

AVICENNA MEDICAL & DENTAL COLLEGE



# STUDY GUIDE

## 2025

### Head & Neck, Special Senses

#### BLOCK 5- MODULE 9



**Program:** MBBS  
**Year:** 2nd Professional Year  
**Batch No:** M-23  
**Session:** 2024-2025

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## 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

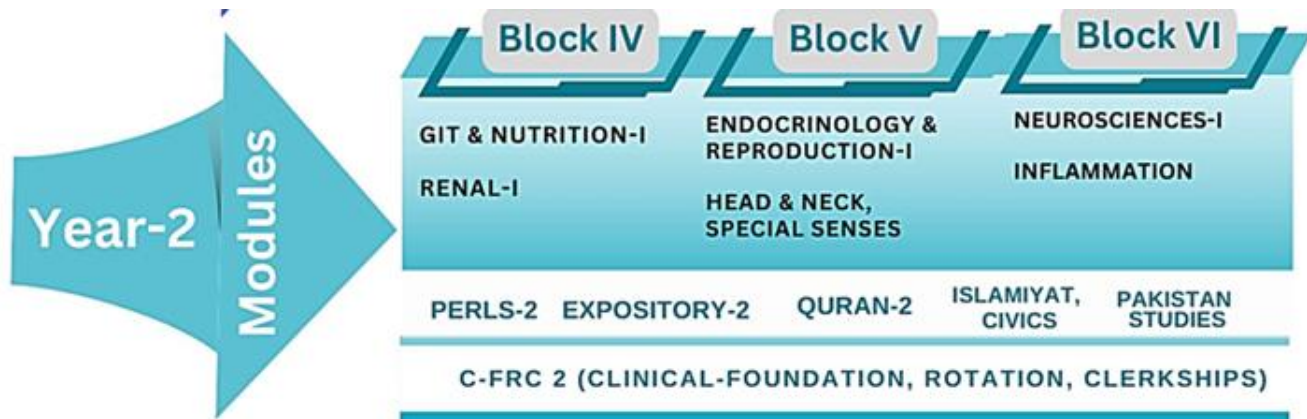
	<b>CMV</b>	cytomegalo virus
	<b>CNS</b>	Central Nervous System
	<b>CO</b>	Carbon monoxide
	<b>CO2</b>	Carbon dioxide
	<b>CODIS</b>	combined DNA index system
	<b>COPD</b>	Chronic obstructive pulmonary disease
	<b>COVID-19</b>	Corona Virus Disease 2019
	<b>COX</b>	Cyclooxygenase
	<b>CPR</b>	Cardiopulmonary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

	<b>GFR</b>	Glomerular Filtration Rate
	<b>GIT</b>	Gastrointestinal tract
	<b>GL-MS</b>	Gas Liquid Mass Spectrometry
	<b>GLC</b>	Gas Liquid Chromatography
	<b>GLP</b>	Guanosine Monophosphate
	<b>GMP</b>	Guanosine monophosphate
	<b>GO</b>	Gynecology and Obstetrics
	<b>GP</b>	General Practitioner
	<b>GPE</b>	General Physical Examination
	<b>GTO</b>	Golgi Tendon Organ
	<b>Gynae &amp; Obs</b>	Gynecology and Obstetrics
<b>H</b>	<b>H &amp; E</b>	Hematoxylin and eosin
	<b>H. influenzae</b>	Haemophilus influenzae
	<b>H.pylori</b>	Helicobacter pylori
	<b>HAI</b>	Healthcare Associated Infections
	<b>HbC</b>	Hemoglobin C
	<b>HbS</b>	Sickle Hemoglobin
	<b>HbSC</b>	Hemoglobin Sickle C Disease
	<b>HCL</b>	Hydrochloric Acid
	<b>HCM</b>	Hypertrophic Cardiomyopathy
	<b>HHV</b>	Human Herpesvirus
	<b>HIT</b>	Hematopoietic, Immunity and Transplant
	<b>HIV</b>	Human Immunodeficiency Virus
	<b>HL</b>	Hematopoietic & Lymphatic
	<b>HLA</b>	Human Leukocyte Antigen
	<b>HMP</b>	Hexose Monophosphate
	<b>HNSS</b>	Head & Neck and Special Senses
	<b>HPLC</b>	High Pressure Liquid Chromatography
<b>I</b>	<b>ICF</b>	Intra Cellular Fluid
	<b>ID</b>	Infectious Diseases
	<b>IE</b>	Infective Endocarditis
	<b>IL</b>	Interleukin
	<b>ILD</b>	Interstitial Lung Disease
	<b>IN</b>	Inflammation
	<b>INR</b>	International Normalized Ratio
	<b>INSTIs</b>	Integrase Strand Transfer Inhibitors
	<b>IPV</b>	Intrauterine Device
	<b>IUD</b>	Intrauterine device
	<b>IUGR</b>	Intra-Uterine Growth Restriction
<b>J</b>	<b>JVP</b>	Jugular Venous Pulse
<b>L</b>	<b>L</b>	Law
	<b>LD50</b>	Median Lethal Dose
	<b>LDH</b>	Lactate Dehydrogenase
	<b>LSD</b>	Lysergic acid diethylamide
<b>M</b>	<b>M</b>	Medicine
	<b>MALT</b>	Mucosa Associated Lymphoid Tissue
	<b>MBBS</b>	Bachelor of Medicine, Bachelor of Surgery
	<b>MCH</b>	Mean corpuscular hemoglobin
	<b>MCHC</b>	Mean Corpuscular Hemoglobin Concentration
	<b>MCV</b>	Mean Corpuscular Volume
	<b>MHO2001</b>	Mental Health Ordinance 2001
	<b>MoA</b>	Mechanism of action

