AVICENNA MEDICAL & DENTAL COLLEGE

STUDY GUIDE

2026

GIT & NUTRITION-1

BLOCK- 4 MODULE-6



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

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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.

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 Colleg

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

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	ntegrase 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 in hibitors
	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	ventricvular septal defect
W	**W. bancroft**	Wuchereria bancroft
	WBCs	White Blood Cells
	WHO	World Health Organization
Z	**ZN Staining**	Ziehl-Neelsen Staining

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.

7-Star Doctor Competencies (PMDC)

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

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

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

Introduction to Module-6

- The module 6 is designed to build upon and consolidate the foundational knowledge acquired in the earlier years of medical education, particularly from the Foundation-I module.

- As students transition into their clinical years, it is crucial to reinforce and deepen their understanding of basic medical sciences to support the integration of new, clinically relevant concepts.

- This module serves as a bridge, revisiting core topics in general Pharmacology, Pathology, and Forensic medicine with an emphasis on their clinical applications.

- By doing so, it ensures that students develop a more comprehensive understanding, which is vital for the advanced study of organ systems in subsequent modules (e.g., CVS 2, Respiratory-2, GIT-2, Neurosciences-2, and Reproduction 2).

- Mastery of these topics is essential before students can effectively approach the complexities of clinical scenarios.

- The revisiting of these concepts throughout the curriculum ensures a robust and integrated understanding, laying a solid foundation for clinical competence.

Module Committee

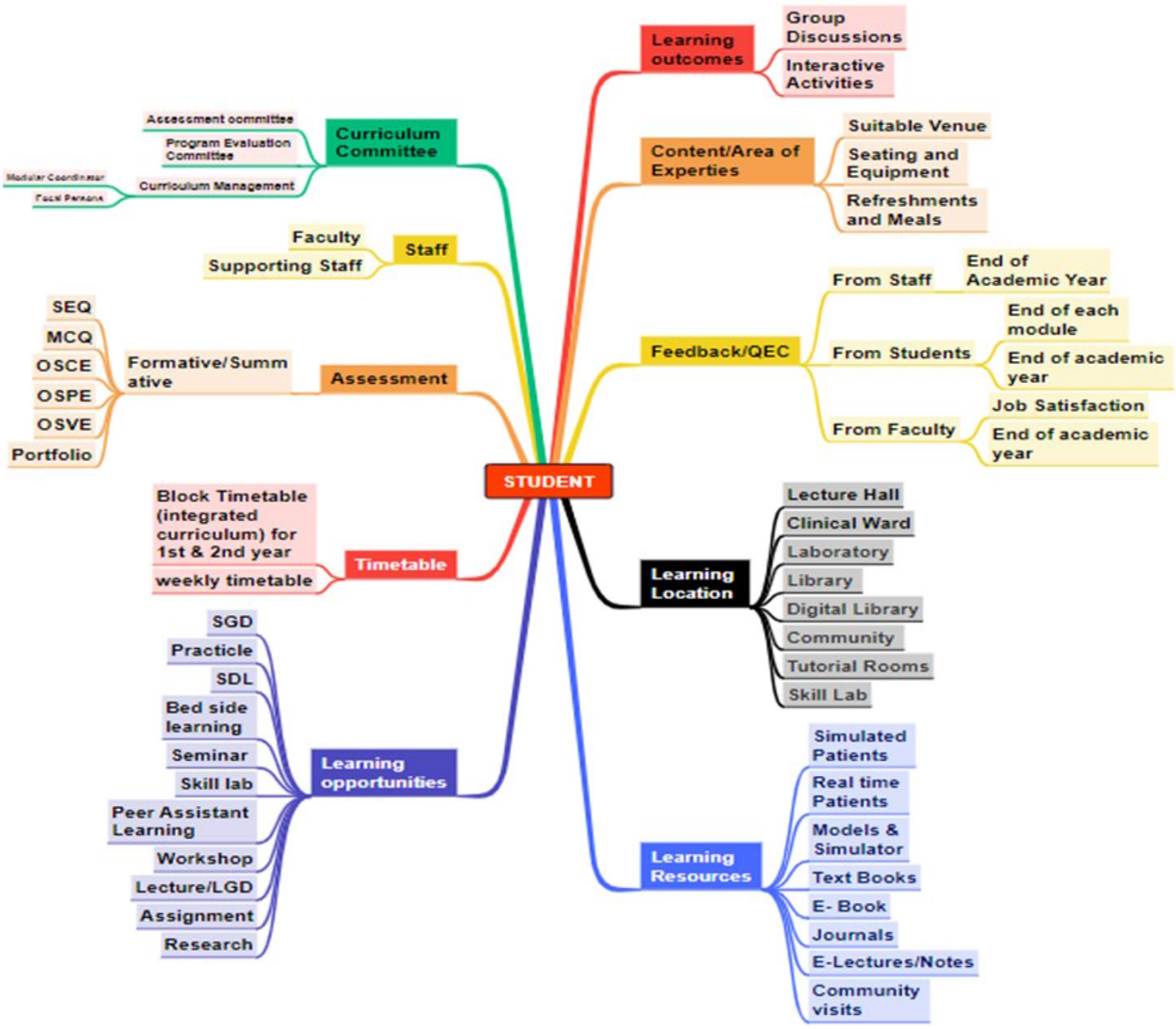
Name	Designation	Department
Prof. Dr. Gulfreen Waheed	Principal & Director DME	Medical Education
Dr. Saba Iqbal	Associate Professor	Medical Education

Dr. Syed Hussain Raza	Assistant Professor	Medical Education
Dr. Ijlal Zehra	HOD	Assessment Cell
Dr. Javaid Shabkhez Rab	Coordinator	Medical Education
Dr. Huma Fatima	Demonstrator	Medical Education
Mr. Adeel	Incharge	Student Affairs
Prof. Dr. Razia	HOD	Anatomy
Dr. Kalsoom	Focal Person	Anatomy
Prof. Dr. Sadia Zafer	HOD	Physiology
Dr. Shaheena	Focal Person	Physiology
Prof. Sadia Amir	HOD	Biochemistry
Dr. Yusra	Focal Person	Biochemistry
Prof. Dr. Saeed Afzal	HOD	Pathology
Dr. Nadia salam	Focal Person	Pathology
Prof. Dr. Asma Saeed	HOD	Pharmacology
Dr. Azka	Focal Person	Pharmacology

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

Curriculum Map

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


STUDENT
Learning outcomes
Group Discussions
Interactive Activities
Content/Area of Experties
Suitable Venue
Seating and Equipment
Refreshments and Meals
Feedback/QEC
From Staff
End of Academic Year
From Students
End of each module
End of academic year
From Faculty
Job Satisfaction
End of academic year
Learning Location
Lecture Hall
Clinical Ward
Laboratory
Library
Digital Library
Community
Tutorial Rooms
Skill Lab
Learning Resources
Simulated Patients
Real time Patients
Models & Simulator
Text Books
E- Book
Journals
E-Lectures/Notes
Community visits
Learning opportunities
SGD
Practicle
SDL
Bed side learning
Seminar
Skill lab
Peer Assistant Learning
Workshop
Lecture/LGD
Assignment
Research
Timetable
Block Timetable (integrated curriculum) for 1st & 2nd year
weekly timetable
Assessment
Formative/Summative
SEQ
MCQ
OSCE
OSPE
OSVE
Portfolio
Staff
Faculty
Supporting Staff
Curriculum Committee
Assessment committee
Program Evaluation Committee
Curriculum Management
Modular Coordinator
Focal Persons

