List the contents of Superficial and Deep Perineal Spaces	Anatomy	

	Tabulate the attachments, actions and nerve supply of muscles of perineum	Anatomy	
	Describe the topographical anatomy and neuro-vasculature of Penis	Anatomy	
	Tabulate the muscles forming the perineal body with their attachments and nerve supply	Anatomy	
	Describe the clinical presentation and anatomical justification for: 1) Hypospadias 2) Phimosis 3) Circumcision 4) Erectile Dysfunction 5) Internal Hernias 6) Suprapubic Cystotomy 7) Rupture Of Bladder 8) Rectal Examination		

EnR-A-025	9) Disposition Of Uterus	Anatomy	Pelvis
EnR-A-026	Describe the extent, structure, vascular supply, lymphatic drainage of Breast (Mammary Glands)	Integrate with Medicine	Mammary Gland
	Demonstrate palpation of breast and define its relation to the Fibrous septa in Carcinoma of Breast	Integrate with Surgery	
	Explain the anatomical basis of position adopted for breast examination and mammography.	Integrate with Radiology	
EMBRYOLOGY & POST-NATAL DEVELOPMENT			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 14	
		DISCIPLINE	TOPIC
EnR-A-027	Describe the development of Thyroid gland		Development of Thyroid gland
	Explain the embryological basis of the Thyroglossal Cyst		

EnR-A-028	Describe the development of parathyroid glands	Anatomy	Development Of Parathyroid glands
-----------	--	---------	-----------------------------------

EnR-A-029	Anatomically justify the clinical presentation of: 1. Ectopic Parathyroid 2. Aberrant Thyroid	Anatomy	Development of Thyroid, Parathyroid
EnR-A-030	Describe the development of pituitary gland Describe the embryological basis for the congenital anomalies of pituitary development	Anatomy	Development of Pituitary Gland
EnR-A-031	Describe the contributing factors, histogenesis and the development of adrenal gland	Anatomy	Development Of Adrenal Gland
	Describe the embryological basis for the congenital anomalies of adrenal development	Anatomy	
EnR-A-032	Identify the stages in the development of the adrenal gland	Anatomy	Adrenal Gland
EnR-A-033	Describe the indifferent gonads	Anatomy	Development of Reproductive system
	List and describe the Factors influencing the differentiation of gonads		
	Evaluate the role of the factors influencing Sex determination and differentiation		
	Describe the Development and descent of testis	Anatomy	

EnR-A-034	Describe the embryological basis and locations of undescended testes	Anatomy	Testis
EnR-A-035	Explain the Development and descent of ovaries	Anatomy	Development of Reproductive system
	Describe the anatomical basis for indifferent gonads, Klinefelter, turner syndromes & androgen insufficiency	Anatomy	
	Describe the Formation of Genital Ducts In different stage (paramesonephric and mesonephric ducts)	Anatomy	
	Development of Mammary gland. Describe related clinical anomalies.		
	Describe the development of female genital ducts and glands, Development of uterus & Vagina. Describe related clinical anomalies: 1) Uterus Arcuatus 2) Uterus septus 3) Uterus Bicornis Bicolis 4) Uterus Bicornis Unicollis	Anatomy	

	5) Uterus Unicornis 6) Atresia of vagina 7) Double vagina 8) Imperforate hymen		
	Describe the development of male genital ducts and glands	Anatomy	

	Discuss the Development of male external genitalia	Anatomy	
	Describe the Development of female external genitalia	Anatomy	
	Explain the anatomical basis for the Associated congenital anomalies of male and female external genitalia (Hyposidiasis, Epispidiasis)	Anatomy	
	Describe the development of inguinal canal and descent of testis and embryological basis for Cryptorchidism, Ectopic Testis, Congenital Inguinal Hernia, Hydrocele	Anatomy	
	Klinefelter, turner syndromes & androgen insufficiency Describe the embryological basis for the coverings of testis	Anatomy	
MICROSCOPIC STRUCTURE (HISTOLOGY & PATHOLOGY)			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 14	
		DISCIPLINE	TOPIC
EnR-A-036	Describe the histological basis and manifestation of Gastric Carcinoid Tumors	Anatomy/ Pathology	Stomach
	Classify the principal Enteroendocrine Cells on the basis of type, location, hormone produced and Actions	Anatomy	

EnR-A-037	Describe microscopic structure of Pituitary gland.	Anatomy	Pituitary Gland
	Classify pituitary gland on the basis of cell type, hormone produced and functions	Anatomy	
	Explain the histological basis and manifestation of Pituitary Adenomas	Anatomy	
EnR-A-038	Describe the light microscopic structure of Adrenal Gland	Anatomy	Adrenal Gland

	Explain the histological basis and manifestation of Addison disease	Anatomy	
EnR-A-039	Describe the light microscopic structure of endocrine pancreas	Anatomy	Pancreas
	Classify the pancreatic islets on the basis of cell type, hormone produced and functions	Anatomy	
	Explain the histological basis and manifestation of Diabetes Mellitus	Anatomy	
	Explain the components and functions of neuroendocrine system	Anatomy	
	Describe the light microscopic structure of Thyroid Gland	Anatomy	Thyroid Gland
	Describe the light microscopic structure of Parathyroid Gland	Anatomy	

EnR-A-040	Describe the light microscopic structure of Pineal gland	Anatomy	
EnR-A-041	Describe the light and ultramicroscopic structure of Testes, structure & function of Sertoli cells. Describe Blood testes Barrier	Anatomy	Testes
	Describe the histological basis and manifestation of Orchitis, Cryptorchidism	Anatomy Pathology	
EnR-A-042	Describe the light microscopic structure of Epididymis	Anatomy	Epididymis
EnR-A-043	Describe the light microscopic structure of vas deferens	Anatomy	Vas deferens
EnR-A-044	Describe the light microscopic structure of seminal vesicle	Anatomy	Seminal Vesicle
EnR-A-045	Describe the light microscopic structure of Prostate Gland	Anatomy	Prostate gland
	Describe the lobes of prostate and correlate with the pathologies of prostate	Anatomy pathology	
EnR-A-046	Describe the light microscopic structure of ovaries	Anatomy	Ovaries
	Describe the light microscopic structure of ovarian follicles in different stages of menstrual cycle.	Anatomy	
	Describe the histological basis and manifestation of Polycystic Ovary Syndrome	Anatomy Pathology	
	Discuss the light microscopic structure of uterus	Anatomy	Uterus