	<b>MRI</b>	Mechanism of action
	<b>MS</b>	Musculoskeletal
	<b>MSD</b>	Musculoskeletal disorders
	<b>MSDS</b>	Minimum Service Delivery Standards
	<b>MSK</b>	Musculoskeletal
<b>N</b>	<b>N</b>	Neoplasia
	<b>NEAA</b>	Non-Essential Amino Acids
	<b>NK cells</b>	Natural Killer Cells
	<b>NNRTI</b>	Non-nucleoside Reverse Transcriptase Inhibitors
	<b>NRTIs</b>	Nucleoside Reverse Transcriptase Inhibitors
	<b>NS</b>	Neurosciences
<b>O</b>	<b>NSAIDs</b>	Non-steroidal Anti-Inflammatory Drugs
	<b>O</b>	Ophthalmology
	<b>OA</b>	Osteoarthritis
	<b>OPC</b>	Organophosphate
	<b>OPV</b>	Oral poliovirus vaccine
	<b>Or</b>	Orientation
	<b>Orth</b>	Orthopaedic
<b>P</b>	<b>P</b>	Physiology
	<b>P.jiroveci</b>	Pneumocystis jiroveci
	<b>Pa</b>	Pathology
	<b>PAD</b>	Pathology
	<b>PAF</b>	Platelet activating factor
	<b>PBL</b>	Problem Based Learning
	<b>PCH</b>	Psychiatry
	<b>PCR</b>	Polymerase Chain Reaction
	<b>PDA</b>	Patent Ductus Arteriosus
	<b>PDGF</b>	Platelet derived growth factor
	<b>Pe</b>	Pediatrics
	<b>PEM</b>	Protein Energy Malnutrition
	<b>PERLs</b>	Professionalism, Ethics, Research, Leadership
	<b>PET</b>	Positron Emission Tomography
	<b>Ph</b>	Pharmacology
	<b>Ph</b>	Pharmacology
	<b>PI</b>	Personal Identity
	<b>PID</b>	Pelvic inflammatory disease
	<b>PIs</b>	Protease inhibitors
	<b>PMC</b>	Pakistan Medical Commission
	<b>PMDC</b>	Pakistan Medical and Dental Council
	<b>PMI</b>	Post-Mortem Interval
	<b>PNS</b>	Peripheral Nervous System
	<b>PPD</b>	Paraphenylenediamine
	<b>PPE</b>	Personal Protective Equipment
	<b>Psy</b>	Psychiatry
	<b>PT</b>	Prothrombin Time
	<b>PVC</b>	Premature Ventricular Contraction
	<b>PVD</b>	Peripheral Vascular Diseases
<b>Q</b>	<b>QALY</b>	Quality-Adjusted Life Year
	<b>QI</b>	Quran and Islamiyat
<b>R</b>	<b>R</b>	Renal
	<b>Ra</b>	Radiology

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

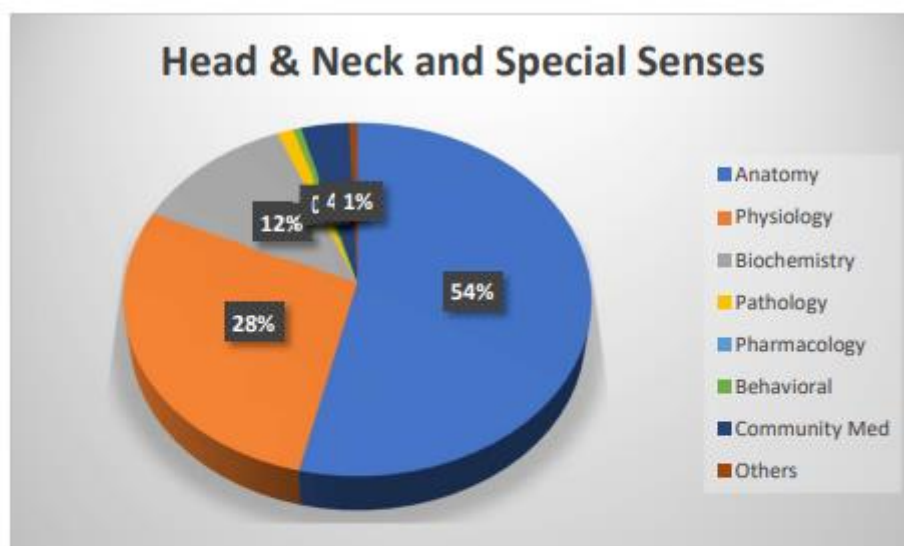
### 7. Learning Resources:

- 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.

## Introduction to Module

- 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.