Academic Calendar

Avicenna Medical & Dental College
Calendar 2025- 2026
2nd year MBBS

April 2026

	Sun	Mon	Tue	Wed	Thurs	Fri	Sat	
				1	2	3	4	Week-04
Week-01	5	6	7	8	9	10	11	Week-5
Week-02	12	13	14	15	16	17	18	Week-6
Week-03	19	20 TUT	21 TUT	22 TUT	23 TUT	24 TUT	25	Week-7
Week-04	26	27	28	29 IFA-1	30			Eid week

May 2026

	Sun	Mon	Tue	Wed	Thurs	Fri	Sat	
						iv-1	2	Week-8
Week-9	3	4 TUT	5 TUT	6 TUT	7 TUT	8 TUT	9	Week-9
Week-10	10	11 TUT	12 TUT	13 TUT	14 TUT	15 TUT	16	Week-10
Week-11	17	18	19	20	21 M:6	22	23	Week-11
Week-12	24	25	26	v-27	vi-28	29	30	Week-12
	31							

June 2026

	Sun	Mon	Tue	Wed	Thurs	Fri	Sat	
		1	2	3	4	5	6	Week-8
Week-9	7	8 TUT	9 TUT	10 TUT	11 TUT	12 TUT	13	Week-9
Week-10	14	15	16	17 IFA:2	18	19	20	Week-10
Week-11	21	22	23	24 Allied Test:1	vii-25	vii-26	27	Week-11
Week-12	28	a-29	30					Week-12

July 2026

	Sun	Mon	Tue	Wed	Thurs	Fri	Sat	
Week-12				1	2 M:7	3	4	
Week-13	5	6 B:4	7 B:4	8	9	10	11	Summer vacations
Summer vacations	12	13	14	15	16	17	18	Week-14
Summer vacations	19	20	21	22	23	24	25	Week-15
Summer vacations	26	27	28	29	30	31		Week-16
								Week-17

August 2026

	Sun	Mon	Tue	Wed	Thurs	Fri	Sat	
							1	Week-17
Week-18	2	3	4	5	6	7	8	Week-18
Week-19	9	10	11	12	13	viii-14	15	Week-19
Week-20	16	17 TUT	18 TUT	19 TUT	20 TUT	21 TUT	22	Week-20
Week-21	23	24 TUT	ix-25	26 TUT	27 TUT	28 TUT	29	Week-21
	30	31 TUT						

September 2026

	Sun	Mon	Tue	Wed	Thurs	Fri	Sat	
			1 TUT	2 TUT	3 TUT	4 TUT	5	Week-17
Week-18	6	7	8	9 IFA:3	10	11	12	Week-18
Week-19	13	14	15	16	17	18	19	Week-19
Week-20	20	21	22	23 IFA:4	24	25	26	Week-20
Week-21	27	28	29	30 M:8				Week-21

October 2026

	Sun	Mon	Tue	Wed	Thurs	Fri	Sat	
Week-21					1	2	3	Week-26
Week-22	4	5	6	7	8	9	10	Week-27
Week-23	11	12 TUT	13 TUT	14 TUT	15 TUT	16 TUT	17	Week-28
Week-24	18	19	20	21 IFA:5	22	23	24	Week-29
Week-25	25	26	27	28 Allied Test:2	29	30	31	Week-30

November 2026

	Sun	Mon	Tue	Wed	Thurs	Fri	Sat	
	1	2 TUT	3 TUT	4 TUT	5 TUT	6 TUT	7	Week-30
Week-31	8	9	10	11 M:9	12	13	14	Week-31
Week-32	15	16 B:5	17 B:5	18	19	20	21	Week-32
Winter vacations	22	23	24	25	26	27	28	Winter vacations
Week-33	29	30 TUT						Week-33

December 2026

	Sun	Mon	Tue	Wed	Thurs	Fri	Sat	
			1 TUT	2 TUT	3 TUT	4 TUT	5	Week-30
Week-31	6	7 TUT	8 TUT	9 TUT	10 TUT	11 TUT	12	Week-31
Week-32	13	14	15	16 IFA:6	17	18	19	Week-32
Winter vacations	20	21	22	23	24	x-25	26	Winter vacations
Week-33	27	28 TUT	29 TUT	30 TUT	31 TUT			Week-33

January 2027

	Sun	Mon	Tue	Wed	Thurs	Fri	Sat	
Week-33						1 TUT	2	
Week-34	3	4	5	6 IFA:7	7	8	9	Send Up
Week-35	10	11	12	13 M:10	14	15	16	
Week-36	17	18 AlliedTest:3	19	20	21 M:11	22	23	
Week-37	24	25	26 B:6	27 B:6	28	29	30	

February 2027

	Sun	Mon	Tue	Wed	Thurs	Fri	Sat	
		1	2	3	4	xi-5	6	
Week-34	7	8	9	10	11	12 B:6 Send Up	13	
Week-35	14	15 B:4 Send Up	16	17	18	19 B:5 Send Up	20	
Week-36	21	22 B:6 Ospe/Viva	23 B:4 Ospe/Viva	24 B:5 Ospe/Viva	25	26	27	
Week-37	28							

March 2027

	Sun	Mon	Tue	Wed	Thurs	Fri	Sat	
		1	2	3	4	5	6	
Week-34	7	8	9	10	11	12	13	
Week-35	14	15	16	17	18	19	20	
Week-36	21	22	23	24	25	26	27	
Week-37	28	29	30	31				

SESSION START: 6th April 2026

Gazetted Holidays

i- Kashmir Holiday - 5th Feb, 2026
ii- Eid- ul- Fitr- 18th March - 20th March, 2026
iii - Pakistan Day -23rd March, 2026
iv- Labor Holiday- 1st May, 2026
v- Eid- Ul- Adha- 27th May - 29th May, 2026
vi- Youm-e-Takbeer Holiday - 28th May, 2026
vii- Ashura- 25th & 26th June, 2026
viii- Independence Day- 14th Aug, 2026
ix- Milad un Nabi- 25th Aug, 2026
x- Quaid-e-Azam Day/Christmas- 25th Dec, 2026
xi- Kashmir Holiday - 5th Feb, 2027

Vacations

Spring Vacations - 16th March - 23rd March, 2026
Summer Vacations - 18th July -16th

Events

World Oral Health Day
International Day of Happiness
World TB Day
World Autism Awareness Day
World Health Day
White Coat Ceremony
Music Fest - 2026
Spring Fest
World Hand Hygiene Day
International Nursing Day
World Hypertension Day
Debates & MUN
Class Trips
World Environment Day
Fun Fair
International Self-Care Day
Independence Day
Qiraa & Naat Competition
Blood Cancer Awareness Day
World First Aid Day
World Patient Safety Day
World Heart Day
Sports Fest - 26
World Mental Health Day
Breast Cancer Awareness
Talent Hunt & Drums Circle
Art & Craft
Yoga & Arobics
Character Day & Bake Sale
Golden Week

Block Exams

a. Block-4 Exam : 9th July, 2026
b. Block-5 Exam : 17th November, 2026
c. Block-6 Exam : 9th February, 2027

LSE/ Send-Up

end Up = 12th Feb 2027 to 24th feb 202

Prof Exams

Time Table:

AVICENNA MEDICAL & DENTAL COLLEGE

TIME TABLE WEEK-01		M-24 2nd Year MBBS		SESSION 2025-2026				Theme:			
DATE	DAY							BLOCK # IV		MODULE - 06	
		08:00 - 09:00	09:00 - 10.00	10.00-11.00	11:00 - 11:30	11:30 - 12:30	12:30-01:30	1.30-2.30	2:30 - 3.30	3:30 - 5.00	5:00 - 6.00
6-Apr-26	Mon	Lecture Gross Anatomy	Lecture Biochemistry	Lecture Physiology		Lecture Embryology	Lecture Biochemistry	Practical Histology Biochemistry Physiology			CFRC
7-Apr-26	Tues	08:00 - 09:00	09:00 - 10.00	10.00-11.00		11:30 - 12:30	12:30-01:30	1.30-2.30	2:30 - 3.30		5:00 - 6.00
		Lecture Biochemistry	SGD Anatomy			Lecture Physiology	Lecture Pathology	Practical Histology Biochemistry Physiology			CFRC
8-Apr-26	Wed	08:00 - 09:00	09:00 - 10.00	10.00-11.00	BREAK	11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3.30		5:00 - 6.00
		Lecture Biochemistry	Lecture Embryology	Lecture Gross Anatomy		Practical Histology Biochemistry Physiology		Clinical Skill	Lecture Islamiyat	BREAK	CFRC
9-Apr-26	Thur	08:00 - 09:00	09:00 - 10.00	10.00-11.00		11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3.30		5:00 - 6.00
		Lecture Physiology	SGD Anatomy			Lecture Biochemistry	Lecture Behavioural Science	Clinical Skill	English Expository Writing		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		5:00 - 6.00
		Lecture Histology	Lecture Physiology	Lecture Biochemistry	Lecture Medicine Integration	Lecture Community Medicine	JUMMA BREAK		Lecture Quran		CFRC

AVICENNA MEDICAL & DENTAL COLLEGE

TIME TABLE WEEK-02		M-24 2nd Year MBBS		SESSION 2025-2026				Theme:			
DATE	DAY							BLOCK # IV		MODULE - 06	
		08:00 - 09:00	09:00 - 10.00	10.00-11.00	11:00 - 11:30	11:30 - 12:30	12:30-01:30	1.30-2.30	2:30 - 3.30	3:30 - 5.00	5:00 - 6.00
13-Apr-26	Mon	Lecture Gross Anatomy	Lecture Physiology	Lecture Biochemistry		Lecture Medicine Integration	Lecture Biochemistry	Lecture PERL Professionalism	Lecture Quran		CFRC
14-Apr-26	Tues	08:00 - 09:00	09:00 - 10.00	10.00-11.00		11:30 - 12:30	12:30-01:30	1.30-2.30	2:30 - 3.30		5:00 - 6.00
		Lecture Biochemistry	SGD Anatomy			Practical Histology Biochemistry Physiology		Lecture PERL Professionalism	Tutorial Anatomy Biochemistry Physiology		CFRC
15-Apr-26	Wed	08:00 - 09:00	09:00 - 10.00	10.00-11.00	BREAK	11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3.30		5:00 - 6.00
		Lecture Physiology	Lecture Biochemistry	Lecture Embryology		Practical Histology Biochemistry Physiology		Clinical Skill	Tutorial Anatomy Biochemistry Physiology	BREAK	CFRC
16-Apr-26	Thur	08:00 - 09:00	09:00 - 10.00	10.00-11.00		11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3.30		5:00 - 6.00
		Lecture Biochemistry	SGD Anatomy			Practical Histology Biochemistry Physiology		Clinical Skill	Tutorial Anatomy Biochemistry Physiology		CFRC
17-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 Histology	Lecture Physiology	Lecture Biochemistry	Lecture Pathology	Lecture Behavioural Science	JUMMA BREAK		Computer Science		CFRC

AVICENNA MEDICAL & DENTAL COLLEGE

TIME TABLE WEEK-03		M-24 2nd Year MBBS		SESSION 2025-2026				Theme:			
DATE	DAY							BLOCK # IV		MODULE - 06	
		08:00 - 09:00	09:00 - 10.00	10.00-11.00	11:00 - 11:30	11:30 - 12:30	12:30-01:30	1.30-2.30	2:30 - 3.30	3:30 - 5.00	5:00 - 6.00
20-Apr-26	Mon	Lecture Biochemistry	SGD Anatomy		BREAK	Practical Histology Biochemistry Physiology		Lecture PERL Ethics	Tutorial Anatomy Embryology Biochemistry Physiology	BREAK	CFRC
		08:00 - 09:00	09:00 - 10.00	10.00-11.00		11:30 - 12:30	12:30-01:30	1.30-2.30	2:30 - 3.30		5:00 - 6.00
21-Apr-26	Tues	Lecture Physiology	Lecture Biochemistry	Lecture Embryology		Practical Histology Biochemistry Physiology		Lecture PERL Ethics	Tutorial Anatomy Embryology Biochemistry Physiology		CFRC
		08:00 - 09:00	09:00 - 10.00	10.00-11.00		11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3.30		5:00 - 6.00
22-Apr-26	Wed	Lecture Biochemistry	SGD Anatomy			Practical Histology Biochemistry Physiology		Clinical Skill	Tutorial Anatomy Embryology Biochemistry Physiology		CFRC
		08:00 - 09:00	09:00 - 10.00	10.00-11.00		11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3.30		5:00 - 6.00
23-Apr-26	Thur	Lecture Gross Anatomy	Lecture Biochemistry	Lecture Physiology		Lecture Pathology	Lecture Community Medicine	Clinical Skill	Tutorial Anatomy Embryology Biochemistry Physiology		CFRC
		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
24-Apr-26	Fri	Lecture Histology	Lecture Biochemistry	Lecture Physiology	Lecture Behavioural Science	English Expository Writing	JUMMA BREAK		Lecture Quran		CFRC

AVICENNA MEDICAL & DENTAL COLLEGE

TIME TABLE WEEK-04		M-24 2nd Year MBBS		SESSION 2025-2026				Theme:			
DATE	DAY							BLOCK # IV		MODULE - 06	
		08:00 - 09:00	09:00 - 10.00	10.00-11.00	11:00 - 11:30	11:30 - 12:30	12:30-01:30	1.30-2.30	2:30 - 3.30	3:30 - 5.00	5:00 - 6.00
27-Apr-26	Mon	Lecture Gross Anatomy	Lecture Behavioural Science	Lecture Biochemistry	BREAK	Practical Histology Biochemistry Pathology		Lecture PERL Leadership	Tutorial Anatomy Biochemistry Physiology	BREAK	CFRC
		08:00 - 09:00	09:00 - 10.00	10.00-11.00		11:30 - 12:30	12:30-01:30	1.30-2.30	2:30 - 3.30		5:00 - 6.00
28-Apr-26	Tues	Lecture Physiology	Lecture Embryology	Lecture Biochemistry		Practical Histology Biochemistry Pathology		Lecture PERL Leadership	Tutorial Anatomy Biochemistry Physiology		CFRC
		08:00 - 09:00	09:00 - 10.00	10.00-11.00		11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3.30		5:00 - 6.00
29-Apr-26	Wed	Integrated Formative Assessment 01	Lecture Embryology	Lecture Biochemistry		Practical Histology Biochemistry Pathology		Clinical Skill	Tutorial Anatomy Biochemistry Physiology		CFRC
		08:00 - 09:00	09:00 - 10.00	10.00-11.00		11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3.30		5:00 - 6.00
30-Apr-26	Thur	Lecture Biochemistry	Lecture Gross Anatomy	Lecture Pathology		Lecture Histology	Lecture Pharmacology	Clinical Skill	Lecture Quran		CFRC
		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
1-May-26	Fri	LABOUR DAY HOLIDAY									