EnR-A-047	Describe the light microscopic structure of different stages of Menstrual cycle	Anatomy	
	Describe the histological basis and manifestation of Endometriosis	Anatomy Gynae & Obs.	
EnR-A-048	Describe the light microscopic structure of Fallopian Tube.	Anatomy	Fallopian Tube
EnR-A-049	Describe the light microscopic structure of Cervix	Anatomy	Cervix
	Describe the histological basis and manifestation of Cervical Carcinoma	Anatomy Pathology	
EnR-A-050	Describe the light microscopic structure of Vagina	Anatomy	Vagina
EnR-A-051	Describe light microscopic structure of mammary gland (inactive, during pregnancy, after lactation) Discuss histological basis of Breast cancer	Anatomy pathology	Mammary Gland
NORMAL FUNCTION			
MEDICAL PHYSIOLOGY			
CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 60	
		DISCIPLINE	TOPIC

EnR-P-001	Define different chemical messengers. Enlist endocrine organs and hormones of the body. Enlist the hormones on the basis of chemical nature. Discuss the feedback control of hormone secretion. Explain the up and down regulation of receptors. Enlist the location of hormone receptors. Explain the mechanism of intracellular signaling after hormone receptor activation. Name the hormones that use enzyme-linked hormone receptors signaling. Explain the mechanism of enzyme linked receptors. Enlist second messenger mechanisms for mediating intracellular hormonal functions. Define second messenger system.	Physiology	Introduction to Endocrinology
-----------	---	------------	-------------------------------

	Explain the adenylyl cyclase– cAMP Second Messenger System. Enumerate the hormones that use the adenylyl cyclase– cAMP Second Messenger System. Explain The cell membrane phospholipid second messenger System. Enumerate the hormones that use cell membrane phospholipid second messenger system. Explain the mechanism of calcium Calmodulin system.		
	Name the hormones/ factors of hypothalamus. Name the hormones of anterior pituitary. Name the hormones of posterior pituitary. Describe the functional relationship between hypothalamus, anterior and posterior pituitary gland. Explain the significance of hypothalamic- hypophysial portal circulation. Explain the hypothalamic pituitary tract. Explain the mechanism of action of growth hormone. Explain the actions of Growth hormone on Carbohydrate. Discuss the actions of Growth hormone on protein		

EnR-P-002	metabolism. Describe the actions of Growth hormone on fat metabolism. Explain the effect of growth hormone on skeletal growth and age. Explain the significance of somatomedins in mediating the actions of growth hormone. Describe the regulation of Growth Hormone. Describe the causes and features and treatment of panhypopituitarism in adults and childhood. Define Sheehan's syndrome. Enlist the types of dwarfism according to cause. Explain the pathophysiology and features of gigantism and acromegaly.	Physiology	Hypothalamus / Pituitary Gland
-----------	---	------------	--------------------------------

	Explain the mechanism of action of antidiuretic hormone. Discuss the actions of antidiuretic hormone. Regulation of antidiuretic hormone production.		
--	--	--	--

	Elaborate the mechanism of action of oxytocin. Discuss the actions of oxytocin.		
EnR-P-003	Discuss the transport of thyroid hormone Discuss the mechanism of action of thyroid hormone Explain the actions of thyroid hormone on carbohydrate metabolism Discuss the actions of thyroid hormone on protein metabolism Explain the actions of thyroid hormones on fat metabolism Explain the non-metabolic functions of thyroid hormone Explain the regulation of thyroid hormone Enumerate antithyroid substances and explain their mechanism of action Enumerate the causes of hyperthyroidism	Physiology	Thyroid gland

Explain the features, pathophysiology and treatment of thyrotoxicosis/ grave's disease Explain the thyroid function test to investigate hypo and hyperthyroidism Enlist the causes of hypothyroidism. Explain the signs and symptoms of hypothyroid patient. Explain the pathophysiology of Hashimoto hypothyroidism Discuss the features and pathophysiology and treatment of myxedema Explain the pathophysiology and features of endemic colloid goiter Discuss the pathophysiology and features of nontoxic colloid goiter Enlist the causes of cretinism Discuss the features and pathophysiology of cretinism		
---	--	--

EnR-P-004	Name the hormones of adrenal cortex. Explain the physiological anatomy of adrenal cortex. Explain the cellular mechanism of Aldosterone action. Explain the effects of mineralocorticoid hormone. Discuss the regulation of aldosterone secretion. Discuss the metabolic and non-metabolic functions of cortisol Explain the interconversion of active cortisol and inactive cortisone by the 2, 11 beta hydroxysteroid dehydrogenase isoform. Explain the mechanism for regulation of glucocorticoid secretion by hypothalamus and pituitary Name adrenal androgens and enlist the functions of adrenal androgens. Discuss the causes, features, pathophysiology and treatment of hypoadrenalism (Addison's disease). Enlist the causes of hyperadrenalism. Explain the features, pathophysiology and treatment of Cushing's syndrome. Differentiate between Cushing's syndrome and Cushing's disease	Physiology & Pathology	Adrenocortical hormones
-----------	--	------------------------	-------------------------

	Explain the clinical importance of dexamethasone suppression test to diagnose Cushing's syndrome. Discuss the features, pathophysiology and treatment of Conn's syndrome. Enlist the cause, features and pathophysiology of congenital adrenal hyperplasia/ Androgenital syndrome.		
EnR-P-005	Enumerate the types of pancreatic cells with their hormones. Explain the mechanism of action of insulin. Discuss the synthesis and mechanism of release of insulin. Explain the effects of insulin on carbohydrate, protein and lipid metabolism.	Physiology	Pancreatic hormones

	Enlist the actions of insulin on liver, adipose tissue and skeletal muscle. Enlist the factors and conditions that increase or decrease insulin secretion.		
--	--	--	--

	Explain the role of insulin (and other hormones) in “switching” between carbohydrate and lipid metabolism. Discuss the effects of glucagon on carbohydrate and lipid metabolism. Explain the factors that regulate the secretion of glucagon. Explain the 24-hour regulation of glucose. Discuss the importance of blood glucose regulation. Explain the actions of somatostatin.		
EnR-P-006	Enlist the types of diabetes mellitus Explain the causes of Type I and type II diabetes mellitus Discuss the features and pathophysiology of diabetes mellitus Explain the role of insulin resistance, obesity and metabolic syndrome in developing type II diabetes mellitus Explain how to diagnose the diabetes mellitus Explain the treatment of type I and type II diabetes mellitus Explain the features, cause of insulinoma	Physiology	Abnormalities of Glucose regulation
EnR-P-007	Discuss the physiological anatomy of parathyroid gland Explain the rapid and slow mechanism of resorption of bone by parathyroid hormone Discuss the actions of parathyroid Explain the control of parathyroid secretion by calcium ion concentration	Physiology	Parathyroid hormones