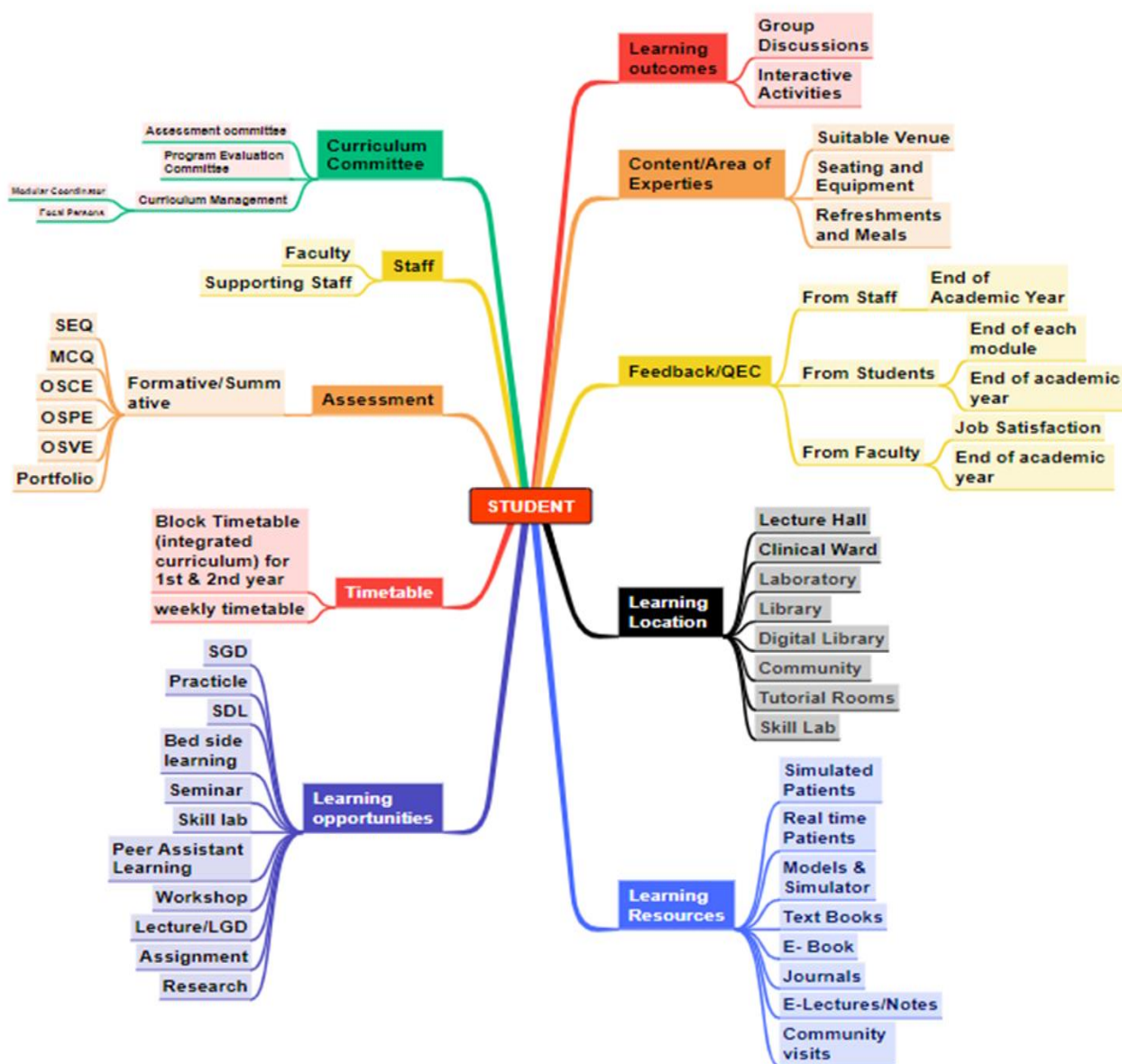
Module Weeks	Recommended Minimum Hours
05	158

## Module Committee

Name	Designation	Department
Prof. Dr. Gulfreen Waheed	Principal & Director	Medical Education
Dr. Saba Iqbal	Associate Director	Medical Education
Dr. Ijlal Zehra	Head	Assessment Cell
Dr. Javaid Shabkhez Rab	Coordinator	Medical Education
Dr. Salar Arsalan	Demonstrator	Medical Education
Dr. Zaib Hassan	Demonstrator	Medical Education
Ms. Tamzeela	Co-Coordinator	Medical Education
Mr. Adeel	Head	Student Affairs
Prof. Dr. Saeed Afzal	Head	Pathology
Dr. Majid	Focal Person	Pathology
Prof. Dr. Asma Saeed	Head	Pharmacology
Dr. Azka	Focal Person	Pharmacology
Prof. Dr. Rana Akhtar	Head	Community Medicine
Dr. Usman Sheikh	Focal Person	Community Medicine
Prof. Dr. Zainab	Head	Forensic Medicine
Dr. Anwar	Focal Person	Forensic Medicine
Prof. Dr. Hassan Khan	Head	Surgery Unit-1
Prof. Dr. Khalid Nizami	Head	Surgery Unit-2
Dr. Sumaira	Focal Person	General Surgery
Prof. Dr. Muzammil	Head	Medicine Unit-1
Prof. Dr. Waheed Ahmed	Head	Medicine Unit-2
Dr. Usman	Focal Person	General Medicine
Dr. Usman	Focal Person	Psychiatry
Dr. Usman	Focal Person	Family Medicine
Dr. Farhat	Head	Behavioural Sciences
Dr. Uzma	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:



# Timetable

AVICENNA MEDICAL COLLEGE									
TIME TABLE M-23		2ND YEAR MBBS Week - 20		SESSION 2024 - 2025				BLOCK # V MODULE - 08	
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	01:30 - 02:30	02:30 - 03:00
07/07/2025	Mon	Lecture Anatomy	Lecture Physiology	Lecture Anatomy	Lecture Biochemistry	<b>BREAK</b>	SGD 3 BATCHES	PRACTICAL 4 BATCHES	Clinical
08/07/2025	Tues	Lecture Physiology	Lecture Biochemistry	Lecture Anatomy	Lecture Physiology Int. Patho		SGD 3 BATCHES	PRACTICAL 4 BATCHES	Clinical
09/07/2025	Wed	Lecture Biochemistry	Lecture Anatomy	Lecture Physiology	Lecture Anatomy		SGD 3 BATCHES	PRACTICAL 4 BATCHES	Clinical
10/07/2025	Thur	GRAND TEST Anatomy			OSPE + OSVE Anatomy		Lecture Holy Quran	PRACTICAL 4 BATCHES	SDL
11/07/2025	Fri	Lecture Anatomy	Lecture Physiology Int. Ear	<b>BREAK</b>	Lecture Physiology	Lecture Pathology	SDL	Jumma Break	SDL