AVICENNA MEDICAL & DENTAL COLLEGE

TIME TABLE WEEK-05		M-24 2nd Year MBBS		SESSION 2025-2026				Theme:			
DATE	DAY							BLOCK # IV		MODULE - 06	
		08:00 - 09:00	09:00 - 10.00	10.00-11.00	11:00 - 11:30	11:30 - 12:30	12:30-01:30	1.30-2.30	2:30 - 3.30	3:30 - 5.00	5:00 - 6.00
4-May-26	Mon	Lecture Biochemistry	SGD Anatomy			Lecture Integration Community Medicine	Practical Histology Biochemistry Pharmacology		Tutorial Anatomy Biochemistry Physiology		CFRC
		08:00 - 09:00	09:00 - 10.00	10.00-11.00		11:30 - 12:30	12:30-01:30	1.30-2.30	2:30 - 3.30		5:00 - 6.00
5-May-26	Tues	Lecture Biochemistry	SGD Anatomy			Lecture Community Medicine	Lecture PERL Leadership	Lecture Pakistan Studies	Lecture Quran		CFRC
		08:00 - 09:00	09:00 - 10.00	10.00-11.00	BREAK	11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3.30		5:00 - 6.00
6-May-26	Wed	Lecture Gross Anatomy	Lecture Physiology	Lecture Biochemistry		Practical Histology Biochemistry Pharmacology		Clinical Skill	Tutorial Anatomy Biochemistry Physiology	BREAK	CFRC
		08:00 - 09:00	09:00 - 10.00	10.00-11.00		11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3.30		5:00 - 6.00
7-May-26	Thur	Lecture Surgery Integration	Lecture Embryology	Lecture Biochemistry		Practical Histology Biochemistry Pharmacology		Clinical Skill	Tutorial Anatomy Biochemistry Physiology		CFRC
		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
8-May-26	Fri	Lecture Histology	Lecture Biochemistry	Lecture Gross Anatomy	Lecture Integration Peads	Lecture Behavioural Science	JUMMA BREAK		Lecture Islamiyat		CFRC

AVICENNA MEDICAL & DENTAL COLLEGE

TIME TABLE WEEK-06		M-24 2nd Year MBBS		SESSION 2025-2026				Theme:			
DATE	DAY							BLOCK # IV		MODULE - 06	
		08:00 - 09:00	09:00 - 10.00	10.00-11.00	11:00 - 11:30	11:30 - 12:30	12:30-01:30	1.30-2.30	2:30 - 3.30	3:30 - 5.00	5:00 - 6.00
11-May-26	Mon	SGD Anatomy		Lecture Biochemistry		Lecture PERL Research	Practical Histology Biochemistry Physiology		Tutorial Anatomy Embryology Biochemistry Physiology		CFRC
		08:00 - 09:00	09:00 - 10.00	10.00-11.00		11:30 - 12:30	12:30-01:30	1.30-2.30	2:30 - 3.30		5:00 - 6.00
12-May-26	Tues	Lecture Gross Anatomy	Lecture Biochemistry	Lecture Medicine Integration		Lecture Biochemistry	Practical Histology Biochemistry Physiology		Tutorial Anatomy Embryology Biochemistry Physiology		CFRC
		08:00 - 09:00	09:00 - 10.00	10.00-11.00	BREAK	11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3.30		5:00 - 6.00
13-May-26	Wed	Lecture Biochemistry	Lecture Embryology	Lecture Integration Medicine		Practical Histology Biochemistry Physiology		Clinical Skill	Tutorial Anatomy Embryology Biochemistry Physiology	BREAK	CFRC
		08:00 - 09:00	09:00 - 10.00	10.00-11.00		11:30 - 12:30	12:30-01:30	1:30 - 2:30	2:30 - 3.30		5:00 - 6.00
14-May-26	Thur	Lecture Physiology	Lecture Biochemistry	Lecture Surgery Integration		Lecture Community Medicine	Lecture Behavioural Science	Clinical Skill	Tutorial Anatomy Embryology Biochemistry Physiology		CFRC
		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
15-May-26	Fri	Lecture Histology	Lecture Biochemistry	SGD Anatomy		Lecture Biochemistry	JUMMA BREAK		Lecture Pakistan Studies		CFRC

Allocation of Hours

AVICENNA MEDICAL COLLEGE, LAHORE

2ND YEAR MBBS

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

Module Outcome

8. Describe the microscopic features of nerve cells, muscle cells, general features of epithelia of the body.

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

MODULE OUTCOMES

- To describe gross and microscopic anatomy of different parts of gastrointestinal system and associated organs
- To describe the embryological development of different parts of gastrointestinal system and associated organs

- To describe the functional anatomy and physiology of different parts of gastrointestinal system and associated organs
- To describe the motility, secretory and digestive function of gastrointestinal system
- To describe the biochemical aspects of carbohydrate metabolism
- To discuss pathological aspect and management of gastrointestinal related diseases
- To discuss the pharmacological treatment of diarrhea
- To discuss the psychosocial impact of gastrointestinal diseases in society
- To discuss the preventive measures related to gastrointestinal diseases
- To comprehend concept of balanced diet and malnutrition

Learning Objectives

NORMAL STRUCTURE		
GROSS ANATOMY		
		TOTAL HOURS = 35

CODE	SPECIFIC LEARNING OUTCOMES	DISCIPLINE	TOPIC
GIT-A-001	Describe the gross anatomical features of oral cavity with its neurovascular supply and lymphatic drainage Discuss the location, anatomical features, relations and vascular supply of tonsils: nasopharyngeal, palatine and lingual. Discuss the skeletal framework of hard palate with its neurovascular supply and lymphatic drainage Describe the gross anatomical features of soft palate with its neurovascular supply and lymphatic drainage Describe the attachments, nerve supply and actions of muscles of soft palate Describe the structure of tongue with attachments of muscles, blood supply, nerve supply and lymphatic drainage. Discuss the anatomical basis of injury to hypoglossal nerve Describe anatomical features, relations and neurovascular supply of parotid gland and its duct, mentioning the structures entering and exiting the gland.	Human Anatomy	Oral Cavity

	Discuss the clinical correlates of parotid gland: parotiditis, Mumps, Frey's syndrome, parotid duct injury and parotid tumor surgery with its complications.		
	Describe the Waldeyer's ring.		
	Describe anatomical features, relations and neurovascular supply of submandibular and sublingual glands with their ducts.		
GIT-A-002	Describe the planes and quadrants of abdomen	Human Anatomy	Anterior Abdomen Wall
	Drawand label the cutaneous innervation and dermatomes of anterior abdominal wall and anterolateral Abdominal wall and describe the clinical correlates		

	(Abdominal pain, Muscle rigidity, Referred pain, anterior abdominal nerve block)		
	Describe the fascia of anterior abdominal wall with its clinical significance Describe anterolateral Abdominal wall arteries, Veins and Lymphatics and related clinical correlates—Caput Medusae		
	Describe the attachments, nerve supply and actions of muscles of anterior abdominal wall		

	Identify the muscles of anterolateral abdominal wall on anatomical model and/or cadaver		
	Describe the extent, formation and contents of rectus sheath		
	Give the formation and extent of inguinal ligament		
	Describe the formation of superficial and deep inguinal rings and conjoint tendon		
	Locate the position of superficial and deep inguinal rings on simulated subject or Cadaver		
	Describe the extent, boundaries and contents of inguinal canal		
	Define the following hernias: umbilical, epigastric, incisional, Spigelian, lumbar, femoral, internal and inguinal		
	Differentiate between direct and indirect inguinal hernias		
	Describe the location of abdominal surgical incisions		
	Mark the abdominal incisions on simulated patient/ subject and explain their anatomical basis		
	List the structures and coverings of spermatic cord		
	Trace the horizontal and vertical peritoneal reflections		
	Describe the relationship of viscera to the peritoneum		

GIT-A-004	Describe the gross anatomical features of the following: 1. Mesentery 2. Omentum 3. Peritoneal ligaments	Human Anatomy	Peritoneum