EnR-P-008	Discuss the effects of Vitamin D Discuss the effects of calcitonin on calcium Discuss the regulation of calcium (the first & second line of defense) Explain the causes and features of hypoparathyroidism	Physiology	Regulation of calcium in body
-----------	--	------------	-------------------------------

	Explain the causes and the features of primary and secondary hyperparathyroidism Enumerate the causes and features of osteoporosis		
EnR-P-009	Enlist the functions of adrenal medullary hormones and explain pheochromocytoma	Physiology	Adreno medullary hormones
EnR-P-010	Describe the hormonal factors that affect spermatogenesis Explain the maturation and storage of sperm in epididymis Discuss the structure and physiology of a mature sperm Describe the composition of semen Discuss the functions of prostate & seminal vesicles in the formation of semen Explain the phenomenon of capacitation and its significance Describe the acrosome Reaction and its significance	Physiology	Spermatogenesis Capacitation & Acrosome reaction

	Discuss the role of pineal gland in reproduction		
EnR-P-011	Discuss the site of secretion of testosterone Name the active form of testosterone Explain the production of estrogen in males Describe the basic intracellular mechanism of action of testosterone	Physiology	Testosterone
	Explain the functions of testosterone in intrauterine life and after birth Discuss the regulation of male sexual functions by hormones from the hypothalamus and anterior pituitary gland		

EnR-P-012	Enumerate and explain the phases of ovarian cycle along with the hormonal changes Explain the postulated mechanism of ovulation Explain the formation and involution of Corpus luteum Endometrial cycle Explain the structural and hormonal changes of endometrial cycle	Physiology	Menstrual cycle
-----------	---	------------	-----------------

	Explain the regulation of female monthly cycle Discuss the role of progesterone on female sexual organs		
EnR-P-013	Enumerate the ovarian hormones Discuss the synthesis of estrogen and progesterone Describe the interaction of follicular theca and granulosa cells for production of estrogens with the help of a diagram Explain the functions of the estrogens on different organs Discuss the role of progesterone on female sexual organs	Physiology	Female sexual hormones
EnR-P-014	Explain the physiological basis of puberty, menarche Define menopause Explain the cause of menopause Discuss the physiological changes in the function of the body at the time of menopause	Physiology	Puberty, menarche & menopause

EnR-P-015	Explain the non-hormonal functions of placenta Explain the hormonal factors in pregnancy/ hormones of placenta Explain the changes in non- placental hormones during pregnancy Response of the mother's body to pregnancy Explain the mechanical and hormonal factors that increase uterine contractility during parturition	Physiology	Normal Pregnancy
EnR-P-016	Explain the physiology of lactation Discuss the actions of prolactin Justify the suppression of ejection of milk during pregnancy Discuss the physiological basis of suppression of the female ovarian cycles in nursing mothers for many months after delivery	Physiology	Lactation
EnR-P-017	Describe the circulatory & respiratory changes at birth	Physiology	Neonatal Physiology
MEDICAL BIOCHEMISTRY			
CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 32	

		DISCIPLINE	TOPIC
--	--	-------------------	--------------

EnR-B-001	Describe the features of Signal transduction Describe different types of receptors	Biochemistry	Signal Transduction
EnR-B-002	Discuss the classification of hormones	Biochemistry	Classification of hormones
EnR-B-003	Describe different types of second messengers Differentiate the G protein and non-G protein mediated pathways of signal transduction Discuss the hormones which act through: Cyclic AMP (Adenosine monophosphate) Discuss the hormones which act through: Cyclic GMP (guanosine monophosphate) Discuss the hormones which act through calcium phosphoinositol Describe the Receptor tyrosine kinase pathway of signal transduction Explain the Serine threonine kinase pathway of signal transduction Discuss the Nuclear Receptor mediated pathway of signal transduction Describe the Receptor coupled to Jak Stat pathway of signal transduction	Biochemistry	Second messengers
	Explain the control and negative feedback mechanism of hormone regulation	Biochemistry	

	Discuss the biosynthesis, secretion, mechanism of action and metabolic functions of Insulin, glucagon, epinephrine, cortisol, thyroid and growth hormone with special reference to carbohydrate, protein and lipid metabolism	Biochemistry	
	Interpret disorders of hormones on the basis of sign, symptoms and given data	Biochemistry	
EnR-B-004	Explain the synthesis, secretion, transport and clearance of steroid and protein hormones.	Biochemistry	Synthesis of Hormones
EnR-B-005	Enlist the steps in the synthesis of adrenocortical hormone. Explain the synthesis and secretion of ACTH	Biochemistry	Synthesis of ACTH & adrenocortical

	(Adrenocorticotrophic hormone) in association with melanocyte-stimulating hormone, lipotropin, and endorphin.		
EnR-B-006	Explain the structure, biosynthesis, secretion, transport, regulation, catabolism, mechanism of action and biochemical role of testosterone, progesterone and estrogen	Biochemistry	Synthesis of testosterone, progesterone and estrogen
EnR-B-007	Discuss the role of steroid hormones in oral	Biochemistry	Steroid in infertility

	contraception, Infertility		
EnR-B-008	Define the following terms: chromosome, allele (dominant and recessive), gene, locus, heterozygote, homozygote, hemizygous, autosome, genotype, phenotype, haploid and diploid number of chromosomes, aneuploidy, proband, proposita, pedigree, propositus, penetrance, codominance and polygenic	Biochemistry	Nomenclature of genetics
EnR-B-009	Discuss the structures of genes, how they are organized and regulated.	Biochemistry	Genes
EnR-B-010	Describe Mendelian Law of Segregation and Law of Independent Assortment.	Biochemistry	Mendelian laws
EnR-B-011	Describe the patterns of inheritance characteristic of autosomal dominant, autosomal recessive, X- linked dominant, X-linked recessive and mitochondrial traits.	Biochemistry	Patterns of inheritance
EnR-B-012	Interpret genetic symbols as they appear in pedigrees.	Biochemistry	Pedigrees

