

AVICENNA MEDICAL & DENTAL COLLEGE



STUDY GUIDE 2026

Foundation I BLOCK- 1 MODULE 1



Program: MBBS Integrated Curriculum
Year: 1st Professional Year
Batch No: M-25
Session: 2025-2026

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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

Message from the Chairman



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

Vision & Mission



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
	CVS	Cerebrovascular system
D	D.medinensis	Dracunculus Medinensis

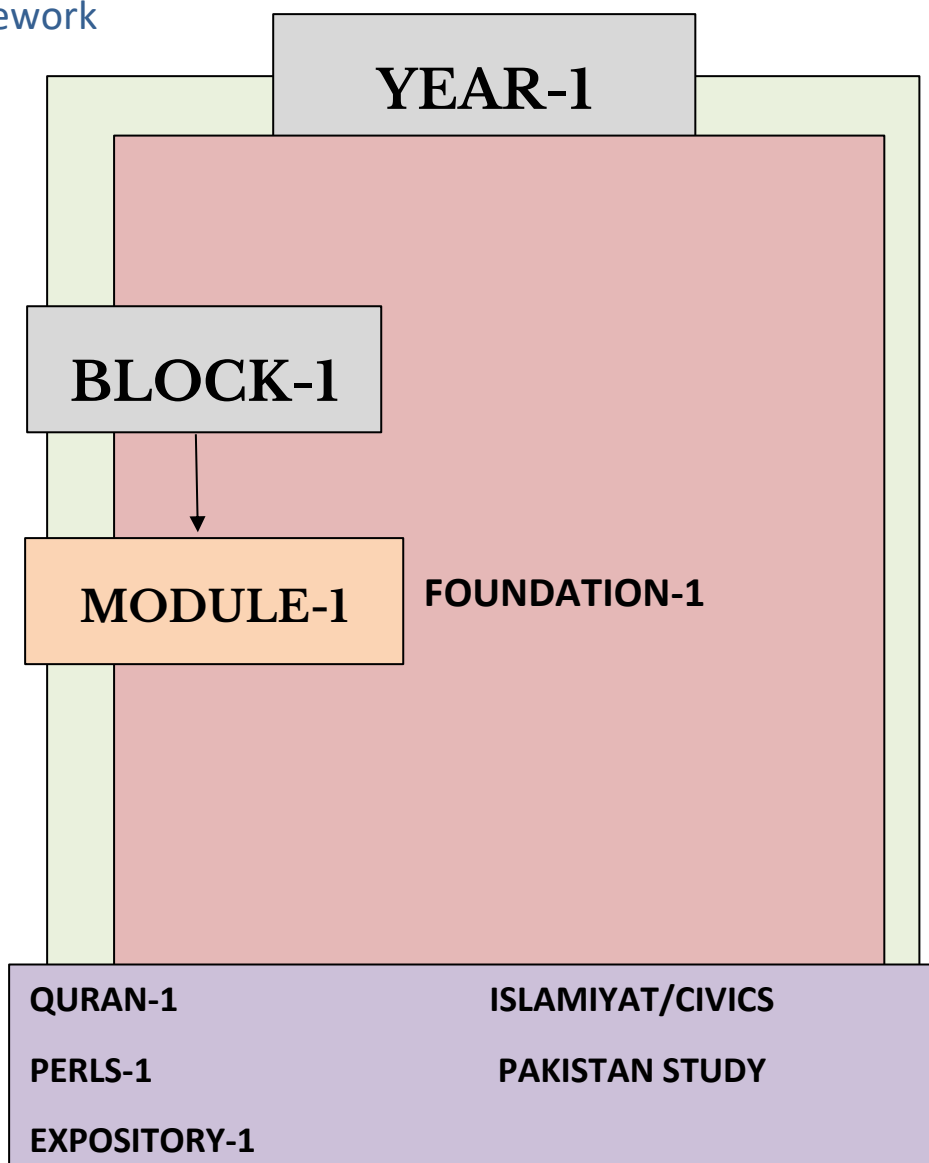
	DALY	Disability-Adjusted Life Year
	DCIS	Ductal Carcinoma in situ
	DCM	Dilated Cardiomyopathy Dorsal Colu
	DCMLS	Dorsal column medial lemniscus system
	DLC	Differential Leukocyte Count
	DMARDs	Disease Modifying Anti Rheumatic Drugs
	DNA	DeoxyRibonucleic Acid
	DOTS	Directly Observed Treatment Short-course
	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
	NSAIDs	Non-steroidal Anti-Inflammatory Drugs
O	O	Ophthalmology
	OA	Osteoarthritis

	OPC	Organophosphate
	OPV	Oral poliovirus vaccine
	Or	Orientation
	Orth	Orthopaedic
P	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

1. 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.

2. 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.

3. Subject Insight:

- Obtain a comprehensive overview of your courses, including detailed subject outlines, objectives, and departmental structures, to streamline your academic planning.

4. Curriculum Framework:

- Explore the curriculum framework, academic calendar, and schedules for clinical and community rotations, adhering to the structured guidelines of UHS & PMDC.

5. 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.

6. 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.

7. 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.

Seven Star Doctor

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.

1. Skillful / Care Provider.
2. Knowledgeable / Decision Maker.
3. Community Health Promoter / Community Leader.
4. Critical Thinker / Communicator
5. Professional / Lifelong learner.
6. Scholar / Researcher
7. Leader/ Role Model / Manager

Introduction to Module-1

- The Foundation 1 module 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	Assistant 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. Salar Arsalan	Demonstrator	Medical Education
Dr. Huma Fatima	Demonstrator	Medical Education
Mr. Adeel	Incharge	Student Affairs
Prof. Dr. Saeed Afzal	HOD	Pathology
Dr. Majid	Focal Person	Pathology
Prof. Dr. Asma Saeed	HOD	Pharmacology
Dr. Azka	Focal Person	Pharmacology
Prof. Dr. Rana Akhtar	HOD	Community Medicine
Dr. Usman Sheikh	Focal Person	Community Medicine
Prof. Dr. Zainab	HOD	Forensic Medicine
Dr. Anwar	Focal Person	Forensic Medicine
Prof. Dr. Hassan Khan	HOD	Surgery Unit-1
Prof. Dr. Khalid Nizami	HOD	Surgery Unit-2
Dr. Uzma	Focal Person	General Surgery
Prof. Dr. Muzammil	HOD	Medicine Unit-1
Prof. Dr. Waheed Ahmed	HOD	Medicine Unit-2
Dr. Usman	Focal Person	General Medicine
Dr. Usman Aslam	Focal Person	Psychiatry
Dr. Farhat Mihas	HOD	Behavioural Sciences
Dr. Mavrah Zafar	Focal Person	Paediatrics

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 Celander

Aricenna Medical & Dental College Calendar First year MBBS 2025- 2026																																	
	January 2026								February 2026								March 2026							SESSION START: 9th Gazetted									
	Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat										
					1	2	3	Orientation Week	1	2	3	4	5	6	7	Week-04	1	2	3	4	5	6	7		i - Kashmir								
	4	5	6	7	8	9	10	Week-01	8	9	10	11	12	13	14	Week-05	8	9	10	11	12	13	14		ii - Eid-ul-Fitr								
	11	12	13	14	15	16	17	Week-02	15	16	17	18	19	20	21	Spring Vacations	15	16	17	18	19	20	21		iii - Pakistan Day								
	18	19	20	21	22	23	24	Week-03	22	23	24	25	26	27	28	Week-06	22	23	24	25	26	27	28		iv - Labor								
	25	26	27	28	29	30	31									Week-07	29	30	31						v - Eid- Ul- Adha								
																									vi -								
	April 2026								May 2026								June 2026							vii - Ashura- 25th									
	Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat										
Week-07				1	2	3	4	Week-11						1	2	Week-15		1	2	3	4	5	6		viii -								
Week-08	5	6	7	8	9	10	11	Week-12	3	4	5	6	7	8	9	Week-16	7	8	9	10	11	12	13		ix - Milad un Nabi								
Week-09	12	13	14	15	16	17	18	Week-13	10	11	12	13	14	15	16	Week-17	14	15	16	17	18	19	20		x - Quaid-e-Azam								
Week-10	19	20	21	22	23	24	25	Week-14	17	18	19	20	21	22	23	Week-18	21	22	23	24	25	26	27		xi - Christmas								
Week-11	26	27	28	29	30			Eid Week	24	25	26	27	28	29	30	Week-19	28	29	30						xii - Vacations								
									31																Winter Vacations								
	July 2026								August 2026								September 2026							Events									
	Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat										
Week-19				1	2	3	4								1	Week-24				1	2	3	4	5		Annual Dinner							
Week-20	5	6	7	8	9	10	11	Summer Vacations	2	3	4	5	6	7	8	Week-25	6	7	8	9	10	11	12		White Coat								
Summer Vacations	12	13	14	15	16	17	18	Week-21	9	10	11	12	13	14	15	Week-26	13	14	15	16	17	18	19		Sports Week 2nd								
Summer Vacations	19	20	21	22	23	24	25	Week-22	16	17	18	19	20	21	22	Week-27	20	21	22	23	24	25	26		Sports Day 16th								
Summer Vacations	26	27	28	29	30	31		Week-23	23	24	25	26	27	28	29	Week-28	27	28	29	30					Wellness Week								
								Week-24	30	31															Module Exam								
	October 2026								November 2026								December 2026							Module 1 Exam - 13th April 2026									
	Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat		Sun	Mon	Tue	Wed	Thurs	Fri	Sat										
Week-28					1	2	3	Week-33	1	2	3	4	5	6	7	Week-37				1	2	3	4	5		Module 2 Exam - 6th June 2026							
Week-29	4	5	6	7	8	9	10	Week-34	8	9	10	11	12	13	14	Week-38	6	7	8	9	10	11	12		Module 3 Exam - 2nd July 2026								
Week-30	11	12	13	14	15	16	17	Week-35	15	16	17	18	19	20	21	Week-39	13	14	15	16	17	18	19		Module 4 Exam - 29th September 2026								
Week-31	18	19	20	21	22	23	24	Week-36	22	23	24	25	26	27	28	Week-40	20	21	22	23	24	25	26		Module 5 Exam - 4th Nov								
Week-32	25	26	27	28	29	30	31	Week-37	29	30						Winter Vacations	27	28	29	30	31				a-Block:1 Exam - 11th & 12th Nov								
																									b-Block:2 Exam - 7th & 8th								