	4. Peritoneal fold 5. Peritoneal sac, 6. Recesses, 7. Spaces and 8. Gutters		
	Describe the nerve supply of Peritoneum		
	Describe the anatomical basis and manifestations of the following: 1. Peritonitis and ascites 2. Peritoneal adhesions (and adhesiostomy) 3. Abdominal paracentesis		
GIT-A-005	Describe the extent of esophagus, its constrictions, neurovascular supply and lymphatic drainage Discuss the anatomical basis of esophageal varices, achalasia and Gastro Esophageal Reflux Disease (GERD)		Esophagus
	Describe the location, position, parts, external and internal structure, relations, vascular and nerve supply and lymphatic drainage of stomach		
	Draw and label a diagram illustrating the lymphatic drainage of Stomach		

GIT-A-006	Describe the clinical presentation and the anatomical basis and manifestations of the following conditions: Carcinoma of stomach and peptic ulcers Identify and demonstrate the parts, external and internal features of stomach on anatomical model and cadaver	Human Anatomy	Stomach
GIT-A-007	Describe the location, position, parts, relations, neurovascular supply and lymphatic drainage of duodenum, Jejunum & Ileum (Small Intestine) Describe the anatomical basis and manifestations of the following conditions: 1. Duodenal Ulcers 2. Ileal diverticulum 3. Diverticulosis	Human Anatomy	Small & Large Intestine
	4. Large bowel cancer 5. Appendicitis 6. Volvulus 7. Intussusception Demonstrate the various positions of appendix Identify and demonstrate the Parts and external features of small and large intestines on anatomical model and cadaver		
	Describe the origin, course, branches (tributaries in case of veins) and distribution of the blood vessels of GIT		

GIT-A-008	Describe the formation, tributaries and drainage of hepatic- portal vein	Human Anatomy	Liver
	Discuss the sites and vessels contributing in portosystemic anastomosis		
	Describe the clinical picture and anatomical basis for the blockage of porto-systemic anastomosis		
	Identify the blood vessels supplying GIT on anatomical model and cadaver		
	Describe location, lobes, important relations, peritoneal ligaments, blood supply, lymphatic drainage, nerve supply, related clinical correlates of liver and subphrenic spaces.	Human Anatomy	Liver
GIT-A-009	Describe components of Biliary tree- hepatic duct and bile duct	Human Anatomy	Biliary System
	Describe relations, functions, blood supply, lymphatic drainage and nerve supply of Gallbladder		
	Describe related clinical correlates- gall stones, biliary colic, cholecystectomy, gallbladder gangrene		
GIT-A-010	Describe the location, surfaces, peritoneal reflections, relations, neurovascular supply and lymphatic drainage of pancreas	Human Anatomy	Pancreas
	Describe the anatomical basis and manifestations of pancreatitis and pancreatic cancer		
	Identify the parts of the pancreas		

GIT-A-011	Describe the location, surfaces, peritoneal reflections, relations, neurovascular supply and lymphatic drainage of spleen Describe the anatomical basis and manifestations of splenic trauma and splenomegaly Identify the borders, surfaces and Impressions of spleen Demonstrate the correct anatomical positioning of spleen	Human Anatomy	Spleen
GIT-A-012	Describe the gross anatomical features, peritoneal relations, blood supply, nerve supply and lymphatic drainage of cecum ascending and descending colon, sigmoid colon, rectum and anal canal Describe the anatomical basis for Sigmoidoscopy, rectal prolapse, rectal examination, rectal cancer and hemorrhoids	Human Anatomy	Sigmoid Colon, Rectum & Anal Canal
GIT-A-013	Outline the anatomical basis and surgical treatment plan for the following diseases: 1. Esophageal Injuries 2. Gastric Carcinoma 3. Intestinal Obstruction 4. Pancreatic Carcinoma 5. Obstructive Jaundice 6. Gall Stones	Human Anatomy integrated with Surgery	Surgical Intervention

EMBRYOLOGY & POSTNATAL DEVELOPMENT

CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 08	
		DISCIPLINE	TOPIC
	Describe the development of tongue		

GIT-A-014	Describe the embryological basis of tongue tie	Embryology	Oral Cavity
	Describe the development of palate		
	Describe the embryological basis of various facial clefts		
	Identify the parts of the developing tongue and palate		
GIT-A-015	Describe the formation and divisions of gut tube Describe the molecular regulation of gut tube development.	Embryology	Foregut

	Describe the development of mesenteries		
	Describe the development of esophagus		
	Describe the embryological basis of esophageal atresia and/or tracheoesophageal fistula		
	Describe the development and rotation of stomach		
	Describe the embryological basis of pyloric stenosis		
	Describe the development of duodenum, liver and gall bladder. Describe the molecular regulation of liver.		
	Describe the embryological basis of intrahepatic and extrahepatic biliary atresia		
	Describe the development of pancreas. Describe the molecular regulation of pancreas.		
	Describe the embryological basis of annular pancreas		

GIT-A-016	Describe the development of midgut especially mentioning physiological herniation, rotation, retraction of herniated loops and mesenteries of the intestinal loops Describe the embryological basis of the following 1. mobile cecum 2. volvulus 3. retro colic hernia 4. Omphalocele 5. gastroschisis Describe the embryological basis of Meckel's diverticulum Describe the embryological basis of; 1. Gut rotation defects 2. Gut atresia and stenosis	Embryology	Midgut
GIT-A-017	Describe the development of hindgut Describe the embryological basis of; 3. Rectourethral and rectovaginal fistulas 4. Recto anal fistulas and atresia 5. Imperforate anus 6. Congenital megacolon Identify the parts of the developing foregut, midgut and hindgut originating from the endoderm	Embryology	Hindgut

MICROSCOPIC ANATOMY (HISTOLOGY & PATHOLOGY)			
CODE	SPECIFIC LEARNING OUTCOMES	TOTAL HOURS = 07	
		DISCIPLINE	TOPIC

	Describe the light microscopic structure of; 1. Lips 2. Tongue including lingual papillae and taste buds 3. Oral Cavity (Cheeks, Teeth gums, hard & Soft palate) Describe the histological structure of parotid, submandibular and sublingual glands. Compare and contrast the histological structures of parotid, submandibular and sublingual glands. Describe the serous and mucous acini and give histological differences between the two. Describe the structure and location of serous demilunes. Describe histology of oropharynx		
GIT-A-018	Relate the characteristics of various layers of GIT with their function	Histology	Oral Cavity & Esophagus
	Describe the light microscopic structure of esophagus		
	Tabulate the histological differences between different parts of esophagus		
	Describe the histological changes associated with reflux esophagitis and Barrett's esophagus		
	Describe the light microscopic structure of stomach		

GIT-A-019	Describe the role of parietal cells in pernicious anemia	Histology	Stomach
GIT-A-020	Describe the light microscopic structure of 1. Duodenum 2. Jejunum 3. Ileum	Histology	Small Intestine
	Discuss the histological basis of celiac disease		
	Discuss the histological basis of Crohn's disease		

GIT-A-021	Describe the light microscopic structure of 1. Colon 2. Appendix 3. Rectum Define colorectal cancer, anal abscess, hemorrhoids	Histology	Large Intestine
GIT-A-022	Describe the light microscopic structure of: 1. Liver 2. Gall Bladder 3. Pancreas	Histology	Accessory Organs

NORMAL FUNCTION

MEDICAL PHYSIOLOGY

CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 20 DISCIPLINE	TOPIC
	Classify the components of enteric nervous system		
	Discuss the location and significance of myenteric plexus		

GIT-P-001	Describe the Meissner's plexus	Medical Physiology	General Principles of GIT Function - Motility, Nervous Control & Blood Flow
	Differentiate between myenteric and Meissner's plexuses		
	Explain the mechanism of developing slow wave		
	Explain the mechanism of developing spike potential		
	Enlist the factors that depolarize & hyperpolarize the GIT membrane		
	Enlist the excitatory & inhibitory neurotransmitters of enteric nervous system		
	Explain the role of sympathetic & parasympathetic nervous system in controlling GIT function.		
	Enlist the gastrointestinal reflexes & explain the functions of these reflexes		
	Enlist the hormones acting on GIT, their stimuli, site of release and actions		
	Enumerate different types of movements that occur in GIT		
	Discuss the functions and control of GIT movements		