EnR-B-013	Analyze pedigree to determine the mode of inheritance of following traits: 1) X-linked recessive (Duchenne Muscular dystrophy) 2) X-linked dominant (Rickets) 3) Autosomal recessive (Xeroderma Pigmentosum) 4) Autosomal dominant (Huntington's Disease)) Mitochondrial disorder (Mitochondrial diabetes)	Biochemistry	Mode of inheritance
EnR-B-014	Discuss different structural and numerical chromosomal abnormalities.	Biochemistry	Chromosomal abnormalities

EnR-B-015	Interpret the normal human karyotype in terms of number and structure of chromosomes.	Biochemistry	Karyotypes
EnR-B-016	Describe the effect of the following chromosomal mutations on a segment of DNA: point mutation, frameshift mutation, deletion, insertion, inversion, Robertsonian Translocation and mosaicism.	Biochemistry	Mutations
EnR-B-017	Discuss the concept of central dogma from gene to protein	Biochemistry	Central dogma

EnR-B-018	Describe in detail all the steps in prokaryotic DNA replication with emphasis on: Different proteins required, Primers, DNA polymerase; their different components and functions, Initiation, elongation and termination of replication, Topoisomerases	Biochemistry	Prokaryotic DNA replication
EnR-B-019	Describe in detail all the steps in Eukaryotic DNA replication with emphasis on differences between Pro- and Eukaryotes	Biochemistry	Eukaryotic DNA replication
EnR-B-020	Discuss telomeres and Telomerase and their clinical significance		Telomeres and Telomerase
EnR-B-021	Describe DNA repair, mutation and cancers		DNA Repair
	Interpret Xeroderma pigmentosa on basis of sign /symptoms and data		
EnR-B-022	Explain the transcription in prokaryotes focusing on the following key points; RNA polymerase, its components and functions, Initiation, elongation and termination of transcription.		Transcription in prokaryotes
EnR-B-023	Illustrate the transcription in eukaryotes focusing on the differences between pro- and eukaryotic replication		Transcription in Eukaryotes

EnR-B-024	Discuss post transcriptional modifications		post transcriptional modifications
EnR-B-025	Describe the role of Wobble hypothesis in codon recognition by tRNA	Biochemistry	Wobble hypothesis
EnR-B-026	Interpret the translation focusing on the following key points: Initiation, elongation and termination		Translation
EnR-B-027	Describe Post-translational modification of proteins		

	Illustrate RNA dependent synthesis of RNA and DNA		Post- translational modification
EnR-B-028	Discuss the gene expression especially Lac operon and Tryptophan operon		Gene Expression
	Discuss the regulation of eukaryotic gene expression with special emphasis on iron metabolism and RNA interference	Biochemistry	

EnR-B-029	Discuss the following Recombinant DNA techniques with reference to their principles, procedures and application: 1) PCR (Polymerase Chain Reaction) 2) RFLP (Restriction Fragment Length Polymorphism) 3) Cloning 4) Human Genome Project 5) Blotting Techniques 6) DNA (Deoxyribose Nucleic Acid) sequencing	Biochemistry	Techniques
-----------	---	--------------	------------

PATHOPHYSIOLOGY AND PHARMACOTHERAPEUTICS

CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 02	
		DISCIPLINE	TOPIC
EnR-Ph-001	Classify drugs that mimic or inhibit hypothalamic and pituitary hormones. Explain their mechanism of action. Enumerate their clinical uses and potential adverse effects.	Pharmacology	Hypothalamic and Pituitary hormones
EnR-Ph-002	Classify drugs that mimic or inhibit gonadal hormones and explain their mechanism of action. Enumerate their clinical uses and potential adverse effects.		Gonadal Hormones

PATHOLOGY

CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 12	
		DISCIPLINE	TOPIC
EnR-Pa-001	Enumerate clinical manifestations along with hormone levels of anterior pituitary	Pathology	Pathology of Anterior Pituitary Gland

	Classification of pituitary adenomas		
EnR-Pa-002	Enumerate and describe posterior pituitary syndromes (inappropriate ADH (Anti Diuretic Hormone) secretion, diabetes insipidus)	Pathology	Pathology of Posterior Pituitary Gland
EnR-Pa-003	Define thyroiditis Describe salient morphological features of clinically significant subtypes of thyroiditis: i. Hashimoto Thyroiditis ii. Granulomatous Thyroiditis	Pathology	Thyroiditis
EnR-Pa-004	Describe the pathogenesis & salient morphological features of Grave's Disease Describe the pathogenesis & salient morphological features of Diffuse and Multinodular goiter	Pathology	Grave's Disease
EnR-Pa-005	Enumerate causes of hypo and hyperthyroidism along with levels of thyroid hormones	Pathology	Pathology of Thyroid Gland

EnR-Pa-006	Enumerate causes of hypercalcemia, hyper and hypoparathyroidism Describe the histopathological features of parathyroid hyperplasia and adenoma	Pathology	Pathology of Parathyroid Gland
EnR-Pa-007	Give etiological Classification of DM (Diabetes Mellitus) Give differentiating features of DM-I and DM-II on the basis of pathogenesis, clinical features, diagnosis and complications	Pathology	Pathology of Endocrine Pancreas Gland
EnR-Pa-008	Enumerate causes of Cushing syndrome with lab investigations Enlist causes and clinical features of adrenocortical insufficiency (Addison disease)	Pathology	Pathology of Adrenal Gland
EnR-Pa-009	Describe the morphological features of inflammatory disorders of breast.		Breast

		Microbiology	
--	--	--------------	--

EnR-Pa-010	Enumerate the infectious agents that cause the lower genital tract infections and PIDs along with lab investigations Enumerate causes of infertility in females along with hormonal investigations Enlist causes of dysfunctional uterine bleeding with histopathological features Discuss pathophysiology and lab diagnosis of eclampsia and preeclampsia Enlist sites of abnormal placental implantations (ectopic pregnancy)	Pathology	Female Reproductive Pathology
EnR-Pa-011	Enumerate causes of inflammation of male genital tract Enlist causes of male infertility with semen analysis Describe pathological features of testicular torsion	Pathology	Male Reproductive Pathology
DISEASE PREVENTION & IMPACT			
CODE	COMMUNITY MEDICINE	TOTAL HOURS = 05	
	SPECIFIC LEARNING OBJECTIVES	DISCIPLINE	TOPIC

EnR-CM-001	Define Diabetes Mellitus according to WHO (World Health Organization) criteria Classify types of Diabetes Mellitus Describe epidemiological risk factors for Diabetes Epidemiological distribution & statistics of DM Screening of community for Diabetes Apply levels of prevention for control of Diabetes.	Community Medicine and Public Health	Diabetes
------------	---	--------------------------------------	----------

EnR-CM-002	Classify types of genetic disorders common in community. Describe health promotional measures to control genetic diseases. Describe screening programs for community to prevent genetic disorders. Apply levels of preventive and social measures for control of genetic abnormalities.	Community Medicine	Genetics
	Define women's health and life cycle approach for health- related events. Highlight statistics related to human reproductive health issues.		