# AVICENNA MEDICAL COLLEGE

TIME TABLE M-23		2ND YEAR MBBS Week - 21		SESSION 2024 - 2025				BLOCK # V MODULE - 09	
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	01:30 - 02:30	02:30 - 03:00
14/07/2025	Mon	Lecture Anatomy	Lecture Physiology	Lecture Anatomy	Lecture Biochemistry	<b>BREAK</b>	SGD 3 BATCHES	PRACTICAL 3 BATCHES	Clinical
15/07/2025	Tues	Lecture Physiology	Lecture Biochemistry	Lecture Anatomy	Lecture PERL		SGD 3 BATCHES	PRACTICAL 3 BATCHES	Clinical
16/07/2025	Wed	Lecture Biochemistry	Lecture Anatomy	Lecture Physiology	Lecture Anatomy		SGD 3 BATCHES	PRACTICAL 3 BATCHES	Clinical
17/07/2025	Thur	MODULE - 08			KEY DISCUSSION		Lecture PERL	OSPE + OSVE	
18/07/2025	Fri	Lecture Anatomy	Lecture Biochemistry	<b>BREAK</b>	Lecture Physiology	Lecture Holy Quran	SDL	Jumma Break	SDL

# AVICENNA MEDICAL COLLEGE

TIME TABLE M-23		2ND YEAR MBBS Week - 26		SESSION 2024 - 2025				BLOCK # V MODULE - 09	
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	01:30 - 02:30	02:30 - 03:00
18/08/2025	Mon	Lecture Anatomy	Lecture Biochemistry	Lecture Physiology	Lecture Pathology	<b>BREAK</b>	SGD 3 BATCHES + 1 Patho Prac	PRACTICAL 4 BATCHES	Clinical
19/08/2025	Tues	08:00 - 09:00 Lecture Physiology	09:00 - 10:00 Lecture Anatomy	10:00 - 11:00 Lecture Biochemistry	11:00 - 12:00 Lecture Anatomy		12:30-01:30 SGD 3 BATCHES + 1 Patho Prac	01:30 - 02:30 PRACTICAL 4 BATCHES	02:30 - 03:00 Clinical
20/08/2025	Wed	08:00 - 09:00 Lecture Physiology <u>Int. Ear</u>	09:00 - 10:00 Lecture Anatomy	10:00 - 11:00 Lecture PERL	11:00 - 12:00 Lecture Anatomy		12:30-01:30 SGD 3 BATCHES + 1 Patho Prac	01:30 - 02:30 PRACTICAL 4 BATCHES	02:30 - 03:00 Clinical
21/08/2025	Thur	08:00 - 09:00 Lecture Biochemistry	09:00 - 10:00 Lecture Anatomy	10:00 - 11:00 Lecture Physiology	11:00 - 12:00 Lecture Com. Med.		12:30-01:30 SGD 3 BATCHES + 1 Patho Prac	01:30 - 02:30 PRACTICAL 4 BATCHES	02:30 - 03:00 SDL
22/08/2025	Fri	08:00 - 09:00 Lecture Anatomy	09:00 - 10:00 Lecture Physiology	10:00 - 10:30 <b>BREAK</b>	10:30 - 11:30 Lecture Biochemistry	11:30 - 12:30 Lecture Holy Quran	12:30-01:30 SDL	01:30 - 02:30 Jumma Break	02:30 - 03:30 SDL



# AVICENNA MEDICAL COLLEGE

TIME TABLE M-23		2ND YEAR MBBS Week - 27		SESSION 2024 - 2025				BLOCK # V MODULE - 09	
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	01:30 - 02:30	02:30 - 03:00
25/08/2025	Mon	Lecture Anatomy	Lecture Beh. Sc.	Lecture Anatomy	Lecture Physiology	BREAK	SGD 4 BATCHES	PRACTICAL 4 BATCHES	Clinical
26/08/2025	Tues	08:00 - 09:00	09:00 - 10:00	10:00 - 11:00	11:00 - 12:00		12:30-01:30	01:30 - 02:30	02:30 - 03:00
		Lecture Physiology	Lecture Biochemistry	Lecture Anatomy	Lecture PERL		SGD 4 BATCHES	PRACTICAL 4 BATCHES	Clinical
27/08/2025	Wed	08:00 - 09:00	09:00 - 10:00	10:00 - 11:00	11:00 - 12:00		12:30-01:30	01:30 - 02:30	02:30 - 03:00
		Lecture Biochemistry	Lecture Anatomy	Lecture Physiology	Lecture Anatomy		SGD 4 BATCHES	PRACTICAL 4 BATCHES	Clinical
28/08/2025	Thur	08:00 - 09:00	09:00 - 10:00	10:00 - 11:00	11:00 - 12:00		12:30-01:30	01:30 - 02:30	02:30 - 03:00
		GRAND TEST Physiology			OSPE + OSVE Physiology		SGD 4 BATCHES	PRACTICAL 4 BATCHES	SDL
29/08/2025	Fri	Lecture Anatomy	Lecture Physiology	BREAK	Lecture Pharmacology	Lecture Holy Quran	SDL	Jumma Break	SDL