	Discuss the effect of gut activity and metabolic factors on GIT blood flow / Splanchnic circulation		
	Explain the nervous control of GIT blood flow / Splanchnic circulation		

GIT-P-002	Trace the reflex arc of mastication	Medical Physiology	Oral Cavity & Esophagus
	Explain the process and importance of chewing reflex		
	Enlist the stages of swallowing		
	Describe the mechanism of voluntary stage of swallowing		
	Trace the reflex arc of involuntary stage of swallowing		
	Enlist the steps involved in involuntary stage of swallowing	Medical Physiology	
	Explain the effect of swallowing on respiration	Medical Physiology	
	Discuss the mechanism of esophageal stage of swallowing	Medical Physiology	
	Enlist causes of dysphagia	Medical Physiology integrates with Surgery	
	Explain the types and role of different peristalsis originating in esophagus	Medical Physiology	
	Discuss the role of Lower Esophageal Sphincter (Gastroesophageal)	Medical Physiology	
	Discuss the pathophysiology of achalasia & Megaesophagus	Medical Physiology	
	Enlist the features and treatment of achalasia	Medical Physiology	
	Explain storage function of stomach	Medical Physiology	
	Describe the basic electrical rhythm of stomach wall	Medical Physiology	

GIT-P-003	Explain the role of pyloric pump and pyloric sphincter in gastric emptying	Medical Physiology	Stomach
	Explain the factors that promote Stomach Emptying	Medical Physiology	
	Discuss the duodenal (nervous & hormonal) factors that inhibit Stomach emptying	Medical Physiology	
	Enlist the factors that initiate enterogastric inhibitory reflexes	Medical Physiology	

	Enumerate the causes, features, and pathophysiology of gastritis	Medical Physiology integrates with Medicine	
	Explain the physiological basis of each feature of gastritis	Medical Physiology integrates with Medicine	
	Recommend treatment of gastritis	Medical Physiology integrates with Medicine	
	Enumerate the causes, features, and pathophysiology of peptic ulcer		
	Explain the physiological basis of each feature of peptic ulcer		
	Enumerate and explain the secretions and movements of small intestine		
	Explain the term “peristaltic rush”		

GIT-P-004	Explain the functions of ileocecal valve and sphincter	Medical Physiology	Small Intestine
	Enumerate the types of intestinal sprue	Medical Physiology integrates with Medicine	
	Enlist the features of intestinal sprue		
	Explain the consequences of sprue on the body		
GIT-P-005	Enumerate the types of movements taking place in colon	Medical Physiology	Large Intestine
	Explain the mechanism of developing movements of colon and their control through Gastrocolic and Duodenocolic Reflexes	Medical Physiology	
	Enlist the defecation reflexes	Medical Physiology	
	Explain the mechanism of defecation reflex	Medical Physiology	
	Trace the reflex arc of defecation	Medical Physiology	
	Name the other autonomic reflexes that affect bowel activity	Medical Physiology	
	Explain the pathophysiology of constipation	Medical Physiology integrates with Medicine	
		Medical Physiology	

	Describe the cause of Hirschsprung's disease integrate with Medicine.		
	Explain the functions of liver	Medical Physiology	

	Differentiate between liver and gall bladder bile and the hormones acting on them	Medical Physiology	
GIT-P-006	Enumerate the causes and composition of developing gall stones	Medical Physiology Integrate with Surgery	Liver
	Explain function and secretions of pancreas	Medical Physiology	
	Enlist the causes and pathophysiology of acute and chronic pancreatitis	Integrate with Medicine	
GIT-P-007	Enumerate the features of acute pancreatitis and explain the physiological basis of each feature of pancreatitis	Integrate with Medicine	Pancreas
	Describe the stages of vomiting act	Medical Physiology	
	Trace the reflex arc of vomiting	Medical Physiology	
GIT-P-008.	Explain the role of chemoreceptor trigger zone for initiation of vomiting by drugs or by motion sickness	Medical Physiology	Vomiting Reflex
	Define Acute Diarrhea	Integrated with Medicine Gastroenterology	Acute & Chronic Diarrhea
	Define Chronic Diarrhea		
GIT-P-009	Enlist various causes for acute and chronic diarrhea		

BIOCHEMISTRY

CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 40 DISCIPLINE	TOPIC
	Give the composition and importance of saliva and related clinical disorder (xerostomia)		

GIT-B-001	Give the composition and importance of gastric juice with special reference to mechanism of HCl secretion and related clinical disorders (achlorhydria, gastric ulcer	Biochemistry	Biochemistry of GIT /GIT secretions & digestion and absorption of dietary carbohydrates
	Give the composition and importance of pancreatic juice, bile and succus entericus and related clinical disorders (pancreatitis, cystic fibrosis, cholelithiasis).		

	Describe digestion and absorption of dietary carbohydrates along with inherited and acquired disorders (lactose intolerance, sucrase-isomaltase deficiency).		
GIT-B-002	Elaborate key features of various transport systems for entry of glucose into cells.	Biochemistry	Carbohydrate metabolism/ Entry of glucose into cells
GIT-B-003	Enlist the hormones that play important roles in regulating carbohydrate metabolism.	Biochemistry	Carbohydrate metabolism/ Hormonal control of BSL
	Elaborate the metabolic effects of these hormones.		
	Infer the consequences of deficiency and excess of these hormones		
	Describe the glycolytic pathway along with its regulation and significance.		
	Compare key features of aerobic and anaerobic glycolysis.		

GIT-B-004	Calculate the number of ATP produced during aerobic and anaerobic glycolysis. Explain hemolytic anemia in subjects with pyruvate kinase deficiency based on your biochemical knowledge. Clearly differentiate between substrate level phosphorylation and oxidative phosphorylation.	Biochemistry	Carbohydrate metabolism/ Glycolysis
GIT-B-005	Discuss the metabolic fates of pyruvate. Describe the transport of pyruvate from cytosol to mitochondria. Elaborate the reaction catalyzed by pyruvate dehydrogenase complex (PDH) along with regulation and significance. Enlist inherited and acquired causes of lactic acidosis and give biochemical explanation for lactic acidosis in each condition.	Biochemistry	Carbohydrate metabolism/ Metabolic fates of pyruvate
GIT-B-006	Describe the TCA cycle along with regulation & significance. Calculate the energy yield of TCA	Biochemistry	Carbohydrate metabolism/ Kreb's Cycle

	Define gluconeogenesis and enumerate gluconeogenic substrates (precursors)		

GIT-B-007	Delineate the reactions involved in synthesis of glucose from various gluconeogenic substrates. Elaborate the regulation and importance of gluconeogenesis. Explain the significance of Cori cycle and glucosealanine cycle	Biochemistry	Carbohydrate metabolism/ Gluconeogenesis
GIT-B-008	Illustrate the reactions of glycogenesis, glycogenolysis along with their regulation and significance Enlist various types of glycogen storage diseases (GSDs) Infer the key biochemical and clinical features of various GSDs from the respective enzyme deficiencies.	Biochemistry	Carbohydrate metabolism/ Glycogen metabolism
GIT-B-009	Describe the reactions and regulation of Hexose Mono Phosphate Pathway (HMP). Discuss the importance of HMP shunt Explain hemolytic anemia in subjects suffering from G6PD deficiency. Diagnose G6PD (glucose-6-phosphate dehydrogenase) deficiency based on given data.	Biochemistry	Carbohydrate metabolism/ HMP Hexose Monophosphat e Pathway
GIT-B-010	Describe the reactions, regulation, and biomedical importance of uronic acid pathway and sorbitol pathway	Biochemistry	Carbohydrate metabolism/ Uronic acid pathway & sorbitol pathway
	Outline the reactions involved in ethanol metabolism.		