Time Table:

AVICENNA MEDICAL & DENTAL COLLEGE

TIME TABLE WEEK-01		M-25 1st Year MBBS		SESSION 2025-2026				Theme:				
DATE	DAY							BLOCK # I		MODULE - 01		
9-Feb-26	Mon	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 12:00	12:00 - 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> General Anatomy Topic Introduction to General Anatomy Facilitator: Dr. Kanwal LECTURE HALL 2	<u>Lecture</u> Embryology Topic Cell division and Chromosomal abnormalities Facilitator: Prof. Dr. Nahid LECTURE HALL 2	<u>Lecture</u> Physiology Topic cell biology Facilitator: Prof: Dr Sadia Zafar LECTURE HALL 2	<u>Lecture</u> Biochemistry Topic: Structure of cell Facilitator: Prof Dr Sadia Amir LECTURE HALL 2	BREAK	<u>Lecture</u> PERL Topic: (Professionalism) Facilitator: Dr. Fatima Huma LECTURE HALL 2	<u>Clinical Skill</u> Batch A :Medicine History taking Batch B : Surgery History taking Batch C : Eye History taking Batch D : ENT History taking Batch E : Pediatrics History taking Batch F : Obstetrics & Gynecology History taking	English Expository Writing Topic: Introduction to Expository Writing Facilitator: Ms. Uzma Jawad LECTURE HALL 2	CFRC		
10-Feb-26	Tues	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 12:00		12:30-01:30	1:30-2:30	2:30 - 3:30		5:00 - 6:00	
		<u>Lecture</u> Physiology Topic cell biology Facilitator: Dr Benish LECTURE HALL 2	<u>Lecture</u> Biochemistry Topic: Cell Membrane Facilitator: Prof Dr Sadia Amir LECTURE HALL 2	<u>Lecture</u> General Anatomy Topic Introduction to General Anatomy Facilitator: Dr. Kanwal LECTURE HALL 2	<u>Lecture</u> Embryology Topic Cell division and Chromosomal abnormalities Facilitator Prof. Dr. Nahid LECTURE HALL 2		<u>Lecture</u> Behavioural Science Topic: Biological Basis of Behavior Facilitator: Dr Farhat LECTURE HALL 2	<u>Clinical Skill</u> Batch A :Medicine History taking Batch C : Surgery History taking Batch D : Eye History taking Batch E : ENT History taking Batch F : Pediatrics History taking Batch A : Obstetrics & Gynecology History taking	Computer Science Topic: Introduction to Computers and MS Word Basics Facilitator: Ms. Saba Bilal LECTURE HALL 2		CFRC	
11-Feb-26	Wed	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 12:00		12:30-01:30	1:30 - 2:30	2:30 - 3:30		5:00 - 6:00	
		<u>Lecture</u> Biochemistry Topic: Cell Membrane Facilitator: Prof Dr Sadia Amir LECTURE HALL 2	<u>Lecture</u> Histology Topic Introduction to microscopy & Basic staining technique Facilitator Dr. Shazia LECTURE HALL 2	<u>Lecture</u> Biochemistry Topic: Signal transduction Facilitator: Prof Dr Sadia Amir LECTURE HALL 2	<u>Lecture</u> Embryology Topic Gametogenesis Spermatogenesis Facilitator Prof. Dr. Nahid LECTURE HALL 2		<u>Lecture</u> Physiology Topic cell biology Facilitator Prof: Dr Shaheena LECTURE HALL 2	Practical Batch A : Histology BatchB :Biochemistry Batch :C Physiology	BREAK		CFRC	
12-Feb-26	Thur	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00-12:00		12:30-01:30	1:30 - 2:30			2:30 - 3:30	5:00 - 6:00
		<u>Lecture</u> General Anatomy Topic Bones (Osteology) Facilitator Dr. Kanwal LECTURE HALL 2	<u>Lecture</u> Physiology Topic cell biology Facilitator Prof: Dr Shaheena LECTURE HALL 2	<u>Lecture</u> Embryology Topic Gametogenesis Oogenesis Facilitator Prof. Dr. Nahid LECTURE HALL 2	<u>Lecture</u> Pathology Topic: Cell Injury Facilitator: Dr Munaza LECTURE HALL 2		<u>Lecture</u> Community Medicine Topic: Concept of Health and Disease Facilitator: Prof. Dr. Rana Akhtar Khan LECTURE HALL 2	Practical Batch B :Histology Batch C :Biochemistry Batch A:Physiology:			CFRC	
13-Feb-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> Biochemistry Topic: Signal transduction Facilitator: Prof Dr Sadia Amir LECTURE HALL 2	<u>Lecture</u> Histology Topic Cell membrane Facilitator Dr. Shazia LECTURE HALL 2	<u>Lecture</u> Physiology Topic cell biology Facilitator Dr Nida LECTURE HALL 2	Practical Batch A :Histology Batch A :Biochemistry Batch B :Physiology	JUMMA BREAK	<u>Lecture</u> Quran Topic: Oneness of Allah (SWT) (Tawheed) Facilitator: Ms. Amna Syed LECTURE HALL 2	CFRC				

AVICENNA MEDICAL & DENTAL COLLEGE											
TIME TABLE WEEK-02		M-25 1st Year MBBS		SESSION 2025-2026				Theme:			
DATE	DAY							BLOCK # I		MODULE - 01	
16-Feb-26	Mon	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 12:00	12:00 - 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 Topic: Signal Transduction Facilitator: Prof Dr Sadia Amir LECTURE HALL 2	<u>Lecture</u> Physiology Topic Cell biology Facilitator Dr Nida LECTURE HALL 2	<u>Lecture</u> Embryology Topic Female Reproductive Cycle Facilitator Prof. Dr. Nadia (Gynaec) LECTURE HALL 2	<u>Lecture</u> Community Medicine Topic:Positive health, Dimensions of Health and Determinants of Health Facilitator:Prof. Dr. Rana Akhtar Khan LECTURE HALL 2	BREAK	<u>Tutorial</u> Batch :A :Anatomy Batch :B :Biochemistry Batch :C :Physiology	<u>Clinical Skill</u> Batch:C :Medicine History taking Batch:D :Surgery History taking Batch:E :Eye History taking Batch:F :ENT History taking Batch: A :Pediatrics History taking Batch: B :Obstetrics & Gynecology History taking	<u>Lecture</u> PERL Topic (Professionalism) Facilitator: Dr. Fatima Huma LECTURE HALL 2	CFRC	
17-Feb-26	Tues	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 12:00		12:30-01:30	1:30-2:30	2:30 - 3:30		5:00 - 6:00
		<u>Lecture</u> General Anatomy Topic: Bones (Osteology) Facilitator: Dr. Kamal LECTURE HALL 2	<u>Lecture</u> Physiology Topic Cell biology Facilitator Dr komal LECTURE HALL 2	<u>Lecture</u> Embryology Topic: Transportation of gametes, Fertilization Facilitator Prof. Dr. Nahid LECTURE HALL 2	<u>Lecture</u> Behavioural Science Topic:Psychological Disorders Facilitator: Dr Farhat LECTURE HALL 2		<u>Tutorial</u> Batch :B :Anatomy Batch :C :Biochemistry Batch :A :Physiology	<u>Clinical Skill</u> Batch:D :Medicine History taking Batch:E :Surgery History taking Batch:F :Eye History taking Batch :A :ENT History taking Batch:B :Pediatrics History taking Batch:C :Obstetrics & Gynecology History taking	<u>Lecture</u> Quran Topic:Oneness of Allah (SWT) (Tawheed) Facilitator: Ms. Amna Syed LECTURE HALL 2		CFRC
18-Feb-26	Wed	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 12:00		12:30-01:30	1:30 - 2:30	2:30 - 3:30		5:00 - 6:00
		<u>Lecture</u> Physiology Topic Cell biology Facilitator Dr Tooba LECTURE HALL 2	<u>Lecture</u> Embryology Topic: Contraception Facilitator Prof. Dr. Nahid LECTURE HALL 2	<u>Lecture</u> Biochemistry Topic: Chemistry of purine and pyrimidines Facilitator: Prof Dr Haroon Habib LECTURE HALL 2	<u>Lecture</u> Histology Topic: Cell organelles Facilitator: Dr. Shazia LECTURE HALL 2		<u>Tutorial</u> Batch :C :Anatomy Batch :A :Biochemistry Batch :B :Physiology	<u>Practical</u> Batch :A :Anatomy Batch :B :Histology Batch :C :Physiology Batch :D :Biochemistry	BREAK		CFRC
19-Feb-26	Thur	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00-12:00	12:30-01:30	1:30 - 2:30	2:30 - 3:30	5:00 - 6:00		
		<u>Lecture</u> Histology Topic: Facilitator: LECTURE HALL 2	<u>Lecture</u> Biochemistry Topic: DNA (Deoxy Ribonucleic Acid) Facilitator: Prof Dr Haroon Habib LECTURE HALL 2	<u>Lecture</u> Physiology Topic Cell biology Facilitator Prof. Dr Shaheema LECTURE HALL 2	<u>Lecture</u> General Anatomy Topic: Cell nucleus Facilitator: Dr. Kamal LECTURE HALL 2	<u>Lecture</u> Pathology Topic: Cell Injury Facilitator: Dr Nadia LECTURE HALL 2	<u>Practical</u> Batch :B :Anatomy Batch :C :Histology Batch :A :Biochemistry Batch :D :Physiology"	CFRC			
20-Feb-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> Physiology Topic Cell biology Facilitator Prof. Dr Shaheema LECTURE HALL 2	<u>Lecture</u> Biochemistry Topic: RNA (Ribonucleic Acid) Facilitator: Prof Dr Haroon Habib LECTURE HALL 2	<u>Lecture</u> Embryology Topic Infertility & assisted reproductive techniques Facilitator Dr. Sana (Gynaec) LECTURE HALL 2	<u>Practical</u> Batch :C :Anatomy Batch :D :Histology Batch :A :Physiology Batch :B :Biochemistry"	JUMMA BREAK	<u>Lecture</u> Quran Topic: Prophethood (Risalat) Facilitator: Ms. Amna Syed LECTURE HALL 2	CFRC			