# AVICENNA MEDICAL COLLEGE

TIME TABLE M-23		2ND YEAR MBBS Week - 28		SESSION 2024 - 2025				BLOCK # V MODULE - 09	
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	01:30 - 02:30	02:30 - 03:00
01/09/2025	Mon	Lecture Anatomy	Lecture Biochemistry	Lecture Anatomy	Lecture Physiology	BREAK	SGD 4 BATCHES	PRACTICAL 4 BATCHES	Clinical
02/09/2025	Tues	08:00 - 09:00	09:00 - 10:00	10:00 - 11:00	11:00 - 12:00		12:30-01:30	01:30 - 02:30	02:30 - 03:00
		Lecture Physiology	Lecture Biochemistry	Lecture Anatomy	Lecture Com. Med.		SGD 4 BATCHES	PRACTICAL 4 BATCHES	Clinical
03/09/2025	Wed	08:00 - 09:00	09:00 - 10:00	10:00 - 11:00	11:00 - 12:00		12:30-01:30	01:30 - 02:30	02:30 - 03:00
		Lecture Biochemistry	Lecture Anatomy	Lecture Physiology	Lecture Anatomy		SGD 4 BATCHES	PRACTICAL 4 BATCHES	Clinical
04/09/2025	Thur	08:00 - 09:00	09:00 - 10:00	10:00 - 11:00	11:00 - 12:00	BREAK	12:30-01:30	01:30 - 02:30	02:30 - 03:00
		GRAND TEST Biochemistry			OSPE + OSVE Biochemistry		SGD 4 BATCHES	PRACTICAL 4 BATCHES	SDL
05/09/2025	Fri	08:00 - 09:00	09:00 - 10:00	10:00 - 10:30	10:30 - 11:30	11:30 - 12:30	12:30-01:30	01:30 - 02:30	02:30 - 03:30
		Lecture Anatomy	Lecture PERL	BREAK	Lecture Physiology	Lecture Holy Quran	SDL	Jumma Break	SDL

# AVICENNA MEDICAL COLLEGE

TIME TABLE M-23		2ND YEAR MBBS Week - 29		SESSION 2024 - 2025				BLOCK # V MODULE - 09	
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	01:30 - 02:30	02:30 - 03:00
08/09/2025	Mon	Lecture Anatomy	Lecture Biochemistry	Lecture Anatomy	Lecture Physiology	BREAK	SGD 4 BATCHES	PRACTICAL 4 BATCHES	Clinical
09/09/2025	Tues	08:00 - 09:00	09:00 - 10:00	10:00 - 11:00	11:00 - 12:00		12:30-01:30	01:30 - 02:30	02:30 - 03:00
		Lecture Biochemistry	Lecture Physiology	Lecture Anatomy	Lecture Aging ENT		SGD 4 BATCHES	PRACTICAL 4 BATCHES	Clinical
10/09/2025	Wed	08:00 - 09:00	09:00 - 10:00	10:00 - 11:00	11:00 - 12:00		12:30-01:30	01:30 - 02:30	02:30 - 03:00
		Lecture Physiology	Lecture Anatomy	Lecture Aging Biochemistry	Lecture Anatomy		SGD 4 BATCHES	PRACTICAL 4 BATCHES	Clinical
11/09/2025	Thur	08:00 - 09:00	09:00 - 10:00	10:00 - 11:00	11:00 - 12:00		12:30-01:30	01:30 - 02:30	02:30 - 03:00
		GRAND TEST Anatomy			OSPE + OSVE Anatomy		SGD 4 BATCHES	PRACTICAL 4 BATCHES	SDL
12/09/2025	Fri	08:00 - 09:00	09:00 - 10:00	10:00 - 10:30	10:30 - 11:30	11:30 - 12:30	12:30-01:30	01:30 - 02:30	02:30 - 03:30
		Lecture Anatomy	Lecture Physiology	BREAK	Lecture PERL	Lecture Holy Quran	SDL	Jumma Break	SDL

# AVICENNA MEDICAL COLLEGE

TIME TABLE M-23		2ND YEAR MBBS Week - 30		SESSION 2024 - 2025				BLOCK # VI MODULE - 10	
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	01:30 - 02:30	02:30 - 03:00
15/09/2025	Mon	GRAND TEST ALLIED	Lecture Beh. Sc.	Lecture Anatomy	Lecture Physiology	<b>BREAK</b>	SGD 3 BATCHES	PRACTICAL 3 BATCHES	Clinical
16/09/2025	Tues	Lecture Biochemistry	Lecture Physiology	Lecture Anatomy	Lecture Perls		SGD 3 BATCHES	PRACTICAL 3 BATCHES	Clinical
17/09/2025	Wed	Lecture Physiology	Lecture Anatomy	Lecture Biochemistry	Surgery		SGD 3 BATCHES	PRACTICAL 3 BATCHES	Clinical
18/09/2025	Thur	MODULE - 06			KEY DISCUSSION		OSPE + OSVE		SDL
19/09/2025	Fri	Lecture Physiology	Lecture Anatomy	<b>BREAK</b>	Lecture Anatomy	Lecture Holy Quran	SDL	Jumma Break	SDL