EnR-CM-003	Enumerate health related problems across a woman's reproductive lifetime. Explain the components of reproductive health.	Community Medicine	Reproductive health
CODE	BEHAVIORAL SCIENCES	TOTAL HOURS = 1	
	SPECIFIC LEARNING OBJECTIVES	DISCIPLINE	TOPIC
EnR-BhS-001	Discuss common sexual dysfunctions and their prevalence, with emphasis on culture bound syndromes. Identify the various biological, psychological, and relational factors that can contribute to sexual difficulties. Discuss barriers to seek help. Discuss the importance of person centered and nonjudgmental approach when discussing sexual health concerns. Explain the ethical obligations of healthcare professionals in respecting patient confidentiality and informed consent when addressing sexual health issues.	Behavioral Sciences	Sexual difficulties and Medical Practices

AGING			
		TOTAL HOURS = 01	

CODE	SPECIFIC LEARNING OBJECTIVES	DISCIPLINE	TOPIC
EnR-Ag-001	Enlist the changes that occur in Female body after menopause.	Gynae/ OBS	Menopause

HISTOLOGY			
CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 11	
		DISCIPLINE	TOPIC
EnR-A-052	Identify draw & Label the Pituitary gland under light microscope	Anatomy	Pituitary gland
EnR-A-053	Identify draw & label the Thyroid & Parathyroid glands under light microscope	Anatomy	Thyroid & Parathyroid
EnR-A-054	Identify draw & Label the Adrenal gland under light microscope	Anatomy	Adrenal Gland
EnR-A-055	Identify draw & Label Testes, Epididymis & Vas deferens under the light Microscope	Anatomy	Testes Epididymis Vas Deferens
EnR-A-056	Identify draw & label the seminal vesicle & prostate gland under light Microscope	Anatomy	Seminal Vesicle Prostate Gland
EnR-A-057	Identify, draw and label the ovaries under light microscope	Anatomy	Ovaries

EnR-A-058	Identify, draw and label the slide of different phases of uterus under light microscope	Anatomy	Uterus
EnR-A-059	Identify, draw and label the fallopian tube under light microscope	Anatomy	Fallopian Tube
EnR-A-060	Identify, draw and label the cervix under light microscope	Anatomy	Cervix
EnR-A-061	Identify, draw and label the vagina under light microscope	Anatomy	Vagina
EnR-A-062	Identify, draw and label the mammary gland (different stages) under light microscope	Anatomy	Mammary gland

BIOCHEMISTRY

CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 06	
		DISCIPLINE	TOPIC
EnR-B-030	Demonstrate DNA extraction	Biochemistry	DNA

EnR-B-031	Demonstrate Gel Electrophoresis	Biochemistry	Electrophoresis
EnR-B-032	Demonstrate PCR	Biochemistry	PCR
EnR-B-033	Demonstrate ELISA (enzyme-linked immunoassay) to measure concentration of hormones	Biochemistry	ELISA

PHYSIOLOGY

CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 04	
		DISCIPLINE	TOPIC
	Perform Pregnancy test (urine+Blood)		

EnR-P-018	Interpret BetaHCG values to diagnose a normal pregnancy	Physiology	Pregnancy test
EnR-P-019	Diagram/flow chart showing the signs and symptoms of hypothyroidism./hyperthyroidism		Thyroid
PHARMACOLOGY			
CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 02	
		DISCIPLINE	TOPIC
En-R-Ph-003	Label the diagram/flow chart showing the synthesis and MOA of hypothalamic, pituitary and gonadal hormones.	Pharmacology	Hypothalamic and Pituitary and Gonadal Hormones
PATHOLOGY			
CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 15	
		DISCIPLINE	TOPIC
EnR-Pa-012	Identify the salient microscopic features of pituitary adenomas.	Pathology	Pituitary adenomoas
EnR-Pa-013	Identify the salient gross and microscopic features of Multinodular goiter	Pathology	Thyroid Disorders
	Identify the salient gross and microscopic features of Diffuse & Multinodular Goiter		

	Identify the salient microscopic features of		
--	--	--	--

	i. Hashimoto Thyroid ii. Granulomatous Thyroid iii. Grave's Disease.		
	Interpretation of Thyroid Function Tests in Thyroid disorders		
	Interpretation of causes of Hypercalcemia according to PTH levels		
EnR-Pa-014	Identify the salient morphological features of Parathyroid hyperplasia		Parathyroid Disorders
EnR-Pa-015	Interpretation of BSF, GTT, and HbA1C to diagnose Diabetes Mellitus.		Diabetes Mellitus
EnR-Pa-016	Interpretation of lab tests in diagnosing Cushing syndrome and Addison Disease.		Adrenal Disorders
EnR-Pa-017	Discuss lab tests regarding: i. Hyperthyroidism ii. Hypothyroidism iii. Diabetes mellitus iv. Diabetic ketoacidosis		Clinical chemistry Scenarios