AVICENNA MEDICAL & DENTAL COLLEGE

TIME TABLE WEEK-03											
DATE		DAY		M-25 1st Year MBBS				SESSION 2025-2026			
								Theme:			
								BLOCK # I		MODULE - 01	
				08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 12:00	12:00 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30
23-Feb-26	Mon			Lecture Biochemistry Topic: RNA (Ribonucleic Acid) Facilitator: Prof Dr Haroon Habib	Lecture Physiology Topic: Cell biology Facilitator: Prof: Dr Sadia	Lecture Embryology Topic: Cleavage, blastocyst formation Facilitator: Prof. Dr. Nadia (Gynae)	Lecture Pathology Topic: Cell Injury Facilitator: Dr Munaza		Tutorial Anatomy Biochemistry Physiology	<u>Clinical Skill</u>	English Expository Writing Topic: Introduction to Expository Writing Facilitator: Ms. Uzma Jawad
24-Feb-26	Tues			Lecture General Anatomy Topic: Cartilage (Chondrology), Joints (Arthrology) Facilitator: Dr. Kamwal	Lecture Biochemistry Topic: Nucleotides, Chromosome Facilitator: Prof Dr Haroon Habib	Lecture Embryology Topic: Cleavage, blastocyst formation Facilitator: Prof. Dr. Nadia (Gynae)	Lecture Community Medicine Topic: Health Indicators -01 Facilitator: Prof. Dr. Rana Akhtar Khan		Tutorial Anatomy Biochemistry Physiology	<u>Clinical Skill</u>	Computer Science Topic: Introduction to Computers and MS Word Basics Facilitator:Ms. Saba Bilal
25-Feb-26	Wed			Lecture Physiology Topic: Cell biology Facilitator: Dr Nida	Lecture General Anatomy Topic: Joints (Arthrology) Facilitator: Dr. Kamwal	Lecture Embryology Topic: Gastrulation Facilitator: Prof. Dr. Nadia (Gynae)	Lecture Pathology Topic: Cell Injury Facilitator: Dr Munaza	BREAK	Tutorial Anatomy Biochemistry Physiology		Practical Histology Biochemistry Physiology
26-Feb-26	Thur			Lecture Histology Topic: Epithelium Facilitator: Dr. Shazia	Lecture Physiology Topic: Cell biology Facilitator: Prof: Dr Shaheena	Lecture General Anatomy Topic: Joints (Arthrology) Facilitator: Dr. Kamwal	Lecture Behavioural Science Topic: Psychology and Disease Facilitator: Dr Farhat		Lecture PERL Topic (Professionalism) Facilitator: Dr. Fatima Huma		Practical Histology Biochemistry Physiology
27-Feb-26	Fri			Lecture Biochemistry Topic: Enzymes Facilitator: Dr Sadia Khalil	Lecture Embryology Topic: Formation of notochord Facilitator: Prof. Dr. Nadia (Gynae)	Lecture Physiology Topic: Cell biology Facilitator: Prof: Dr Shaheena	Practical Histology Biochemistry Physiology		JUMMA BREAK		Lecture Pakistan Studies Topic: Pakistan movement Facilitator: Ms. Amna Syed

AVICENNA MEDICAL & DENTAL COLLEGE

TIME TABLE WEEK-04											
DATE		M-25 1st Year MBBS		SESSION 2025-2026				Theme:			
								BLOCK # I		MODULE - 01	
DATE	DAY	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 12:00	12:00 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30	3:30 - 5:00	5:00 - 6:00
2-Mar-26	Mon	Integrated Formative Assessment 01	Lecture Pathology Topic: Cell Injury Facilitator: Dr Munaza	Lecture Biochemistry Topic: Enzymes Facilitator: Dr Sadia Khalil	Lecture Embryology Topic: Derivatives of ectoderm Facilitator: Prof. Dr. Nahid	BREAK	Tutorial Anatomy Biochemistry Physiology	Clinical Skill	Lecture Quran Topic: Belief in Hereafter (Aakhirat) Facilitator: Ms. Amna Syed	BREAK	CFRC
3-Mar-26	Tues	Lecture General Anatomy Topic: Integumentary System Facilitator: Dr. Kamal	Lecture Biochemistry Topic: Enzymes Facilitator: Dr Sadia Khalil	Lecture Physiology Topic: Blood Facilitator: Prof. Dr. Shaheena	Lecture Pathology Topic: Cell Injury Facilitator: Dr Munaza		Tutorial Anatomy Biochemistry Physiology	Clinical Skill	Lecture PERL Topic: Ethics Facilitator: Dr. Fatima Huma		CFRC
4-Mar-26	Wed	Lecture Physiology Topic: Blood Facilitator: Dr Komal	Lecture Biochemistry Topic: Enzymes Facilitator: Dr Sadia Khalil	Lecture Embryology Topic: Mesodermal derivatives Facilitator: Prof. Dr. Nahid	Lecture Pharmacology Topic: PHARMACOKINETICS Facilitator: Dr.Asma		Tutorial Anatomy Biochemistry Physiology	Practical Anatomy Histology Pathology	Practical Anatomy Histology Physiology		CFRC
5-Mar-26	Thur	Lecture Histology Topic: Epithelium Facilitator: Dr. Shazia	Lecture Biochemistry Topic: Enzymes Facilitator: Dr Sadia Khalil	Lecture Physiology Topic: Red blood cells Facilitator: Prof. Dr. Sadia	Lecture Community Medicine Topic: Health Indicators -01 Facilitator: Prof. Dr. Rana Akhtar Khan		Lecture Behavioural Science Topic: Psychology and Disease Facilitator: Dr Farhat	Practical Anatomy Histology Pathology	Practical Anatomy Histology Physiology		CFRC
6-Mar-26	Fri	Lecture Biochemistry Topic: Enzymes Facilitator: Dr Sadia Khalil	Lecture Physiology Topic: red blood cells Facilitator: Prof. Dr. Shaheena	Lecture Embryology Topic: Mesodermal derivatives Facilitator: Prof. Dr. Nahid	Practical Anatomy Histology Pathology	Practical Anatomy Histology Physiology	JUMMA BREAK		Lecture Quran Topic: Belief in Hereafter (Aakhirat) Facilitator: Ms. Amna Syed		CFRC

AVICENNA MEDICAL & DENTAL COLLEGE											
TIME TABLE WEEK-05		M-25 1st Year MBBS		SESSION 2025-2026				Theme:			
DATE	DAY							BLOCK # I		MODULE - 01	
		08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 12:00	12:00 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30	3:30 - 5:00	5:00 - 6:00
9-Mar-26	Mon	Lecture Biochemistry Topic: Enzymes Facilitator: Prof Dr Haroon Habib	Lecture Physiology Topic Hemoglobin Prof: Prof: Dr Shaheena	Lecture Embryology Topic Early development of CVS, Folding of embryo, Germ layer derivatives Facilitator Prof. Dr. Nahid	Lecture Community Medicine Topic: Health Indicators -01 Facilitator: Prof. Dr. Rana Akhtar Khan	BREAK	Tutorial Anatomy Biochemistry Physiology	<u>Clinical Skill</u>	Computer Science Topic: Advanced Word Processing Techniques Facilitator:Ms. Saba Bilal	BREAK	CFRC
10-Mar-26	Tues	Lecture General Anatomy Topic: Muscle Tissue (Myology) Facilitator: Dr. Kanwal	Lecture Physiology Topic white blood cells Prof Dr shaheena	Lecture Pathology Topic: Introduction to Microorganisms Facilitator: Dr Hira	Lecture Pharmacology Topic Pharmacokinetics Facilitator Dr Azka		Tutorial Anatomy Biochemistry Physiology	<u>Clinical Skill</u>	English Expository Writing Topic: Importance of Clarity, Coherence, and Objectivity Facilitator: Ms. Uzma Jawad		CFRC
11-Mar-26	Wed	Lecture Physiology Topic white blood cells Facilitator Dr Benish	Lecture Embryology Topic Folding of Embryo Embryonic period Facilitator Prof. Dr. Nahid	Lecture Biochemistry Topic: Enzymes Facilitator: Prof Dr Haroon Habib	Lecture Pathology Topic: Introduction to Microorganisms Facilitator: Dr Hira		Tutorial Anatomy Biochemistry Physiology	Practical Histology Pharmacology Physiology	Practical Histology Biochemistry Physiology		CFRC
12-Mar-26	Thur	Lecture Histology Topic: Epithelium Facilitator: Dr. Shazia	Lecture Biochemistry Topic: Enzymes Facilitator: Dr Sadia Khalil	Lecture Physiology Topic white blood cells Facilitator Dr Nida	Lecture Behavioural Science Topic Palliative Care Facilitator: Dr Farhat		Lecture PERL Topic Leadership Facilitator: Dr. Fatima Huma	Practical Histology Pharmacology Physiology	Practical Histology Biochemistry Physiology		CFRC
13-Mar-26	Fri	Lecture Physiology Topic white blood cells Facilitator Dr Tooba	Lecture Biochemistry Topic: Amino Acids Facilitator: Dr. Yusra	Lecture Embryology Topic Fetal Period, Fetal status Facilitator Prof. Dr. Nahid	Practical Histology Pharmacology Physiology		Practical Histology Biochemistry Physiology	JUMMA BREAK	Lecture Quran Topic: Divine Revelations (Holy Books) Facilitator: Ms. Anna Syed		CFRC
AVICENNA MEDICAL & DENTAL COLLEGE											
TIME TABLE WEEK-06		M-25 1st Year MBBS		SESSION 2025-2026				Theme:			
DATE	DAY							BLOCK # I		MODULE - 01	
23-Mar-26	Mon	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 12:00	12:00 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30	3:30 - 5:00	5:00 - 6:00
PAKISTAN DAY HOLIDAY											
24-Mar-26	Tues	Lecture General Anatomy	Lecture Biochemistry	Lecture Embryology	Lecture Pathology	BREAK	Tutorial Anatomy Biochemistry Physiology	Practical Histology Biochemistry Physiology	Practical Histology Pathology Physiology	BREAK	CFRC
25-Mar-26	Wed	Lecture Physiology	Lecture Biochemistry	Lecture Embryology	Lecture Pharmacology		Tutorial Anatomy Biochemistry Physiology	Practical Histology Biochemistry Physiology	Practical Histology Pathology Physiology		CFRC
26-Mar-26	Thur	Lecture Histology	Lecture Physiology	Lecture Pathology	Lecture Behavioural Science		Tutorial Anatomy Biochemistry Physiology	Practical Histology Biochemistry Physiology	Practical Histology Pathology Physiology		CFRC
27-Mar-26	Fri	Lecture Biochemistry	Lecture Embryology	Lecture Community Medicine	Lecture PERL (Leadership)		Lecture Quran	JUMMA BREAK	Lecture Pakistan Studies		CFRC