## Allocation of Hours

Allocation of Hours																						
2nd Year MBBS																						
	Anatomy				Biochemistry				Physiology				Path		Pharm	Bh.Sc.	C.M.	PERL	Quran	Clinical	Exams	Total
Wk #	Lec	Prac	SGD	SDL	Lec	Prac	SGD	SDL	Lec	Prac	SGD	SDL	Lec	Prac	Pharm	Bh.Sc.	C.M.	PERL	Quran	Clinical	Exams	Total
0	3			1	4			1	3			1	1		1	1	1	1	1	1		20
1	6	2	2	1	6	1	1	1	5	1	1	1				1	1		1	3		34
2	5	2	1	1	5	1	1	1	5	1	1	1	1	1						3	4	34
3	6	2	2	1	4	1	1	1	5	1	1	1					1			3	4	34
4	6	2	2	1	5	1	1	1	4	1	1	1				1				3	4	34
5	5	2	2	1	4	1	1	1	5	1	1	1				1	1			3	4	34
6																						0
7	6	2	2	1	5	1	1	1	4	1	1	1					1			3	4	34
8	5	2	2	1	5	1	1	1	4	1	1	1	1				1			3	4	34
9	5	1	1	1	5	1	1	1	5	1	1	1			1	1				3	5	34
10	3	1	1	1	4	1	1	1	4	1	1						1			3	4	27
11	5	2	1	1	4	1	1	1	4	1	1	1	1	1		1	1			3	4	34
12	4	2	2	1	4	1	1	1	4	1	1	1	1	1	1	1	1	1		3	4	34
13	6	1	1	1	3	1	1	1	4	1	1	1	1	1				1	1	3	6	34
14	3	1	1	1	2	1	1	1	3	1	1	1				1	1			2	6	27
15	6	2	1		4	1	1		4	1	1	1	1		1			1		3		28
16	5	1	1	1	2	1	1	1	3	1	1	1	1	1			1			2	4	27
17	6	2	1	1	3	1	1	1	5	1	1	1	1	1						3	4	33
18	6	2	1	1	3	1	1	1	4	1	1	1	1	1		1		1	1	3	4	34
19	6	2	1	1	4	1	1	1	5	1	1	1					1	1		3	4	34
20	6	2	1	1	3	1	1	1	6	1	1	1	1	1					1	3	4	34
21	6	1	1	1	4	1	1	1	4	1	1	1						2	1	3	5	34
22																						0
23																						0
24																						0
25																						0
26	7	2	1	1	4	1	1	1	5	1	1	1	1	1			1	1	1	3		34
27	6	2	2	1	2	1	1	1	4	1	1	1			1	1		1	1	3	4	34
28	6	2	2	1	3	1	1	1	4	1	1	1					1	1	1	3	4	34
29	6	2	2	1	3	1	1	1	4	1	1	1					1	1	1	3	4	33
30	5	1	1	1	2	1	1	1	4	1	1	1	1			1		2	1	3	6	34
31	4	1	1	1	1	1	1	1	2	1	1	1	1	1					1	2	6	27
32	5	2	2	1	3	1	1	1	4	1	1	1					1			3	4	31
33	5	2	2	1	3	1	1	1	4	1	1	1			1	1				3	4	32
34	5	2	2	1	3	1	1	1	4	1	1	1	1					1	1	3	4	33
35	5	2	2	1	2	1	1	1	3	1	1	1	1		1	1	1		1	3	4	33
36	5	2	1	1	1	1	1	1	2	1	1	1	3	1	3			1	1	3	4	34
37	3	2	2	1	1	1	1	1	2	1	1	1	2		2	1	1	2	2	3	4	34
38																					6	6
39																					6	6
40																						0
	171	56	47	32	111	32	32	32	132	32	32	32	21	6	13	15	15	17	17	94	138	1077
	AL	AP	AS	AT	BL	BP	BS	BT	PL	PP	PS	PT	PtL	PtP	PhL	Bh.Sc.	C.M.	PERL	Quran	Clinical	Exams	1077
	306				207				228				27		13	15	15	17	17	94	124	1077

## **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

Week: No	Total Hours	No.	Mode of Teaching	Topic	Code	Learning Objective	Reference	Facilator
Week:20	Physiology							
Week:20	1	1	Lecture	Visual Acuity	HNSS-P-001	Define and describe the visual acuity. Define Emmetropia Enlist the errors of refraction. Explain the cause, features, physiological basis, and correction of Hyperopia	Guyton & Hall Edition 14 CH:50 Pg:631-634	Dr. Nida
Week:20	2	2	Lecture	Visual Acuity	HNSS-P-001	Explain the cause, features, physiological basis, and correction of myopia. Explain the cause, features, physiological basis, and correction of astigmatism. Describe the pathophysiology and treatment of cataract	Guyton & Hall Edition 14 Ch: 82 Pg: 1032-1035	Dr. Amna ILLYAS
Week:20	3	3	Lecture	Errors of Refraction	HNSS-P-002	Interpret common treatment modalities for Refractive errors	Guyton & Hall Edition 14 Ch: 82 Pg: 1036	Dr. Hafsa
Week:20	4	4	Lecture	Fluid system /Glaucoma	HNSS-P-003,004	Describe the mechanism of formation and outflow of aqueous humor. Describe normal value of intraocular pressure and its regulation Describe the method for measuring the intraocular pressure. Describe	Guyton & Hall Edition 14 CH: 50 Pg: 637	Dr. Nida

						the causes and features and pathophysiology of glaucoma. Discuss the clinical features of Open Angle and Angle Closure Glaucoma		
Week:20	5	5	Practical	Cranial Nerve	HNSS-P-003,005	Cranial nerve 1	Zafar Ch.Vol.II	Dr. Neelum
Week:20	6	6	Tutorial	Pancreatic Hormones	EnR-P-004	Types and Diseases	Guyton & Hall Edition 14 Ch: 79 Pg:981	Dr. Ayesha
Week:20	Anatomy							
Week:20	7	1	Gross Anatomy	Olfaction	HNSS-A 002	List the paranasal sinuses giving their locations, openings, neurovascular supply and clinical significance. Describe the course and distribution of olfactory nerve in reference to olfactory pathway. Give the effects of its lesions. Describe the anatomical features and neurovascular supply of external ear	Snell Clinical Anatomy by Region, 10th ed. Pg. No 733-735	Dr. Kalsoom
Week:20	8	2	Gross Anatomy	Hearing	HNSS-A 003	Describe the boundaries, contents, neurovascular supply and communications of middle ear cavity.	Snell Clinical Anatomy by Region, 10th ed. Pg. No 705-712	Dr. Kalsoom
Week:20	9	3	Gross Anatomy	Hearing	HNSS-A 003	Describe the parts, anatomical features and neurovascular supply of internal ear. Human Describe the course and distribution of	Snell Clinical Anatomy by Region, 10th ed. Pg. No 705-712	Dr. Sumera