GIT-B-011	Explain how ethanol consumption causes hypoglycemia and fatty liver.	Biochemistry	Carbohydrate metabolism/ Ethanol metabolism
GIT-B-012	Diagrammatically illustrate the organization of electron transport chain (ETC) depicting the flow of electrons	Biochemistry	Respiratory chain & oxidative phosphorylation /ETC
	Enlist the components of complex I, II, III, and IV		
	Enumerate clinically important inhibitors of electron transport chain and mention their site of action.		
GIT-B-013	Elaborate the structure of ATP synthase (complex V).	Biochemistry	

	Explain how the free energy generated by the transport of electrons by ETC is used to produce ATP from ADP + Pi (i.e. chemiosmotic hypothesis)		Respiratory chain & oxidative phosphorylation /ATP synthesis
	Elaborate the effect of oligomycin and uncouplers on ATP production.		
	Describe the effect of arsenic poisoning on carbohydrate metabolism and ATP production.		
	Elaborate the glycerol 3-P shuttle and malate-aspartate shuttle for the transfer of reducing equivalents from cytosol into the mitochondria.		
	Define and classify nutrients into macro and micronutrients.		

GIT-B-014	Elaborate the concept and importance of Balanced Diet Enlist the components of balanced diet and elaborate the importance of each component.	Biochemistry	Nutrition/ Balanced diet
GIT-B-015	Delineate special nutritional requirements during pregnancy, lactation, growth, and old age. Suggest dietary advice for patients suffering from diabetes mellitus, hypertension, obesity, renal disease, lactose intolerance, gluten enteropathy, hypercholesterolemia, and hemorrhoids.	Integrate with Community Medicine	Nutrition/ Special nutritional requirements
GIT-B-016	Enlist causes and types of Protein Energy Malnutrition (PEM). Differentiate between Kwashiorkor and Marasmus based on the given data Enlist symptoms and signs Outline treatment strategies	Integrate with community Medicine/ Pediatrics	Nutrition/ PEM
GIT-B-017	Define energy balance. Compare the energy content of macro nutrients and alcohol. Suggest a simple method for estimation of caloric requirements of sedentary adults, moderately active adults, and very active adults	Biochemistry	Nutrition/ Caloric requirements
GIT-B-018	Define basal metabolic rate (BMR)	Biochemistry	Nutrition/
	Elaborate the effect of various physiological and pathological factors on BMR.		BMR
	Define body mass index (BMI).		

GIT-B-019	Categorize individuals into underweight, normal, overweight, obese, and morbidly obese based on theirs BMI values. Elaborate the role of genetic, environmental, and behavioral factors in determining body weight. Clearly differentiate between upper body obesity and lower body obesity. Enlist health risks associated with obesity.	Integrate with community Medicine	Nutrition/ BMI & Obesity
GIT-B-020	Define Marasmus and Kwashiorkor	Integrated with Pediatrics	Malnutrition
	Define Malnutrition Identify various causes of malnutrition Identify the risk factors of malnutrition Outline treatment strategies	Integrated with Medicine Gastroenterol o gy	
AGING			
CODE	**SPECIFIC LEARNING OBJECTIVES**	**TOTAL HOURS = 01** **DISCIPLINE**	**TOPIC**
GIT-CM-001	Identify causes and risk factors for malnutrition in elderly Outline treatment strategies	Community Medicine	Preventive Medicine in Geriatrics
PATHOPHYSIOLOGY AND PHARMACOTHERAPEUTICS			
		TOTAL HOURS = 05	

CODE	SPECIFIC LEARNING OBJECTIVES	DISCIPLINE	TOPIC
GIT-Ph-001	Classify anti diarrheal drugs and describe the pharmacokinetics, mechanism of action, pharmacological effects, uses and adverse effects	Pharmacology	Anti Diarrheal Drugs
GIT-Pa-001	Define gastritis. Enlist the types of gastritis	Pathology	Gastritis
	Describe the morphological features of gastritis. Describe salient features of acute & chronic gastritis		
GIT-Pa-002	Describe the salient features (etiology, pathogenesis and morphology) of peptic ulcer disease	Pathology	Peptic Ulcer
	Discuss the role of H. Pylori in causing peptic ulcer disease	Microbiology	
GIT-Pa-003	Enumerate common infectious agents of diarrheal diseases Discuss pathogenesis and clinical features of common pathogens		Infectious agents causing Diarrhea
DISEASE PREVENTION & IMPACT			
CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 09 DISCIPLINE	TOPIC
GIT-BhS-001	Identify health related behaviors and apply principles of learning to modify eating and addictive patterns		Health related behaviors

GIT-BhS-002	Discuss health belief model and its application in managing common presentations related to gastro-intestinal system	Behavioral Sciences	Health related believes
	Explain the transtheoretical model of changing behaviors to modify the diseases pattern		
GIT-BhS-003	Describe motivational interviewing and outline a management plan to help the individuals with obesity and diabetes to lose weight		Management of Obesity
GIT-BhS-004	Describe and distinguish Medically Un described Symptoms (MUS)		Medically Un described Symptoms
	Describe the association of psychosocial factors with MUS		
	Outline the principles of management plan according to biopsychosocial model		
	Describe role of Cognitive Behavioral Therapy (CBT)		
GIT-BhS-005	To identify effect on mental development of nutritional deficiencies		Role of nutritional deficiencies in mental development
GIT-CM-001	Describe prevention and control of polio, viral hepatitis A, cholera, typhoid and food poisoning	Community Medicine	Epidemiology of

	Describe prevention and control of amoebiasis, ascariasis, hook worm infestation		communicable diseases (Intestinal infection)
	Describe the advice to be given for breast feeding, weaning and childhood		

GIT-CM-002	Discuss risk factors, prevention and management of protein energy malnutrition (PEM)		Preventive medicine in pediatrics
GIT-CM-003	Describe balanced diet for adult and obesity		Nutrition & Health
	Plot and interpret growth chart for children under 5 years of age		
	Describe prevention and control of deficiency of Vitamin A and D		

HISTOLOGY			
CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 12	
		DISCIPLINE	TOPIC
GIT-A-023	Identify, draw and label the histological sections of Tongue and Lips and enumerate points of identification	Histology Practical	Oral Cavity
GIT-A-024	Identify, draw and label the histological sections of Salivary glands (Submandibular, Sublingual and Parotid)	Histology Practical	Salivary Gland
GIT-A-025	Identify, draw and label the histological structure of the esophagus and enumerate points of identification Identify, draw and label the histological structure of stomach and enumerate points of identification	Histology Practical	Upper GIT
	Identify, draw and label the histological structure of small	Histology Practical	Small Intestine

GIT-A-026	intestine (Duodenum, Jejunum, and Ileum) and enumerate points of identification		
GIT-A-027	Identify, draw and label the histological structure of large intestine and enumerate points of identification	Histology Practical	Large Intestine
GIT-A-028	Identify, draw and label the histological sections of Gall bladder, liver and enumerate points of identification	Histology Practical	Organs associated with GIT
	Identify, draw and label the histological sections of pancreas and enumerate points of identification	Histology Practical	Organs associated with GIT
GIT-A-029	Identify, draw and label the histological sections of Palatine tonsil, appendix, peyer's patches and enumerate points of identification	Histology Practical	Lymphatic tissue associated with GIT

BIOCHEMISTRY

CODE	SPECIFIC LEARNING OBJECTIVES	TOTAL HOURS = 11	
		DISCIPLINE	TOPIC
GIT-B-021	Estimate blood glucose level by glucose oxidase method and interpret the results	Biochemistry Practical	Estimations of blood/urine analytes
	Determine blood glucose level by glucometer and interpret the result.		
	Interpret the graphs related to GCT and GTT		
	Determine urine glucose by dipstick method and by chemical method and interpret the result.		
	Estimate serum amylase and interpret the result.		