AVICENNA MEDICAL & DENTAL COLLEGE											
TIME TABLE WEEK-07		M-25 1st Year MBBS		SESSION 2025-2026				Theme:			
DATE	DAY							BLOCK # I		MODULE - 01	
30-Mar-26	Mon	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 12:00	12:00 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30	3:30 - 5:00	5:00 - 6:00
		Integrated Formative Assessment 02	English Expository Writing	Lecture Pathology	Lecture Embryology	BREAK	Tutorial Anatomy Biochemistry Physiology	Clinical Skill	Computer Science	BREAK	CFRC
31-Mar-26	Tues	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 12:00		12:30-01:30	1:30-2:30	2:30 - 3:30		5:00 - 6:00
		Lecture General Anatomy	Lecture Physiology	Lecture Pathology	Lecture Community Medicine		Tutorial Anatomy Biochemistry Physiology	Clinical Skill	Lecture Quran		CFRC
1-Apr-26	Wed	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 12:00		12:30-01:30	1:30 - 2:30	2:30 - 3:30		5:00 - 6:00
		Lecture Physiology	Lecture Biochemistry	Lecture Embryology	Lecture Pharmacology		Tutorial Anatomy Biochemistry Physiology	Practical Anatomy Histology Pharmacology			CFRC
2-Apr-26	Thur	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00-12:00		12:30-01:30	1:30 - 2:30	2:30 - 3:30		5:00 - 6:00
		Lecture General Anatomy	Lecture Biochemistry	Lecture Physiology	Lecture Behavioural Science	Lecture PERL (Leadership)	Practical Anatomy Histology Pharmacology		CFRC		
3-Apr-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 Physiology	Lecture Embryology	Practical Anatomy Histology Pharmacology	JUMMA BREAK	Lecture Islamiyat		CFRC		
AVICENNA MEDICAL & DENTAL COLLEGE											
TIME TABLE WEEK-08		M-25 1st Year MBBS		SESSION 2025-2026				Theme:			
DATE	DAY							BLOCK # I		MODULE - 01	
6-Apr-26	Mon	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 12:00	12:00 - 12:30	12:30-01:30	1:30-2:30	2:30 - 3:30	3:30 - 5:00	5:00 - 6:00
		Allied Subjects Integrated Formative Assessment 01	Lecture Physiology	Lecture Biochemistry	Lecture Embryology	BREAK	Tutorial Anatomy Biochemistry Physiology	Clinical Skill	Tutorial Anatomy Biochemistry Physiology	BREAK	CFRC
7-Apr-26	Tues	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00 - 12:00		12:30-01:30	1:30-2:30	2:30 - 3:30		5:00 - 6:00
		Lecture Physiology	Lecture Biochemistry	Practical Histology Biochemistry Physiology			Tutorial Anatomy Biochemistry Physiology	Clinical Skill	Lecture PERL (Leadership)		CFRC
8-Apr-26	Wed	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00-12:00		12:30-01:30	1:30 - 2:30	2:30 - 3:30		5:00 - 6:00
		Lecture General Anatomy	Lecture Physiology	Lecture Embryology	Lecture Biochemistry		Lecture Behavioural Science	Practical Histology Biochemistry Physiology			CFRC
9-Apr-26	Thur	08:00 - 09:00	09:00 - 10:00	10:00-11:00	11:00-12:00		12:30-01:30	1:30 - 2:30	2:30 - 3:30		5:00 - 6:00
		Lecture Biochemistry	Lecture Histology	Lecture Physiology	Lecture General Anatomy	Lecture Community Medicine	Practical Histology Biochemistry Physiology		CFRC		
10-Apr-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
		WHITE COAT CEREMONY									

Allocation of Hours

AVICENNA MEDICAL COLLEGE, LAHORE

1ST YEAR MBBS

#	Anatomy			Biochemistry			Physiology			Path		Pharm		Bh.Sc.	C.M.	Clinical Lectures	PERL				Quran	Islamiyat	Pak Std	Clinical Skills	Clinical Rotation	Comp. Sc.	EEW	Sports	Exam	Total	
	Lec	Tut	Prac	Lec	Tut	Prac	Lec	Tut	Prac	Lec	Prac	Lec	Prac				Prof	Ethics	Research	Lead											
1	9		2	5		2	5		2	1				1	1		1				1			2	5	1	1			39	
2	8	1	4	4	1	1	5	1	1	1				1	1		1				2			2	5					39	
3	8	1	2	3	1	2	4	1	2	2				1	1		1					1	2	5	1	1				39	
4	5	1	4	5	1		4	1	1	2	1	1		1	1			1			2			2	5			1		39	
5	5	1	2	4	1	1	5	1	2	2		1	1	1	1					1	1		2	5	1	1				39	
6	5	1	2	3	1	1	2	1	2	2	1	1		1	1					1	1	1		4						31	
7	5	1	4	3	1		4	1		2		1	2	1	1					1	1	1	2	5	1	1		1		39	
8	5	1	2	4	1	2	4	1	2					1	1					1			2	4				1		32	
9	1		2	7			2	6		2	2			1	1					1	1	1		5					7	39	
10	2		2	9			2	8		2	2		1		1	1			1		1	1	1	5						39	
11			2	4			2	6		2	1		1		1				1				1	4					7	32	
12	11		1	3			1	3		1				1	2		1							5					10	39	
13	14	1	2	3	1	1	3	1	1	1				1	2			1					2	5						39	
14	16	1	2	3	1	1	3	1		1			1	1	2					1				5						39	
15	17	1	2	3	1		2	1		1	1	1	1		2					1				5						39	
16	15	1	1	2	1	1	2	1		1	1	1	1		2				1				2	5				1		39	
17	16	4		2	2		3	2		1		1			2				1					5						39	
18	8	2		2	2		3	2		1		1												3						24	
19	6	4		3	2		3	2		1					2	3							2	5				6		39	
20	3	1	1	3	1	1	6	1	1					1						1		1	1	5	2	1		10		39	
21	3	1	1	3	1	1	8	1	1					1	1		2				1	1	2	4						32	
22	3	1	1	2	1	1	9	1	1	2		1		2				1			2	1	1	2	5	1	1			39	
23	2	1	1	2	1	1	6	1	1	2		1			2					2	2	1	1	4						31	
24	3	1	1	2	1	1	9	1	1	1		1			2					1	1	1	2	5	1	1		1		39	
25	2	1	2	2	1	2	6	1	2	2	2	1			2					2	2	1	2	5	1					39	
26	3	1	2	1	1	2	8	1	2	1			2		1				1		2	1	2	5	1	1		1		39	
27	5	1	1	2	1	1	9	1	1	1		1			1					1	1	2	2	5	1	1		1		39	
28	5			2			7			2		1		2	2			1						5				5	7	39	
29	5	1	1	2	1	1	9	1	1	1		1		1	1			1					2	5				5		39	
30	3	1	1	1	1	1	7	1	1	1		1			1		1						2	4				11	1	39	
31	6	1	2	3	1	2	7	1	2	1		1			1						1		2	5	1			1	1	39	
32	6	1	2	2	1	2	8	1	2	1		1		1	1						1		2	5	1			1		39	
33	3	1		1	1		2	1									1		1				2	4				3	10	31	
34																													20	20	
35																													20	20	
36																													20	20	
37																													20	20	
38	208	34	52	100	30	35	176	30	36	39	6	20	8	19	42	3	8	6	5	12	22	12	12	42	156	13	9	26	146	1307	
39	AL	AT	AP	BL	BT	BP	PL	PT	PP	PtL	PtP	PhL	PhP	Bh.Sc.	C.M.	Clin Lec	Prof	Ethics	Research	Lead	Quran	Isl	PS	Clin Sk	Clin Rota	CS	EEW	Sports	Exam	1161	
40	242	52		130	35		206	36		45		28							31											66	
41	294			165			242																								1227

Module Outcome

MODULE OUTCOMES

- 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.

Learning Objectives

THEORY			
DAY-01			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 01+02+04	
		DISCIPLINE	TOPIC

F-Or-001	Analyze the societal expectations, impact and role of physicians. Meet with doctors in various leadership roles to gain insights into the multifaceted responsibilities in the medical field. Define and explain the concept of a "Seven-Star Doctor."	Foundation orientation	Understanding the Medical Profession and the Physician's Role
F-Or-002	Comprehend the values and mission of the institution. Familiarize themselves with the college campus, its facilities (educational psychologist, career counseling, and research department etc.), faculty, and administrative framework. Comprehend the medical facilities available to the student.	Foundation orientation	Exploring the Academic Environment

F-Or-003	Examine and differentiate various teaching methodologies, assessing their applicability and effectiveness. Develop and maintain professional portfolios and logbooks to reflect on their educational progression. Understand the assessment strategies of the program, considering their types and influence on learning. Practice the PBL (Problem Based Learning) mock to understand its process, including problem identification, teamwork, research, and presentation skills.	Foundation orientation	Acquainting with the MBBS Program
DAY-02			
CODE		TOTAL HOURS = 02+05	
		DISCIPLINE	TOPIC

	SPECIFIC LEARNING OUTCOMES		
F-Or-004	Describe and understand the structure of Pakistan's Healthcare System (primary, secondary, and tertiary), recognizing the roles of different sectors and key health policies. Identify and comprehend cultural and ethical aspects unique to the Pakistani Healthcare context. Describe the principles of family practice within the Healthcare System.	Foundation orientation	Delving into the Healthcare System and Delivery

F-Or-005	Use the IT and library facilities such as eBooks', Year planners, access to scientific journals etc. Effectively use the university's learning management system and other online educational tools. Demonstrate proficiency in essential academic software tools such as Microsoft office such as (word, spreadsheets, and presentation software. Recognize and adhere to ethical practices in the use of digital resources, focusing on digital literacy and academic integrity.	Foundation orientation	Integrating Information Technology in Learning
DAY-03			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 05+04	
		DISCIPLINE	TOPIC