						vestibulocochlear nerve mentioning the effects of its lesion. Describe auditory pathway.		
Week:20	10	4	EMBRYOLOGY	Tongue and Thyroid gland.	HNSS-A 038	Describe the development of tongue and thyroid gland. List and provide embryological basis of congenital anomalies of tongue and thyroid gland.	Langman Medical Embryology, 5th ed. Ch. NoPg. No 297-298	Dr. Razia
Week:20	11	5	EMBRYOLOGY	Tongue and Thyroid gland.	HNSS-A 038	Describe the development of tongue and thyroid gland. List and provide embryological basis of congenital anomalies of tongue and thyroid gland.	Langman Medical Embryology, 5th ed. Ch. NoPg. No 297-298	Dr. Razia
Week:20	12	6	HISTOLOGY	Ovaries	EnR-A-045	Describe the light microscopic structure of ovaries, Describe the light microscopic structure of ovarian follicles in different stages of menstrual cycle. Describe the histological basis and manifestation of Polycystic Ovary Syndrome	Medical Histology By Laiq Hussain 6th ed Pg. No 231-242	Dr. Madiha
Week:20	13	7	Practical	Pelvis	EnR-A-025	Describe the clinical presentation and anatomical justification for: 1) Hypospadias 2) Phimosis 3) Circumcision 4) Erectile Dysfunction 5) Internal Hernias 6) Suprapubic Cystotomy 7) Rupture Of Bladder 8) Rectal Examination 9) Disposition Of Uterus	Snell Clinical Anatomy By Region	Dr. Shazia/Dr. Madiha



Week:20	14	8	Practical	Cervix and Vagina	EnR-A-059-60	identify, draw and label the cervix and vagina under light microscope	Histology practical note book	Dr. Shaista
Week:20	15	9	Tutorial	Pelvis	EnR-A-025	Describe the clinical presentation and anatomical justification for: 1) Hypospadias 2) Phimosis 3) Circumcision 4) Erectile Dysfunction 5) Internal Hernias 6) Suprapubic Cystotomy 7) Rupture Of Bladder 8) Rectal Examination 9) Disposition Of Uterus	Snell Clinical Anatomy By Region	Dr. Shazia/Dr. Madiha
Week:20	Biochemistry							
Week:20	16	1	Lecture	Techniques 03	ENR-B-021	BLOTTING TECHNIQUES	Lippincott 7th edition Chapter 13	Prof Dr Sadia Amir
Week:20	17	2	Lecture	Techniques 04	ENR-B-021	DNA SEQUEECING	Lippincott 7th edition Chapter 14	Prof Dr Sadia Amir
Week:20	18	3	Lecture	Endo 1	ENR-B-001-004	Endo I	Lippincott 7th edition Chapter 15	Dr Sadia Khalil
Week:20	19	4	Practical	Detect abnormal constituents in urine by chemical methods	HNSS-B 004	Perform HbA1C by chromatographic method	Lab Manual	Monday: Dr. Maryam Tuesday: Dr. Seemal Wednesday: Dr. Zahra Thursday: Dr. Aleena
Week:20	20	5	Tutorial	Techniques 04	ENR-B-021	DNA SEQUEECING	Lippincott 7th edition Chapter 14	Monday: Dr. Maryam Tuesday: Dr. Seemal

								Wednesday: Dr. Zahra Thursday: Dr. Aleena
Week:20	Pathology							
Week:20	21	1	Lecture	EnR-Pa-008	Pathology of Adrenal Gland	Enumerate causes of Cushing syndrome with lab investigations Causes and clinical features of adrenocortical insufficiency (Addison disease)	Robbins	Dr. Munazza
Week:20	22	1	Lecture	EnR-Pa-011	Male Reproductive Pathology	Enumerate causes of inflammation of male genital tract Causes of male infertility with semen analysis Describe pathological features of testicular torsion	Robbins	Dr. Naeem
Week:20	Holy Quran							
Week:20	23	1	Lecture	f. Justice (Adal-o-insaf)	i. Justice of Allah subhan wa taala ii. Importance of justice for the survival of community		Islamiyat Notes	Amna Syed
Week:20	24	2	Lecture	f. Justice (Adal-o-insaf)	iii. Need of justice to be prevailed irrespective of religion iv. Devine reward for fair justice		Islamiyat Notes	Amna Syed
Week:20	SDL							
Week:20	25	1	Self Directed Learning					

Week:20	26	2	Self Directed Learning			
Week:20	27	3	Self Directed Learning			
Week:20	28	4	Self Directed Learning			
Week:20	Clinical Skill					
Week:20	29	1	Clinical skills	revsion of Examination of thyroid Gland	LOG BOOK	Medical Faculty
Week:20	30	2	Clinical skills	revsion of Examination of thyroid Gland	LOG BOOK	Medical Faculty
Week:20	Assessment					
Week:20	31	1	Grand Test			
Week:20	32	2	Grand Test			
Week:20	33	3	OSPE/VIVA			
Week:20	34	4	OSPE/VIVA			

Week: No	Total Hours	No.	Mode of Teaching	Topic	Code	Learning Objective	Reference	Facilator
Week:21	Physiology							
Week:21	1	1	Lecture	Retina	HNSS-P-005	Describe the physiological anatomy and function of structural elements of retina Enlist different layers of retina Explain the significance of melanin pigment in retina Describe macula and foveal region of retina and their significance Describe the structure of rods and cones	Guyton & Hall Edition 14 CH: 51Pg:639	Dr. Nida
Week:21	2	2	Lecture	Retina/Field of vision/Eye movemt,Accomod ationePupillary light reflexnts	HNSS-P-005,HNSS-P-010,012,014,015	Comment on the location of optic disc and its significance Describe the cause, features, and treatment of retinal detachment Enlist the current investigations for Retinal Diseases	Guyton & Hall Edition 14 CH: Pg:640-643	Dr. Hafsa
Week:21	3	3	Lecture	Photochemistry of Vision/CNS	HNSS-P-006	CNS/Describe the rhodopsin-retinal visual cycle Describe the mechanism of excitation of rods/ rods receptor potential Describe the causes and treatment of night Blindness	Guyton & Hall Edition 14 CH:51 Pg: 642	Prof: Dr Sadia