Operational Definition

Traditional & Innovative Teaching Methodologies

Sr.	Pedagogical Methodologies	Description
1.	Lectures	Traditional method where an instructor presents information to a large group of students (large group teaching). This approach focuses on delivering theoretical knowledge and foundational concepts. It is very effective for introducing new topics.
2.	Tutorial	Tutorials involve small group discussion (SGD) where students receive focused instruction and guidance on specific topics.
3	Demonstrations	Demonstrations are practical displays of techniques or procedures, often used to illustrate complex concepts or practices, particularly useful in dental education for showing clinical skills.
4	Practicals	Hands-on sessions where students apply theoretical knowledge to real-world tasks. This might include lab work, clinical procedures, or simulations. Practical are crucial for developing technical skills and understanding the application of concepts in practice.
5.	Student Presentations	Students prepare and deliver presentations on assigned topics. This method enhances communication skills, encourages students to explore topic in-depth. It also provides opportunities for peer feedback and discussion.
6.	Assignment	Tasks given to students to complete outside of class. Assignments can include research papers, case studies, or practical reports. They are designed to reinforce learning, assess understanding, and develop critical thinking and problem-solving skills.
7.	Self-directed Learning	Students take initiative and responsibility for their own learning process. Students are encouraged to seek resources, set goals, and evaluate their progress. This is a learner-centered approach where students take the initiative to plan, execute, and assess their own learning activities. This method promotes independence, critical thinking, and lifelong learning skills.
8.	Flipped Classroom	In this model, students first engage with learning materials at home (e.g., through videos, readings) and then use class time for interactive activities, discussions, or problem-solving exercises. This approach aims to maximize in-class engagement and application of knowledge.
9.	Peer-Assisted Learning (PAL)	A collaborative learning approach where students help each other understand course material. PAL involves structured peer tutoring, study groups, or collaborative tasks. It enhances comprehension through teaching, reinforces learning, and builds teamwork skills.

10.	Team-based Learning (TBL)	A structured form of small group learning where students work in teams on application-based tasks and problems. Teams are responsible for achieving learning objectives through collaborative efforts, promoting accountability, and deeper understanding of the material.
11.	Problem-based Learning (PBL)	Students work on complex, real-world problems without predefined solutions. They research, discuss, and apply knowledge to develop solutions. PBL fosters critical thinking, problem-solving skills, and the ability to integrate knowledge from various disciplines.
12.	Academic Portfolios	A collection of student's work that showcases learning achievements, reflections, and progress over time. Portfolios include assignments, projects, and self-assessments. They provide a comprehensive view of student development, highlight strengths and areas for improvement, and support reflective learning (experiential learning)
13.	Seminar	A seminar is an academic or professional setting where individuals discuss, present, and explore specific topics, often with expert guidance

Infrastructure Resources

Sr .	Infrastructure Resources	Description
1.	Lecture Hall	Each year has a dedicated lecture hall, totaling five lecture halls for the five professional years. These halls are equipped with modern audiovisual aids to support effective teaching and learning.
2.	Tutorial Room	The college's tutorial rooms, each with a capacity of 30, are specifically designed to support small group discussions and interactive sessions. These rooms facilitate personalized instruction, enabling more engaged and effective learning through direct interaction between students and instructors.
3.	Lab	The college is equipped with state-of-the-art laboratories for practical and clinical work. Each lab is designed to support various disciplines, to facilitate hands-on learning.
4.	Library on campus	A huge library occupies a full floor and has 260 seats including study carrels and group-discussion tables. Latest reference books of Basic and Clinical Sciences along with national & international journals are available in the library.
5.	Digital Library	The digital library offers access to a vast collection of e-books, online journals, research databases, and other digital resources. It supports remote access and provides tools for academic research and learning.

6.	Learning Management System (LMS)	The LMS is a comprehensive online platform that supports course management, content delivery, student assessment, and communication. It provides tools for tracking progress, managing assignments, and facilitates ongoing academic activities.
6.	Phantom Labs	Specialized Phantom Labs are available for advanced simulation and practice in dental procedures. These labs provide high-fidelity models and simulators that help students refine their clinical skills in a controlled environment.
7.	Mess & Cafeteria	The College has its own on-campus Mess which caters to 600 students. All food items including dairy, meat, and vegetables are sourced organically and bought in at the time of cooking, in order to ensure that students get freshly cooked meals at all times Students form the Mess committee which decides the mess menu in consultation with other students. The Mess offers fresh food to all residents three times a day. However, day scholars are also welcome to use the Mess facility at a reasonable cost. Two 50- inch LCD screens provide students an opportunity to get entertained during their meal times.
8.	Gymnasium & Sports	We recognize sports as a pivotal key to shape and maintain students' personality and good health. The College has indoor and outdoor sports facilities to help enhance the cognition and capacity to learn. There is a proper sports section for various games like basketball, football, volleyball, and cricket. The gym itself is fully equipped with modern machinery both for students and faculty.
9.	IT Lab	The IT Lab is equipped with modern computers and software available for students who need access for academic purposes.
10	Auditorium	The college has a spacious auditorium equipped with advanced audio-visual facilities. It is used for large-scale lectures, guest presentations, and academic conferences, providing a venue for students to engage with experts and participate in important educational events.
11	Examination Halls	The college provides dedicated examination halls that are designed to accommodate a large number of students comfortably. These halls are equipped with necessary facilities to ensure a smooth and secure examination process, including proper seating arrangements, monitoring systems, and accessibility features.

Assessment Policy

Introduction

This policy outlines the guidelines for internal assessment of students at Avicenna Medical and Dental College. Internal assessment plays a crucial role in evaluating a student's progress, understanding their strengths and weaknesses, and providing timely feedback. This policy aims to ensure fairness, consistency, and transparency in the internal assessment process.

Internal Assessment Components

The internal assessment for each course will be comprised of the following components:

1. Attendance

- Attendance will be recorded regularly and will contribute to the overall internal assessment score.
- Students are expected to maintain a minimum attendance of 75% to be eligible for internal assessment marks.

2. Continuous Assessment

- Continuous assessment will be based on regular assignments, quizzes, presentations, and other activities conducted throughout the semester.
- These assessments will evaluate students' understanding of the course material, their critical thinking skills, and their ability to apply knowledge to real-world scenarios.

3. Grand Test and Module Exams

- i. Grand tests and module exams will be conducted to assess students' comprehensive understanding of the course content.
- ii. These exams will be designed to evaluate both theoretical knowledge and practical skills.

4. Attitude and Behavior

- i. Students' attitude towards learning, participation in class activities, and adherence to college rules and regulations will be assessed.
- ii. This component will evaluate students' professionalism, teamwork skills, and ethical conduct.

5. Logbook and Portfolio

- ii. Students will be required to maintain a logbook and portfolio to document their learning journey.
- iii. The logbook will include reflections on lectures, tutorials, and practical sessions.
- iv. The portfolio will showcase students' best work, including assignments, projects, and research papers.