F-Or-006	Articulate the structure and requirements of their MBBS program, including core and elective subjects. Understand the significance of interdisciplinary studies and the interconnection of various courses. Identify opportunities for experiential learning, research, and career advancement within the curriculum.	Foundation orientation	Understanding the Curriculum Structure
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F-Or-007	Apply various metacognition strategies for learning. Apply digital tools effectively to organize and synthesize information for their academic projects. Create a personal action plan integrating stress management techniques and personal development strategies to enhance their academic and personal life.	Foundation orientation	Self-Directed Learning
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NORMAL STRUCTURE			
GROSS ANATOMY			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 15	
		DISCIPLINE	TOPIC

F-A-001	Briefly describe the applied branches of anatomy Describe the "Anatomical Position" Describe the anatomical planes of body. Describe the terms of relationship, commonly used in Anatomy. Describe the anatomical terms used specifically for Limbs. Describe the terms related to movements.	General Anatomy	Introduction to General Anatomy
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F-A-002	Describe, identify, and exemplify the general morphological features of bones. Describe the developmental classification of bones. Describe the regional classification of bones. Describe the morphological classification of bones. Describe and exemplify Sesamoid, Pneumatic, Wormian and Heterotopic bones. Describe the general features of adult typical long bone. Describe the types of epiphyses Discuss the general concept of ossification (primary and secondary centers and rule of ossification) Describe the relationship of growing end of bones with the direction of nutrient foramen Describe the blood supply of various types of bones	General Anatomy	Bones (Osteology)
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	Describe the salient features of common types of fractures and basic concept of healing of fracture.		
F-A-003	Describe the general features of cartilage and its importance in gross anatomy.	General Anatomy	Cartilage (Chondrology)
	Describe the subtypes and gross features of Hyaline, elastic and fibro Cartilage. Differentiate the three types of cartilages		

F-A-004	Describe and exemplify the structural classification of Joints (synovial, cartilaginous & fibrous) along with their sub-classification. Describe the components and characteristic features of a Synovial Joints. Describe the blood supply, innervation of Synovial Joints, cartilaginous joints, and fibrous joints. List the factors stabilizing a synovial joint. Define common joint injuries and diseases	General Anatomy	Joints (Arthrology)
F-A-005	Describe the structure and function of Skin on the basis of its two layers; Epidermis and Dermis Describe the structure of Hair as an appendage of skin. Describe the structure of Nail as an appendage of skin. Describe the structure of Sweat and Sebaceous Glands Describe the structure and function of Superficial Fascia	General Anatomy	Integumentary System

	Describe the structure, function, and modifications of Deep Fascia Describe important clinical correlates of skin (skin infections, sebaceous cyst, skin burns and skin grafting)		
	Classify and describe Muscle Tissue based on Structure, Function and Development Describe Somatic and Visceral Muscles Describe and differentiate the Red and White Variety of Skeletal Muscles	General Anatomy	

F-A-006	Classify and describe the skeletal muscles based on architecture. Classify skeletal muscle based on action. Describe the parts of a skeletal muscle. Describe and differentiate the basic organization of innervation to skeletal, smooth, and cardiac muscle. Describe the structure of Synovial Bursae Comprehend the meaning of Hypertrophy, Hemiplegia, quadriplegia, paraplegia, hemiparesis	General Anatomy	Muscle Tissue (Myology)
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F-A-007	Classify the types of blood circulation. Classify and exemplify various types of blood vessels. Describe and exemplify various types of anastomoses. Explain the importance of End Arteries Describe the general organization of Lymphatic Circulation Define the terms: Lymphoid Tissue, Tissue Fluid, Lymphatic, Capillaries, Lymph and Lymphatic Vessels Define the terms; Lymphangitis, Lymphadenitis.	General Anatomy	Vascular System (Angiology)
	Define neuron. Describe the anatomical structure of a neuron. Classify neurons based on morphology with examples.	General Anatomy	
	Classify neurons based on function. Describe the components of the central nervous system. Describe the components of the peripheral nervous system. Name the supporting cells (neuroglia) of the central		

F-A-008	nervous system. Describe the structure and functions of the neuroglia of the central nervous system. Enumerate the supporting cells (neuroglia) of the peripheral nervous system. Describe the structure and functions of the neuroglia of the peripheral nervous system. Enlist the cranial nerves I to XII Describe the types of nerve fibers carried by and distribution of the cranial nerves. Describe the formation, types of modalities carried by, and distribution of the spinal nerves. Explain Dermatome (s) Explain Myotome (s) Describe the formation of Plexuses. Differentiate between Somatic and Visceral nervous system. Define Receptors Describe the functions of receptors.	General Anatomy	Nervous Tissue (Neurology)
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	Classify sensory receptors based on modality (with location) Define Effectors Describe the functions of effectors. Describe ANS (Autonomic Nervous System) and differentiate between sympathetic and parasympathetic nervous system		
F-A-009	Identify displacement of fracture segments of the bone Identify dislocation of joints	Integrate with Radiology	Imaging in Anatomy
CODE	EMBRYOLOGY & POST-NATAL DEVELOPMENT	TOTAL HOURS = 25	
	SPECIFIC LEARNING OUTCOMES	DISCIPLINE	TOPIC

F-A-010	Define Chromosome Theory of inheritance Enlist different stages of Mitosis and Meiosis Compare and contrast Mitosis and Meiosis Enlist the numerical chromosomal anomalies Describe the anatomical basis for numerical chromosomal abnormalities. Describe the clinical presentation of numerical chromosomal abnormalities & justify them embryologically Describe the clinical presentation of structural chromosomal abnormalities and justify them embryologically. Describe the embryological basis for mosaicism Describe the embryological basis for teratoma Describe Concept of Gene Mutation. Enlist common diagnostic techniques for identifying genetic abnormalities.	Embryology	Cell division and Chromosomal abnormalities
F-A-011	Describe the Process of spermatogenesis and spermiogenesis Describe the embryological basis for Abnormal	Embryology	Gametogenesis Spermatogenesis

	gametes		
F-A-012	Describe the Prenatal and postnatal maturation of oocyte	Integrate with Gynecology	Gametogenesis Oogenesis

F-A-013	Describe the significance of arrested development of oocyte	Embryology	Gametogenesis is Oogenesis
F-A-014	Compare and contrast oogenesis and spermatogenesis		Gametogenesis
F-A-015	Describe the hormonal control of female reproductive cycles Enumerate and describe the steps of the ovarian cycle Describe the process of ovulation Describe the formation, function and fate of corpus luteum Define Mittelschmerz pain Define menstrual cycle Describe the phases of menstrual cycle	Integrate with Gynecology	Female Reproductive Cycle
F-A-016	Describe the transportation of Oocyte		Transportation of gametes

16			
F-017	Describe Capacitation & Acrosomal Reaction Define fertilization Describe the phases of fertilization Draw and label a diagram illustrating the phases of fertilization Enumerate and describe the results of fertilization	Embryology	Fertilization
F-018	Define contraception Explain the mechanisms of following contraceptive techniques: 1. Barrier methods 2. Hormonal methods 3. Intrauterine device (IUD) 4. Emergency contraceptive pills (ECPs) 1. Male and female sterilization	Integrate with physiology	Contraception
F-019	Describe the anatomical and physiological basis of male and female infertility Define assisted reproductive techniques Describe the mechanisms of In vitro fertilization (IVF) & embryo transfer Explain the correlation of multiple births with assisted reproductive techniques	Integrate with Gynecology	Infertility & assisted reproductive techniques

F-A-020	Describe the process of cleavage of embryo and blastocyst formation Describe the origin and uses of embryonic stem cells and the techniques of obtaining these cells from the embryo (reproductive cloning & therapeutic cloning) Explain the embryological basis of spontaneous abortion.	Embryology	Cleavage, blastocyst formation
	Compare and contrast the villi.	Integrate with Gynaecology	
	Describe the process of Compaction. Describe the Formation of morula (division into inner and outer cell mass)	Embryology	
F-A-021	Describe the Uterus at the time of implantation (decidua reaction) Illustrate the concept of Implantation. Describe the Abnormal implantation/ extra uterine implantations. Define the Molar pregnancy. Describe the formation of amniotic cavity, embryonic disc, and umbilical vesicle Describe the formation of chorionic sac.	Embryology	Implantation Week 2 of Development
F-A-022	Describe the Establishment of uteroplacental circulation.		Utero-Placental circulation

F-A-023	Describe the Formation & fate of primitive streak. Draw a concept map highlighting the sequence of events responsible for transformation of bilaminar germ disc into trilaminar germ disc. Describe the embryology behind sacrococcygeal teratoma and justify its clinical picture.	Embryology Integrate with Gynaecology	Gastrulation
F-A-024	Describe the Invagination and movement of prenotochordal cells Describe the Notochordal plate formation Describe the Neuroenteric canal formation Describe the fate of the notochord Describe the Establishment of body axis	Embryology	Formation of notochord

	Draw and label the fate map establishment Describe the Fate map establishment.		
	Describe the role of notochord as an inducer Describe the embryological basis for situs inversus, Sirenomelia, holoprosencephaly Describe the development of trophoblast and chorionic villi during 3rd week of development		

F-A-025	Describe the Formation of neural tube from neural plate. Justify embryologically the clinical picture seen in various neural tube defects Describe the process of Migration of neural crest cells Enlist the Derivatives of neural tube and describe the fate of each Enlist the Derivatives of neural crest cells Enlist the ectodermal derivatives Describe important Neural tube defects	Embryology	Derivatives of ectoderm
F-A-026	Describe the Differentiation of mesoderm into its constituting components Describe the Somite formation and its fate Describe the Estimation of age by somites Describe the formation of intra-embryonic coelom	Integrate with pediatrics	Mesodermal derivatives
F-A-027	Describe the processes of vasculogenesis & angiogenesis Explain the features of primordial cardiovascular system Describe the anatomical justification for Capillary hemangiomas	Integrate with Cardiology	Early development of CVS
F-A-028	Describe the Cephalo-caudal folding Describe the Lateral folding	Integrate with Gynaecology	Folding of embryo
F-A-029	Enlist the derivatives of germ layers Enlist and Describe the Derivatives of intermediate and	Embryology	Germ layer

	lateral plate mesoderm Enlist & Describe the Derivatives of endoderm		derivatives
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	Enlist & describe the derivatives of ectoderm	Integrate with Gynaecology/ Pediatrics	
F-A-030	Enlist the characteristic features of the embryo during 2nd month Describe the criteria for estimating the developmental staging in human embryos Explain the estimation of gestational & embryonic age	Embryology	Folding of Embryonic period
F-A-031	Explain the measurement and characteristics of fetus/Key events during Embryonic Period. Describe the Overview of External appearance of fetus during fetal period. Enlist developmental horizons during fetal life event. Describe Viability of fetuses and low birth weight babies Explain the factors influencing fetal growth Describe the clinical problems encountered by babies born with IUGR (Intra Uterine Growth Restriction)		Fetal Period