GIT-B-022	Calculate BMI of given subject and interpret the results.		Interpretation of results
PHYSIOLOGY			
CODE	**SPECIFIC LEARNING OBJECTIVES**	**TOTAL HOURS = 06**	
		DISCIPLINE	**TOPIC**
GIT-P-010	Demonstrate Cranial nerve V, IX & X testing	Physiology	Cranial nerve
PATHOLOGY			
CODE	**SPECIFIC LEARNING OBJECTIVES**	**TOTAL HOURS = 01**	
		DISCIPLINE	**TOPIC**
GIT-Pa-004	Identify microscopic features of: Acute and Chronic Gastritis H.Pylori Induced Gastritis	Pathology	Gastritis
PHARMACOLOGY			
CODE	**SPECIFIC LEARNING OBJECTIVES**	**TOTAL HOURS = 01**	
		DISCIPLINE	**TOPIC**
GIT-Ph-002	Preparation and calculation of oral rehydration salt (ORS)	Pharmacology	ORS

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

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

2. Continuous Assessment

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

3. Grand Test and Module Exams

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

4. Attitude and Behavior

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

5. Logbook and Portfolio

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

Assessment Criteria and Weighting

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

Component	Marks	Percentage
Attendance	6	2%
Continuous Assessment	12	4%

Grand Test and Module Exams	30	10%
Attitude and Behavior	10	3%
Logbook and Portfolio	2	1%
Total	60	20%

Assessment Procedures

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

Appeal Process

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

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

Attendance Requirement & Internal Assessment Criteria

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

Assessment Guidelines

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

Assessment drives learning! – George E. Millar

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

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

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

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

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

MBBS YEAR-2						
Block 4 **Modules** (GIT & Nutrition-I + Renal-I)	Part I MCQs (140)	140 Marks	Practical /Clinical Examination	11 OSPE 02 OSCE 03 OSVE	Marks 88 10 42	**350**
	Internal Assessment 10%	35 Marks	Internal Assessment 10%	35 Marks		
	Total	**175**	Total	**175**		

INTERNAL ASSESSMENT

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

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

Assessment Schedule:

Avicenna Medical College

2nd Year MBBS – Exam Schedule – 2026/27

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

15	17/8/26 to 21/8/26	Tutorial Test
16	24/8/26 to 28/8/26	Tutorial Test
17	31/8/26 to 4/9/26	Tutorial Test
18	9/9/26	Integrated Formative Assessment – 03
20	23/9/26	Integrated Formative Assessment – 04
21	30/09/26	Module – 08 (Theory + OSPE/OSVE)
23	12/10/26 to 16/10/26	Tutorial Test
24	21/10/26	Integrated Formative Assessment – 05
25	28/10/26	Allied Subjects Integrated Formative Assessment – 02
26	2/11/26 to 6/11/26	Tutorial Test
27	11/11/26	Module – 09 (Theory + OSPE/OSVE)
28	16/11/26	**Block – V (Theory)**
28	17/11/26	**Block – V (OSPE / OSVE)**
30	30/11/26 to 4/12/26	Tutorial Test
31	7/12/26 to 11/12/26	Tutorial Test
32	16/12/26	Integrated Formative Assessment – 06
33	28/12/26 to 1/1/27	Tutorial Test
34	6/1/27	Integrated Formative Assessment – 07
35	13/1/27	Module – 10 (Theory + OSPE/OSVE)
35	18/1/27	Allied Subjects Integrated Formative Assessment – 03
36	21/1/27	Module – 11 (Theory + OSPE/OSVE)
36	25/1/27	**Block – VI (Theory)**
36	26/1/27	**Block – VI (OSPE / OSVE)**

Table of Specification

MBBS 2nd Professional

Block-4

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	38	38	04	-	01	46
Normal Function	Physiology applied/clinical	28	28	03	-	01	38
	Biochemistry applied/clinical	37	37	02	-	01	30
Disease Burden & Prevention	Community Medicine & Public Health	06	06	-	-	-	-
	Behavioral Sciences	05	05	-	-	-	-
Pathophysiology & pharmacotherapeutics	Pathology	16	16	01	-	-	08
	Pharmacology	10	10	01	-	-	08
CFRC	CF-2	-	-	-	01	-	05
PERLs	PERLs-2	-	-	-	01	-	05
Total		**140**	**140**	**11 stations x 08 = 88**	**02 stations x 05 = 10**	**03 stations x 14=42**	**140**

Recommended Books & Reading Resources

Anatomy

Snell’s Clinical Anatomy 10th edition.

Langman’s Medical Embryology 12th edition

Medical Histology by Laiq Hussain Siddiqui 8th edition.

General Anatomy by Laiq Hussain Siddiqui 6th edition.

Biochemistry

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

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

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

Pathology

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

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

Richard Mitchall, Vinary Kumar, Abul K. Abbas and Nelson Fausto Robbins and Cotran, Pocket Companion to Pathologic basis of diseases, Saunder Harcourt.

Walter and Israel. General Pathology. Churchill Livingstone.

Robbins & Kumar, Medical Microbiology and Immunology Levinson.

General Medicine

Principles and Practice of Medicine by Davidson (latest edition)

Clinical Medicine by Parveen J Kumar & Michaell Clark

Oxford Handbook of Medicine

Macleod's Clinical Examination book

Medicine and Toxicology by C.K. Parikh

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

Pharmacology And Therapeu cs

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

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

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

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

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

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

Katzung Basic and Clinical pharmacology, Lippincot Illustated reviews.

Clinical Pathology Interpretations by A. H. Nagi

Behavioural Sciences

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

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

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

Community medicine

Parks Textbook of Preventive and Social Medicine. K. Park

Public Health and Community Medicine by Ilyas Ansari

MSDS manual of Government of Punjab

Textbook of Community Medicine by Park J E. Latest Edition

Surgery

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

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

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

Patent Safety

Patient Safety Curriculum Guide: Multi Professional Guide

Microbiology

Levinson’s review of Microbiology

Medical Microbiology and Immunology by Levinson and Jawetz,

Pediatrics Medicine

Nelson Textbook of Pediatrics

Basis of Pediatrics by Pervez Akbar Khan

Gynecology

Gynecology by Ten Teachers

Infection Control

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

Biosafety

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

WHO Laboratory Biosafety Manual, Fourth Edition, And Associated Monographs

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

Family medicine

Oxford Handbook of General Practice, 5th Edition

Orthopedics

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

Rheumatology

Davidson's Principles and Practice of Medicine

Clinical Medicine by Parveen J Kumar & Michaell, Clark

Hutchison's Clinical Methods by Michael Swash

Radiology

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

Elsevier Science Limited; 2003.

Forensic Medicine

Knight’s Forensic Pathology by Barnard Knight 3rd edition

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

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

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

Gun Shot Wounds 2nd edition by V.J.Deimaio

Knight B. Simpson's Forensic Medicine.

Knight and Pekka. Principles of Forensic Medicine

Forensic Pathology

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

Washington DC

Toxicology

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

Forensic Sciences

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

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

Biomedical ethics

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

Evidence Based Medicine

Databases for the latest articles/manuscripts

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

Books (Latest edition-within last 5 years)

Pediatrics

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

Islamiyat

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

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

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.