Assessment Criteria and Weighting

The following table outlines the weighting of each component in the internal assessment:

Component	Marks	Percentage
Attendance	6	2%
Continuous Assessment	12	4%
Grand Test and Module Exams	30	10%
Attitude and Behavior	10	3%
Logbook and Portfolio	2	1%
Total	60	20%

Assessment Procedures

- i. **Faculty Responsibility:** Faculty members will be responsible for designing and administering the internal assessments in accordance with the course syllabus and this policy.
- ii. **Marking and Grading:** Faculty members will mark and grade the assessments using a transparent and consistent marking scheme. Candidates shall be required to score at least 50% marks in the internal assessment in each subject to become eligible for admission to professional examinations.
- iii. **Feedback:** Faculty members will provide timely and constructive feedback to students on their performance.
- iv. **Record-Keeping:** Faculty members will maintain accurate records of all internal assessments, including marks and feedback.
- v. **Moderation:** Internal assessments will be moderated by the course coordinator or the head of the department to ensure fairness and consistency.

Appeal Process

Students who have concerns about their internal assessment marks may appeal to the concerned faculty member or the head of the department. The appeal process will be handled promptly and fairly.

The internal assessment policy is designed to promote student learning, assess their progress, and provide a fair and transparent evaluation system. Faculty members and students are expected to adhere to this policy to ensure the integrity of the internal assessment process.

Attendance Requirement & Internal Assessment Criteria

The institution follows the regulations for examinations of the UHS in letter and spirit. The students require **75% attendance** in all academic sessions and **50% passing marks** with internal assessments and send-up examinations to be eligible for the UHS Professional Examinations.

Assessment Guidelines

Assessment in medical & dental education is a critical component designed to ensure that medical & dental students acquire the necessary knowledge, skills, and competencies required for effective medical & dental practice.

Assessment drives learning! – George E. Millar

You will encounter a variety of assessment methods, each serving a specific purpose.

1. Written examinations, including multiple-choice and essay questions, will test your grasp of theoretical concepts and subject matter.
2. Practical assessments will require you to demonstrate your clinical skills and ability to apply knowledge in real-world scenarios.
3. Clinical exams will evaluate your communication skills and reasoning abilities through case discussions and problem-solving exercises.

4. Clinical skills and work-place based assessments will observe your hands-on proficiency and patient management capabilities.

At Avicenna Medical & Dental College, internal assessments are systematically conducted throughout each academic year of the MBBS program, as per the guidelines established by the University of Health Sciences (UHS). These assessments, overseen by the Assessment Cell, adhere to either the Annual Subject-Based System or the Integrated/Modular System, depending on the curriculum structure.

Notably, beginning with the 2024-25 academic year, the weightage of internal assessments will be increased from 10% to 20%. The UHS administers professional examinations independently, organizing them at designated neutral sites and appointing external examiners to ensure objectivity and fairness.

Internal Assessment Weightage	20%	100%
External Assessment Weightage	80%	

MBBS YEAR-2						
SUBJECT	THEORY		PRACTICAL			TOTAL
Block-5 Modules (ENDOCRINOLOGY & REPRODUCTION-1) (HEAD & NECK SPECIAL SENSES)	Part 1 MCQs (140)	140 marks	Practical/Clinical examination	011 OSPE 02 OSCE 03 OSVE	Marks 88 10 42	350
	Internal Assessment 10%	35 Marks	Internal Assessment 10%	35 Marks		
	Total	175	Total	175		

INTERNAL ASSESSMENT

It shall constitute 20% of the total assessment at the end of the academic year.

	Scoring Parameter	Weightage (Percentage)
Theory 10 %	Attendance	75% attendance -1 % >85% attendance -2 %
	Block Exam	5 %
	Continuous assessment	3 %
Practical 10 %	Attendance	75% attendance -1 % >85% attendance -2 %
	Block Exam (OSCE / OSPE / OSVE / Short case)	5 %
	Portfolio-clinical logbooks (CFRC / PERLs / Clinical Clerkship)	3 %

Assessment Schedule:

Avicenna Medical College

2nd Year MBBS – Exam Schedule – 2026/27

Week #	Date	Exam
3	20/4/26 to 24/4/26	Tutorial Test
4	29/4/26	Integrated Formative Assessment – 01
5	4/5/26 to 8/5/26	Tutorial Test
6	11/5/26 to 15/5/26	Tutorial Test
7	21/5/26	Module – 06 (Theory + OSPE/OSVE)
9	8/6/26 to 12/6/26	Tutorial Test
10	17/6/26	Integrated Formative Assessment – 02
11	24/6/26	Allied Subjects Integrated Formative Assessment – 01
12	2/7/26	Module – 07 (Theory + OSPE/OSVE)
13	6/7/26	Block – IV (Theory)
13	7/7/26	Block – IV (OSPE / OSVE)
15	17/8/26 to 21/8/26	Tutorial Test
16	24/8/26 to 28/8/26	Tutorial Test
17	31/8/26 to 4/9/26	Tutorial Test
18	9/9/26	Integrated Formative Assessment – 03

20	23/9/26	Integrated Formative Assessment – 04
21	30/09/26	Module – 08 (Theory + OSPE/OSVE)
23	12/10/26 to 16/10/26	Tutorial Test
24	21/10/26	Integrated Formative Assessment – 05
25	28/10/26	Allied Subjects Integrated Formative Assessment – 02
26	2/11/26 to 6/11/26	Tutorial Test
27	11/11/26	Module – 09 (Theory + OSPE/OSVE)
28	16/11/26	Block – V (Theory)
28	17/11/26	Block – V (OSPE / OSVE)
30	30/11/26 to 4/12/26	Tutorial Test
31	7/12/26 to 11/12/26	Tutorial Test
32	16/12/26	Integrated Formative Assessment – 06
33	28/12/26 to 1/1/27	Tutorial Test
34	6/1/27	Integrated Formative Assessment – 07
35	13/1/27	Module – 10 (Theory + OSPE/OSVE)
35	18/1/27	Allied Subjects Integrated Formative Assessment – 03
36	21/1/27	Module – 11 (Theory + OSPE/OSVE)
36	25/1/27	Block – VI (Theory)
36	26/1/27	Block – VI (OSPE / OSVE)

Table of Specification

MBBS 2nd Professional

Block-5

Theme	Subject	Written Exam		Oral/Practical/Clinical Exam			
		MCQ (1 mark)	Marks	OSPE (8 marks each observed)	OSCE (5 marks each observed)	OSVE (14 marks each observed)	Marks
Normal Structure	Anatomy applied/clinical	50	50	04	-	01	46
Normal Function	Physiology applied/clinical	40	40	03	-	01	38
	Biochemistry applied/clinical	19	19	01	-	01	22
Disease Burden & Prevention	Community Medicine & Public Health	07	07	-	-	-	0
	Behavioral Sciences	04	04	-	-	-	0
Pathophysiology & pharmacotherapeutics	Pathology	18	18	2	-	-	16
	Pharmacology	02	02	1	-	-	08
CFRC	CF-2	-	-	-	01	-	05
PERLs	PERLs-2	-	-	-	01	-	05
Total		140	140	11 stations x 08 = 88	02 stations x 05 = 10	03 stations x 14=42	140

Recommended Books & Reading Resources

Anatomy

Snell's Clinical Anatomy 10th edition.