F-A-032	Tabulate the criteria for estimating fertilization age during the fetal period Describe the procedures for assessing fetal status Describe the clinical picture of IUGR & factors resulting in IUGR (Intra Uterine Growth Restriction) Define Pre-eclampsia	Integrate with Gynaecology	Fetal Status
F-A-033	List the fetal membranes Describe the macroscopic & microscopic features of Decidua Enlist the various parts of decidua Functionally correlate the parts of the decidua with its structure Describe the Changes in the trophoblast leading to the development of placenta Describe the Structure (macroscopic & microscopic) of placenta	Integrate with Gynaecology	Placenta
	Enlist & correlate the Functions of placenta with its structure		

	Describe the Microscopic anatomy of Placental membrane Describe the Placental circulation (fetal & maternal) Embryologically justify the hemolytic disease of the neonate (Erythroblastosis fetalis) Describe the functions of placenta		
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F-A-034	Describe the Formation & fate of Umbilical cord Describe the Cord abnormalities Justify embryologically the clinical features observed in Absence of umbilical artery Describe the formation and circulation of Amniotic fluid Describe the Procedure of diagnostic amniocentesis Explain the significance of amniotic fluid Describe the factors responsible for Polyhydramnios and oligohydramnios Describe the consequences of oligohydramnios and polyhydramnios Define Amniotic Bands Explain the formation and fate of umbilical vesicle (yolk sac) Define Physiological Umbilical Hernia	Integrate with Gynecology	Fetal membranes
F-A-035	Describe the development of Dizygotic twins Describe the development of Monozygotic twins Describe the fetal membranes in twin pregnancy Describe Fetus Papyraceous Explain the zygosity of the twins Describe the characteristics of various types of conjoined monozygotic twins		Multiple pregnancies

F-A-036	Define preterm Birth Describe parturition & three stages of Labor. Describe the Various methods of prenatal diagnosis Describe the Fetal therapy Describe Maternal serum Screening Corelate levels of Alpha fetoprotein levels and fetal anomalies Describe stem cell transplantation and gene therapy	Embryology	Prenatal diagnosis and fetal therapy
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F-A-037	Define teratology and causes of birth defects Define genomic imprinting Define human disorders associated with genetic mutations Describe birth defects caused by genetic factors: numerical and structural anomalies Define and enlist the teratogens Describe the role of following in causing teratogenicity in humans: 1. Drugs 2. Environmental agents 3. Chemicals & heavy metals 4. Infectious agents 5. Radiation 6. Hormones 7. Maternal diseases		Teratogenicity
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	Describe the basis for male-mediated teratogens Describe prevention of birth defects		
CODE	AtV3Tjmi4YmpJFX9aS sFAv6G WMSz2y yPua4aJ PhTE3p R	TOTAL HOURS = 08	
	SPECIFIC LEARNING OBJECTIVES	DISCIPLINE	TOPIC
F-A-038	Describe different types of microscopies Describe Staining methods and their significance	Basic technique in Histology	Introduct ion to microsco py & Basic staining technique

F-A-039	Describe the electron microscopic structure and fluid mosaic model of plasma membrane Draw the fluid mosaic model of plasma membrane Describe the structure of glycocalyx coat and lipid raft and correlate it with function Describe different types of membrane proteins and their functions	Basic Histology	Cell membrane
	Explain different modes of transport across the cell membrane	Integrate with Pathology	

	List the membranous and non- membranous cellular organelles Describe the structure of the following cellular organelles and correlate with their function: 1. Ribosomes 2. Endoplasmic reticulum (rough & smooth) 3. Golgi apparatus 4. Lysosomes 5. Proteasomes 6. Mitochondria 1. Peroxisomes		Cell orga
	Describe the structural components of cytoskeleton, and correlate them with their functions Explain the histological basis of immotile cilia syndrome		

F-A-040	Describe the histological features of cytoplasmic inclusions	Integrate with Pathology	
	Describe the structure of nuclear envelope and nuclear pores	Integrate with Physiology	
F-A-041	Describe the structure of chromatin Describe the structure of chromosome Describe the structure of nucleolus Describe the structure and types of DNA (Deoxy Ribonucleic Acid) and RNA (Ribonucleic Acid) Describe the histological basis for apoptosis and necrosis	Histology	Cell nucleolus
	Describe structure of different types of cell junctions	Integrate with Pathology	
	Describe the cell cycle & cell division Define important clinicopathological terms: Atresia, Hypertrophy, Atrophy, Hyperplasia, Metaplasia, Anaplasia, Neoplasia, Inflammation, Metastasis		
F-A-042	Describe the histological structure and function of basement membrane (light and electron)	Histology	Epithelium

	Draw and label a diagram illustrating the electron microscopic structure of basement membrane Describe the basal surface modifications of epithelia Describe the electron microscopic structure and functions of intercellular junctions (lateral surface modifications) and give their locations		
	Describe the Biochemical composition of the basolateral modifications		
	Describe the electron microscopic structure & functions of the following apical cell surface specializations: 1. Microvilli 2. Stereocilia 1. Cilia	Integrate with Biochemistry	
	Classify and exemplify the epithelia with their histological structure, locations and functions	Integrate with Pathology	

	Describe the structure of exocrine glands Explain the mechanism of transport across the epithelia Describe the classification of exocrine glands on the basis of: 1. Shape of secretory portions and ducts 2. Mode of secretion 1. Type of secretion	Histology	
F-A-043	Describe the composition and list the constituents of connective tissue Classify the connective tissue with examples Describe the composition of ground substance of connective tissue Describe the composition, distribution, and function of glycosaminoglycans in connective tissue	Histology	Connective tissue

	Describe connective tissue fibers, cells. Define Fibrosis		
	Describe the structure, distribution, and functions of the cells of macrophage mononuclear phagocytic system	Integrate with Biochemistry/ Physiology	

	Describe the role of macrophages in innate immunity & formation of foreign body Giant cell Describe the structure & functions of Mast cells. Role of Mast cells in immediate hypersensitivity reactions. Describe structure of Plasma cells and their role in antibody formation.		
	Describe the types of adipose tissue (white & brown), their histogenesis, locations and function	Histology	

	Describe lipid storage and mobilization in and from adipocytes and compare the brown and white adipose tissue	Integrate with Pathology	
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NORMAL FUNCTION			
MEDICAL PHYSIOLOGY			
CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 40	
		DISCIPLINE	TOPIC
	Define Homeostasis Explain control system of body by giving examples Differentiate between Extracellular and Intracellular Fluids Explain the positive and negative feedback mechanisms with examples Explain the significance of feed forward/ adaptive control/delayed negative feedback mechanisms		

	Define normal body temperature, mechanism of heat production and heat loss. Describe regulation of body temperature (role of hypothalamus) Explain abnormalities of body temperature regulation.		
F-P-001	Explain the structure of cell membrane Enlist the types of cell membrane proteins Enumerate the functions of membrane proteins Define and enumerate the functions of cell Glycocalyx	Medical Physiology	Cell Biology

	Enlist membranous and non-membranous organelles Enlist the self-replicative organelles Differentiate between the functions of smooth and rough endoplasmic reticulum Explain the functions of Golgi apparatus Enlist the enzymes of lysosomes Explain the functions of lysosomes Enlist the enzymes of peroxisomes Explain the functions of peroxisomes		
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	Enumerate the components and functions of cytoskeleton Define and enlist types of endocytosis Explain the mechanism of pinocytosis Classify different transport mechanisms Compare the composition of Na (Sodium), K (Potassium) and Cl (Chloride) in extracellular and intracellular fluid Define and enlist different types of diffusion Explain the process of facilitated diffusion with the aid of diagram Define and classify different types of active transport Describe primary and secondary active transport with examples Explain voltage and ligand gated channels with examples		
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	Name Na, K channel Blockers. Discuss functions and significance of Na/K ATPase pump.		
F-P-002	Enumerate the functions of blood Explain the composition of blood Enumerate the plasma proteins		Blood
	Discuss functions of plasma proteins Describe the pathophysiology of edema		

F-P-003	Discuss the characteristics of red blood cells Explain different types of Bone marrows Enumerate the different sites of erythropoiesis at different ages Explain the stages of erythropoiesis Enumerate factors that regulate erythropoiesis Discuss the site and role of erythropoietin in red blood cell production Explain the significance of vitamin B12 and folic acid in maturation of red blood cell	Medical Physiology	Red Blood Cells
F-P-004	Enumerate the types of normal hemoglobin in different ages of life	Medical Physiology	Hemoglobin

	Explain the role of Iron in Hemoglobin formation. Define blood indices, give their normal values & enumerate the conditions in which these values are disturbed (corelate with anemias). Enlist the abnormal types of hemoglobin		
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F-P-005	Enumerate the types of white blood cells Describe the characteristics and functions of Neutrophils Explain the process of defense against invading agent by neutrophils Define leukocytosis and leukopenia Explain the effects of leukemia on body Explain the process of defense against invading agent by macrophages Discuss different lines of defense during inflammation Explain the functions of neutrophils and macrophages in spread of inflammation (walling off effect) Define the Reticuloendothelial system Enlist the different components of	Medical Physiology	White Blood Cells
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	Reticuloendothelial system Explain the characteristics and functions of basophils Explain the characteristics and functions of eosinophils and enlist conditions in which these cells are raised.		
F-P-006	Enumerate different blood group types. Explain the basis of ABO and Rh blood system Explain the Landsteiner law	Medical Physiology	Blood Types

MEDICAL BIOCHEMISTRY			
CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 36	
		DISCIPLINE	TOPIC
F-B-001	Explain the concept of organization of cells to tissue, tissues to organ, organs to system. Differentiate between the eukaryotic and prokaryotic cells.		Structure of cell

F-B-002	Describe the composition and structure of cell on biochemical basis and justify it as fluid mosaic model. Describe the structure and function of cell membrane with particular reference to the role of 1. Lipids 2. Carbohydrates 3. Proteins Explain why the cell membrane is called fluid mosaic model		Cell Membrane
F-B-003	Discuss the various ways of cell- to-cell communication and to the environment. Describe cell to cell communications. Cell signaling pathways (only G protein signaling I e. Gs, Gi and Gq) Describe cell to cell adhesion.	Biochemistry Cell Biology	Signal transduction

F-B-004	Explain the biochemical markers and importance of subcellular organelles and their inherited disorders especially: 1. I cell disease 2. Refsum disease 3. Parkinsonism 1. Progeria		Subcellular organelles
F-B-005	Describe the chemistry of purines and pyrimidines and their linkage in nucleic acid synthesis.		Chemistry of purine and pyrimidines
F-B-006	Discuss the organization of DNA with special reference to Watson and crick model, composition, structure, role of Pairing		DNA (Deoxy Ribonucleic Acid)

	Describe the structural forms of DNA		
F-B-007	Discuss the structure of different types of RNAs with special reference to composition, linkage, functions of RNA, micro-RNA	Biochemistry Cell Biology	RNA (Ribonucleic Acid)

	Illustrate the structure and functions of various types of RNAs Describe the functions of various small RNAs present in cell		
F-B-008	Explain the structure and nomenclature of nucleotides, biomedical importance of natural and synthetic analogues	Biochemistry Cell Biology	Nucleotides
F-B-009	Explain the higher organization of DNA. Difference between DNA, chromatid and chromosome		Chromosome
	Describe enzymes with reference to: 1. Active sites 2. Specificity 3. Catalytic efficiency 4. Cofactor 5. Coenzyme 6. Holoenzyme 7. Apoenzyme 8. Prosthetic group 9. Zymogens 1. Location		

F-B-010	Classify enzymes according to the reaction they catalyze and their nomenclature		Enzymes
	Explain the mechanism of enzyme action from reactants to products (catalysis).		

	Discuss the effect of various factors on enzymatic activity: 1. Substrate concentration 2. Temperature 3. PH 1. Enzyme concentration		
	Explain the regulation of enzymatic activity (Michaelis Menten and Line weaver Burk's equation). Discuss inhibitors of enzymatic activity (with special reference to K_m/V_{max}) 1. Competitive		

	2. Non competitive 1. Uncompetitive	Biochemistry Cell Biology	
	Explain the application of enzyme in clinical diagnosis and therapeutic use		
F-B-011	Classify amino acids based on polarity, nutritional importance and glucogenic/Ketogenic properties		Amino acids
	Explain the structure, physical, chemical properties of amino acids and their biomedical importance		
	Classify proteins on the basis of functions, solubility and physicochemical		

F-B-012	properties and their biomedical importance.		Protein
	Explain the structural levels of proteins 1. Differentiate between alpha helix and beta pleated protein structures 1. Identify bonding at different levels of proteins		

	Describe the role of chaperons in protein folding 1. Interpret disorders related to protein misfolding on basis of given data 1. Describe the biochemical basis of Alzheimer's disease/ prion disease		
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F-B-013	Classify and explain the bio-chemical role of each class of plasma proteins		Plasma proteins
F-B-014	Explain the structure and biochemical role of immunoglobulins 1. Describe the production, structure and functions of B cells, plasma cells, and antibodies (IgA, IgD, IgE, IgG, and IgM). 2. Discuss the functions of the cytokines (Interleukins (ILs), Tumor Necrosis Factor (TNFs), IFs, Platelet derived growth factor (PDGF), and Platelet activating factor (PAF)). 3. Interpret multiple myeloma on basis of given data	Biochemistry Cell Biology	Immunoglobulins

PATHOLOGY			
CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 6+6=12	
		DISCIPLINE	TOPIC
F-Pa-001	Discuss the significance of pathology. Discuss the causes of cell injury. Identify the types of cell injury. Describe the mechanism of cell injury. Identify the types of cell death. Define necrosis and apoptosis.	General Pathology	Cell Injury

	Describe different types of necrosis and mechanism of apoptosis. Compare apoptosis with necrosis. Define different types and mechanism of cellular adaptations (Hypertrophy, Atrophy, Hyperplasia and Metaplasia) Define dysplasia and Neoplasia. Discuss the mechanism and types of intracellular accumulations and pathological calcifications	
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F-Pa-002	Describe the basic structure of bacteria and virus. Enlist medically important microbes causing infectious diseases. Differentiate cell walls of gram positive and gram-negative bacteria. Compare the structure of bacterial cell and virus Discuss the growth curve of bacteria and virus. Enlist steps of viral replication Enlist stages of infectious diseases Enlist stages of bacterial pathogenesis Discuss the determinants of bacterial pathogenesis	General Microbiology	Introduction to Microorganisms
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F-Pa-003	Define sterilization and disinfection. Describe the principles of sterilization and disinfection.		Sterilization & Disinfection
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	Describe clinical uses of common disinfectants and their mode of sterilization. Discuss physical and chemical agents of sterilization		
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PHARMACOLOGY AND THERAPEUTICS

CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 04	
		DISCIPLINE	TOPIC
F-Ph-001	Define Basic terms of General Pharmacology: Drug, Pro-Drug, Placebo, Prototype drug, Orphan Drug, Essential drug, Pharmacology, First Pass effect, Volume of Distribution, Pharmacokinetics, Absorption, Distribution, Metabolism, Elimination, Excretion, Biotransformation.	General Pharmacology	Phar
F-Ph-002	Define the following terms: Pharmacodynamics, Receptor, Potency, Efficacy, Affinity, Agonist, Partial Agonist, Inverse Agonist, Antagonist.		Pharmacodynamics

		General Pharmacology	n i c s
F-Ph-003	Classify types of autonomic receptor (adrenergic and cholinergic) along with their location, actions and post-receptor mechanism		Autonomic System
COMMUNITY MEDICINE & PUBLIC HEALTH			
CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 08	
		DISCIPLINE	TOPIC
F-CM-001	Describe the changing concepts and new philosophy of health Explain responsibility for health	Community Medicine and Public Health	Concept of Health
F-CM-002	Explain dimensions and determinants of health and their role in achieving positive health Discuss concept of health and wellbeing Describe the Physical quality of Life Index & Human Development Index		Positive Health Dimensions, Health Determinants

F-CM-003	Describe the importance of health indicators Classify health indicators Define Morbidity and Mortality Describe Disability indicators Compare indicators among countries		Health indicators
F-CM-004	Conceptualize disease causation and natural history of disease	Community Medicine and Public	Disease causation

	Explain Germ theory & multifactorial causation Describe Epidemiological Triad Discuss Web of disease causation Describe Gradient of infection	Health	
F-CM-005	Describe principles of prevention and control on prevalent diseases Explain difference between elimination and eradication Describe disease surveillance, types and cycle Explain Primary, secondary, & tertiary prevention Describe five levels of interventions	Community Medicine and Public Health	Disease Prevention
IMPACT (EPIDEMIOLOGY, SOCIOLOGY/SOCIETY, COMMUNITY MEDICINE, BEHAVIORAL SCIENCE, & PUBLIC HEALTH)			
CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 08	
		DISCIPLINE	TOPIC

F- BhS - 001	Identify the Biological Basis of human behavior and discuss social behavior Describe processes such as neurobiology of memory, emotions, sleep, learning, motivation, sex, arousal, reward and punishment	Behavioral Sciences	Biological Basis of Behavior
F- BhS - 002	Identify the burden of mental illness on the person, family and society Describe Intellectual disability, Mental Disorders and Personality Disorders		Psychological Disorders
F- BhS - 003	Identify the role of psychosocial factors in various illnesses Describe psychosocial aspects of various system diseases such as Cardio-vascular system (CVS), Central Nervous System (CNS), Gastro Intestinal Tract (GIT), Respiration, renal, endocrine and Cancer		Psychology and Disease

F-BhS-004	Identify the behavioral factors associated with pharmacological treatment of diseases		Behavioral Factors & Pharmacological Treatment
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	Discuss Health belief model, treatment compliance and its psychosocial factors, social factors in drugs prescription and drug resistance		
F-BhS-005	Identify the rehabilitation work for patients on dialysis and any kind of physical disability Discuss the care requirements in chronic debilitating conditions like Diabetes, Multi-infarcts Dementia, chronic renal disease, limb amputation	Behavioral Sciences	Palliative Care
F-BhS-006	Identify the various physiological effects of stress Explain ANS response to stress, Describe Behavioural manifestations of stress, Stress related multiple sclerosis and autoimmune diseases		Stress

AGING			
CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 01	
		DISCIPLINE	TOPIC
F-Ag-001	Discuss telomeres and telomerase and their clinical significance in aging.	Geriatrics Integrate with Biochemistry	Process of Aging

ANATOMY			
C O D E	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 03	
		DISCIPLI NE	TOPIC
F-A-044	Demonstrate the anatomical terms of position and movement, in particular on limbs.	Anatom y	Osteology Imaging and cross-sectional Anatomy Arthrology
	Demonstrate various anatomical movements of body Identify various elevations and anatomical landmarks on bones.		
	Identify and interpret normal radiographs of various body regions Identify and interpret joint dislocations and displaced fracture bone segments radiographically.		
	EMBRYOLOGY	TOTAL HOURS = 05	

C O D E	SPECIFIC LEARNING OBJECTIVES	DISCIPLI NE	TOPIC
F-A-045	Calculate fertilization age, gestational age, embryonic/fetal age and expected date of delivery.	Anatom y	Embryology
	On models, charts, aborted embryos and fetal specimens, identify the events of embryonic period, i.e., cleavage, morula and blastula formation, yolk sac, amniotic cavity, connecting stalk, Placenta and it's positional & Implational variations, umbilical cord and its contents		
	Describe the USG (Ultrasonography) report for the: Fetal features, fetal age estimation, placental attachment with variations, fetal membranes and multiple pregnancies		

	Gastrulation (notochord & primitive streak, three germ layers and their parts/derivatives), angiogenesis, neurulation, somites and embryonic age determination based on it, chorionic villi (primary, secondary & tertiary), developmental defects (sacroccygeal teratoma, neural tube defects). Fetal features during fetal period. Determine age of fetus based on these features.		
C O D E	HISTOLOGY	TOTAL HOURS = 14	
	SPECIFIC LEARNING OBJECTIVES	DISCIP LINE	TOPIC
F-A-046	Describe different types of staining techniques and their significance with special emphasis on H&E (Hematoxylin and Eosin) staining		Staining techniques
F-A-047	Enlist important features of different parts of light microscope		Microscope
F-A-048	Identify and draw & label different cell shapes under the microscope		Cell shape