Langman's Medical Embryology 12th edition.

Medical Histology by Laiq Hussain Siddiqui 8th edition.

General Anatomy by Laiq Hussain Siddiqui 6th edition.

Biochemistry

Harpers illustrated Biochemistry (latest edition). Rodwell.V.W MCGrawHill publishers.

Lippincott illustrated Review (latest edition). Kluwer.W.

Essentials of Medical Biochemistry vol 1&2 by Mushtaq Ahmed.

Pathology

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

Robbins and Cotran Pathological Basis of Disease. Kumar, V., Abbas, A. and Aster, J. Latest Edition

Richard Mitchell, Vinay Kumar, Abul K. Abbas and Nelson Fausto Robbins and Cotran, Pocket Companion to Pathologic basis of diseases, Saunders Harcourt.

Walter and Israel. General Pathology. Churchill Livingstone.

Robbins & Kumar, Medical Microbiology and Immunology Levinson.

General Medicine

Principles and Practice of Medicine by Davidson (latest edition)

Clinical Medicine by Parveen J Kumar & Michael Clark

Oxford Handbook of Medicine

Macleod's Clinical Examination book

Medicine and Toxicology by C.K. Parikh

Hutchison's Clinical Methods by Michael Swash. 21st edition

Pharmacology And Therapeutics

Katzung and Trevor's Pharmacology: Examination and Board Review- 15th Edition

Basic and Clinical Pharmacology by Bertram G Katzung (case scenarios only) - 16th Edition-

Current Medical Diagnosis and Treatment- reference book –Edition-2024

Basic and Clinical Pharmacology by Bertram G Katzung (case scenarios only) - 15th Edition

Basic and Clinical Pharmacology by Katzung, McGraw-Hill. 16th Edition.

Pharmacology by Champe and Harvey, Lippincott Williams & Wilkins 8th Edition.

Katzung Basic and Clinical pharmacology, Lippincott Illustrated reviews.

Clinical Pathology Interpretations by A. H. Nagi

Behavioural Sciences

Handbook of Behavioural Sciences by Prof. Mowadat H.Rana, 3rd Edition

Medical and Psychosocial aspects of chronic illness and disability 6th edition by Donna R.Falvo and Beverly E.Holland,

Integrating behavioral sciences in healthcare, Asma Humayun, 2003, 1st edition

Community medicine

Parks Textbook of Preventive and Social Medicine. K. Park

Public Health and Community Medicine by Ilyas Ansari

MSDS manual of Government of Punjab

Text book of Community Medicine by Park J E. Latest Edition

Surgery

Bailey & Love's Short Practice of Surgery (latest edition)

Browse's Introduction to the Symptoms & Signs of Surgical Disease 4th Edition

Bailey & Love Short Practice of Surgery, Clinical Surgery pearls by Dayananda Babu RACS for Surgical Audits.

Patient Safety

Patient Safety Curriculum Guide: Multi Professional Guide

Microbiology

Levinson's review of Microbiology

Medical Microbiology and Immunology by Levinson and Jawetz,

Pediatrics Medicine

Nelson Textbook of Pediatrics

Basis of Pediatrics by Pervez Akbar Khan

Gynecology

Gynecology by Ten Teachers

Infection Control

National Guidelines Infection Prevention and control, National Institute of Health Pakistan

Biosafety

Biosafety in Microbiological and Biomedical Laboratories, 6th Edition (CDC, USA)

WHO Laboratory Biosafety Manual, Fourth Edition, And Associated Monographs

WHO safe management of wastes from healthcare facilities chapter 7 -8 page 77-99, 105-125)

Family medicine

Oxford Handbook of General Practice, 5th Edition

Orthopedics

Apley and Solomon's System of Orthopaedics and Trauma by Ashley Blom (Editor)

Rheumatology

Davidson's Principles and Practice of Medicine

Clinical Medicine by Parveen J Kumar & Michael Clark

Hutchison's Clinical Methods by Michael Swash

Radiology

Aids to Radiological Differential Diagnosis by Chapman S. and Nakielny R. 4th edition.

Elsevier Science Limited; 2003.

Forensic Medicine

Knight's Forensic Pathology by Barnard Knight 3rd edition

G. Principles and Practice of Forensic Medicine by Prof. Nasib R. Awan, 2nd edition

Forensic DNA Typing – 2nd Edition, Author: John M. Butler

Parikh's Textbook of Medical Jurisprudence, Forensic Medicine and Toxicology by C.K. Parikh 6th Ed., CBS Publisher.

Gun Shot Wounds 2nd edition by V.J. De Maio

Knight B. Simpson's Forensic Medicine.

Knight and Pekka. Principles of Forensic Medicine

Forensic Pathology

Forensic pathology 2nd edition by V.J.Deimaio CRC press Boca Raton London New York

Washington DC

Toxicology

Principles of clinical toxicology 3rd edition Thomas. Gossel CRC press Taylor and Francis group

Forensic Sciences

Fundamentals of Forensic Science- 3rd Edition: Author: Max M Houck, Jay A. Siegel

TextBook of forensic medicine and toxicology Principles and Practice 5th edition by Krishan Vig

Biomedical ethics

Principles of Biomedical ethics, 8th edition by Tom. L. Beauchamp, James F. Childress.

Evidence Based Medicine

Databases for the latest articles/manuscripts

Clinical Practice Guidelines- local and international - (within last 3 years)

Books (Latest edition-within last 5 years)

Pediatrics

Nelson's Book of Pediatric 22 edition Illustrated book of Pediatrics, Pervaiz Akbar textbook pediatrics medicine

Islamiyat

Standard Islamiyat (compulsory) for B.A, BSc, MA, MSc, MBBS by Prof M Sharif Islahi.

Ilmi Islamiyat(compulsory) for BA, BSc & equivalent.