F-A-049	Identify under light microscope and Draw & Label the following types of epithelia: i. Simple squamous ii. Simple cuboidal iii. Simple columnar (ciliated & non-ciliated) iv. Pseudostratified columnar (ciliated & non-ciliated) v. Stratified squamous (keratinized & non keratinized) vi. Stratified cuboidal vii. Stratified columnar viii. Transitional	Microscopic Anatomy	Epithelium
F-A-050	Identify under light microscope and Draw & Label serous & mucous secreting glands under light microscope	Microscopic Anatomy	Epithelium
F-A-051	Identify under light microscope and Draw & Label the various types of connective tissue		Connective tissue

PHYSIOLOGY			
CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 12	
		DISCIPLINE	TOPIC
F-P-007	Explain laboratory/clinical procedure to the subject. Obtain verbal consent from subject before starting a procedure. Reassure the subject after the procedure.	Medical Physiology	Consent
F-P-008	Determine Erythrocyte Sedimentation Rate and packed cell volume		RBCs (Red Blood Cells)
F-P-009	Determination of blood group		Blood Group
F-P-010	Identify various types of WBCs in a prepared DLC (Differential Leukocyte Count)		WBCs (White Blood Cells)
BIOCHEMISTRY			
CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 09	
		DISCIPLINE	TOPIC
F-B-015	Demonstrate the step taken to prevent or rectify the Laboratory Hazards		Lab hazards

F-B-016	Identify the methods of isolation of cell organelles'	Biochemistry	Cell organelles
F-B-017	Identify the different parts of equipment i.e., centrifuge, Microlab, Electrophoresis, Hot Oven, water bath		Equipment
F-B-018	Detect amino acids by paper chromatography		Chromatography Solutions
	Prepare different types of solution Molar, Molal, Normal and %		
PATHOLOGY			
CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 02	
		DISCIPLINE	TOPIC
F-Pa-004	Identify the salient morphological features of: Caseous necrosis (Gross & microscopic features), Coagulative necrosis (Gross), Fat necrosis (microscopic)	Pathology	Cell Injury

	Identify the salient morphological features of Dystrophic calcification. Identify the salient microscopic features of the following: Intestinal metaplasia, Squamous metaplasia, Hyperplasia Identify the salient microscopic and gross features of Anthracosis		
PHARMACOLOGY AND THERAPEUTICS			
CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 03	
		DISCIPLINE	TOPIC

F-Ph-004	Identify Sources of drugs through pictures: Animal, Plant, Microbiological, Minerals, Synthetic and genetically engineered sources. Plant sources: Atropa Belladonna, Pilocarpus microphyllus, Papaver somniferum / Opium poppy, Erythroxylum coca, Cinchona bark, Digitalis Purpureae / Fox glove plant, Rauwolfia serpentine, Ephedra vulgaris, Curare, Catharanthus roseus, Podophyllum, Nux Vomica Animal sources: Heparin (Pig/ Bovine), Insulin (Cow/Pig), Thyroxin (Sheep/Pig), Estrogen, Progesterone, Testosterone, Vitamin A, D (Cod liver), Vaccines Microbiological sources: Penicillins, Cephalosporins, Tetracyclines, Streptomycin,	Pharmacology	Sources of drugs
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	Streptokinase, Cyclosporine Mineral sources: Iron, Magnesium, Zinc, Copper, Silver nitrate, Arsenic, Gold salts, Bismuth salts, Sulfur, Iodine, Calcium salts Recombinant / Genetically engineered drugs: Human insulin, Erythropoietin, Growth hormone, Alteplase		
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	Synthetic: Sulfonamides, Anti- histamines, Benzodiazepines, Anti- epileptics		
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F-Ph-005	Identify and define the following Active Principles of drugs (alkaloids, glycosides, volatile oils, fixed oils) through pictures. Alkaloids: Atropine, Caffeine, Morphine, Nicotine, Quinine, Reserpine, Codeine, Tubocurarine Glycosides: Digoxin, Senna, Cascara Volatile oils: Clove oil , Peppermint oil, Coriander oil, Dill oil, Ginger oil Fixed oils: Coconut oil, Mustard oil, Olive oil, Castor oil, Cod liver oil	Pharmacology	Active Principles of drugs
F-Ph-006	Identify different dosage forms of drugs along with examples. Tablet, Capsule, Syrup, Suspension, Inhaler, Injection, Infusion, Ointment, Cream, Lotion, Lozenges, Suppository, Enema.	Pharmacology	Dosage
F-Ph-007	Identify the types of transmembrane receptors (diagram) and give example.	Pharmacology	Types of receptors

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. Practicals 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

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

- i. Continuous assessment will be based on regular assignments, quizzes, presentations, and other activities conducted throughout the semester.
- ii. 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

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

4. Attitude and Behavior

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

5. Logbook and Portfolio

- Students will be required to maintain a logbook and portfolio to document their learning journey.
- The logbook will include reflections on lectures, tutorials, and practical sessions.
- 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

- **Faculty Responsibility:** Faculty members will be responsible for designing and administering the internal assessments in accordance with the course syllabus and this policy.

- **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.
- **Feedback:** Faculty members will provide timely and constructive feedback to students on their performance.
- **Record-Keeping:** Faculty members will maintain accurate records of all internal assessments, including marks and feedback.
- **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-1						
Subject	Theory		Practical			Total
Block 1 Modules (Foundation-I + Hematopoietic and Lymphatic)	Part I 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:

1st Year MBBS – Exam Schedule – 2026/27

Date	Assessment
2 nd March 2026	IFT 1
30 th March 2026	IFT 2
6 th April 2026	Allied subjects' exam
13 th April 2026	Module Exam 1
6 th May 2026	Module Exam 2
11 th May 2026	Block 1 Exam Written
12 th May 2026	Block 1 Exam OSPE/Viva
8 th June 2026	IFT 3
30 th June 2026	IFT 4
3 rd July 2026	Module Exam 3
7 th July 2026	Block 2 Exam Written
8 th July 2026	Block 2 Exam OSPE/Viva
31 st August 2026	IFT 5
14 th September 2026	IFT 6
21 st September 2026	Allied subjects' exam
28 th September 2026	Module Exam 4

12 th October 2026	IFT 7
19 th October 2026	Allied subjects' exam
4 th November 2026	Module Exam 5
6 th November 2026	Block 3 Exam Written
9 th November 2026	Block 3 Exam OSPE/Viva
11 th November 2026	Internal Assessment Test 1
13 th November 2026	Internal Assessment Test 2
16 th November 2026	Internal Assessment Test 3
18 th November 2026	Internal Assessment Test 4
20 th November 2026	Internal Assessment Test 5
23 rd November 2026	Send up Block 1 Written
24 th November 2026	Send up Block 1 OSPE/Viva
27 th November 2026	Send up Block 2 Written
30 th November 2026	Send up Block 2 OSPE/Viva
3 rd December 2026	Send up Block 3 Written
4 th December 2026	Send up Block 3 OSPE/Viva

Table of Specification

MBBS 1st Professional

Block-1

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	40	40	04	-	01	46
Normal Function	Physiology applied/clinical	37	37	03	-	01	38
	Biochemistry applied/clinical	34	34	02	-	01	30
Disease Burden & Prevention	Community Medicine & Public Health	06	06	-	-	-	-
	Behavioral Sciences	05	05	-	-	-	-
Pathophysiology & pharmacotherapeutics	Pathology	13	13	1	-	-	8
	Pharmacology	05	05	1	-	-	8
CFRC	CF-I	-	-	-	01	-	05
PERLs	PERLs-I	-	-	-	01	-	05
Total		140	140	11 stations x 08 = 88	02 stations x 05 = 10	03 stations x 14=42	140

Mandatory workshop

First year MBBS – CFR/BLS Workshop Schedule

All First year Cardiac First Response / Basic Life Support Mandatory Workshop schedule as follows:

Date	Day	Time	Batch	Venue	Facilitators
4 th April 2026	Saturday	8:30 am to 2:30 pm	Batch A	Skills Lab	Prof. Ameena & Ms. Mahwish /PGR
11 th April 2026	Saturday	8:30 am to 2:30 pm	Batch B	Skills Lab	Dr. Asad & Ms. Mahwish /PGR

18 th April 2026	Saturday	8:30 am to 2:30 pm	Batch C	Skills Lab	Prof. Ameena & Ms. Mahwish /PGR
25 th April 2026	Saturday	8:30 am to 2:30 pm	Batch D	Skills Lab	Dr. Asad & Ms. Mahwish /PGR
2 nd May 2026	Saturday	8:30 am to 2:30 pm	Batch E	Skills Lab	Prof. Ameena & Ms. Mahwish /PGR
9 th May 2026	Saturday	8:30 am to 2:30 pm	Batch F	Skills Lab	Prof. Ameena & Ms. Mahwish /PGR

Workshops have been scheduled as per the above-mentioned timetable. Students must strictly follow their allocated group and timings.

Note: As per UHS instructions, attendance in this workshop is mandatory for all students. Only those students who complete this workshop will be eligible for referral of UHS Professional Examination.

Recommended Books & Reading Resources

ANATOMY

Snell's Clinical Anatomy
 Netter's Atlas of Human Anatomy
 Langman's Medical Embryology
 Laiq Hussain Histology

PHYSIOLOGY

Guyton & Hall Textbook of Medical Physiology
 Ganong's Review of Medical Physiology (optional reference)

BIOCHEMISTRY

Lippincott's Illustrated Reviews: Biochemistry
 Harper's Illustrated Biochemistry (reference)

Pathology

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

Pharmacology

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

Biomedical ethics

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

Islamiyat

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

Behavioural Sciences

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

Community medicine

Parks Textbook of Preventive and Social Medicine. K. Park

Surgery

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

Microbiology

Medical Microbiology and Immunology by Levinson and Jawetz

Pediatrics Medicine

Nelson Textbook of Pediatrics

Family medicine

Oxford Handbook of General Practice, 5th Edition

Gynecology

Gynecology by Ten Teachers

Forensic Medicine

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

About Avicenna Medical College

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.

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.