Week:21	4	4	Lecture/INTEGRATED Eye	Fluid systems of the Eye ,Glaucoma,Retina ,Adaptation ,Color vision,Visual fields,Strabismus , clinical features of Presbyopia	HNSS-P-003 ,004,005,007,008,011, 013,14	Describe the pathophysiology and treatment of catarac	Guyton & Hall Edition 14	Dr. Fariha
Week:21	5	5	Practical	Cranial Nerve	HNSS-P-006	Cranial nerve 1	Zafar Ch.Vol.II	Dr. Shaista
Week:21	6	6	Tutorial	Reggulation of Calcium	EnR-P-007	Discuss the effects of Vitamin D.Discuss the effects of calcitonin on calcium Discuss the regulation of calcium (the first & second line of defense)Explain the causes and features of hypoparathyroidism Explain the causes and the features of primary and secondary hyperparathyroidism.Enumerate the causes and features of osteoporosis	Guyton & Hall Edition 14 Ch: 80 Pg:1003-1006	Dr. Neelum
Week:21								
Week:21	7	1	Gross Anatomy	Scalp	HNSS-A 006	List the layers of scalp and describe the anatomical features with neurovascular supply and lymphatic drainage of scalp.Give anatomical justification of spread of scalp infections, profuse bleeding in superficial scalp lacerations, gaping of scalp wounds and black eye.	Snell Clinal Anatomy by Region, 10th ed. Pg. No 632	Dr. Kalsoom

<b>Week:21</b>	<b>8</b>	<b>2</b>	<b>Gross Anatomy</b>	<b>Muscles of Facial Expression</b>	<b>HNSS-A 007</b>	<b>Enlist in tabulated manner the muscles of facial expression and mastication, giving their nerve supply and actions. Define modiolus.</b>	<b>Snell Clinical Anatomy by Region, 10th ed. Pg. No 630</b>	<b>Dr. Kalsoom</b>
<b>Week:21</b>	<b>9</b>	<b>3</b>	<b>Gross Anatomy</b>	<b>Neurovascular Supply of Face</b>	<b>HNSS-A 008</b>	<b>Describe the functional modalities, course, branches, and distribution of cranial nerves innervating the face (sensory and motor): trigeminal and facial nerves Human Anatomy Neurovascular supply of face Describe the vascular supply and lymphatic drainage of face. Draw a diagram to illustrate cutaneous innervation of face.</b>	<b>Snell Clinical Anatomy by Region, 10th ed. Pg. No 633-688</b>	<b>Dr. Sumera</b>
<b>Week:21</b>	<b>10</b>	<b>4</b>	<b>Gross Anatomy</b>	<b>Danger Area</b>	<b>HNSS-A 008-009</b>	<b>Discuss anastomoses of facial artery with contralateral vessels and branches of internal carotid artery with their clinical significance. Describe the danger area of face with its clinical significance. Define the routes of spread of infection from face and scalp to intracranially.</b>	<b>Snell Clinical Anatomy by Region, 10th ed. Pg. No 635-638</b>	<b>Dr. Sumera</b>
<b>Week:21</b>	<b>11</b>	<b>5</b>	<b>EMBRYOLOGY</b>	<b>Face and nasolacrimal duct</b>	<b>HNSS-A 039</b>	<b>Describe the development of face and nasolacrimal duct and their respective congenital anomalies.</b>	<b>Langman Medical Embryology, 5th ed. Ch. NoPg. No 300-301</b>	<b>Dr. Razia</b>
<b>Week:21</b>	<b>12</b>	<b>6</b>	<b>HISTOLOGY</b>	<b>Head &amp; Neck</b>	<b>HNSS-A 045</b>	<b>Differentiate between serous and mucous acini. Describe the structure and location of serous demilunes. Describe the serous and mucous</b>	<b>Medical Histology By Laiq Hussain 6th ed Pg. No 169-204</b>	<b>Dr. Madiha</b>

						acini and give histological differences between the two.		
Week:21	13	7	Practical	Glands	HNSS-A 050	Identify, draw and label a diagram to show histological structure of parotid, submandibular and sublingual glands.	Histology practical note book	Dr. Shaista
Week:21	14	8	Tutorial	Muscles of Facial Expression	HNSS-A 007	Enlist in tabulated manner the muscles of facial expression and mastication, giving their nerve supply and actions. Define modiolus.	Snell Clinical Anatomy by Region	Dr. Shazia/Dr. Madiha
Week:21	Biochemistry							
Week:21	15	1	Lecture	Endo 2	ENR-B-004-008	Endocrinology	Lippincott 7th edition Chapter 16	Dr Sadia Khalil
Week:21	16	2	Lecture	Genetics II	Enr-B-018-025	Genetics	Lippincott 7th edition Chapter 17	Prof Dr Haroon Habib
Week:21	17	3	Lecture	Genetics III	ENR-B-026-030	Genetics	Lippincott 7th edition Chapter 18	Prof Dr Haroon Habib
Week:21	18	4	Lecture	Genetics III	ENR-B-009-017	Genetics	Lippincott 7th edition Chapter 19	Prof Dr Haroon Habib
Week:21	19	5	Practical	Abnormal constituents in urine	HNSS-B 006	Genetics	Lab Manual	Monday: Dr. Maryam Tuesday: Dr. Seemal Wednesday:

								Dr. Zahra Thursday: Dr. Aleena
Week:21	20	6	Tutorial	Metabolism of fructose & associated diseases	HNSS-B-001	DISCUSS METABOLISM OF MONO AND DISACCHARIDES	Lippincott 7th edition Chapter 28	Monday: Dr. Maryam Tuesday: Dr. Seemal Wednesday: Dr. Zahra Thursday: Dr. Aleena
Week:21	PERLs							
Week:21	21	1	Lecture	Ethics		Patient Confidentiality	Lecture Presentation	Dr. Javaid Sabkhaz
Week:21	22	2	Lecture	Leadership		Basics of Teamwork	Lecture Presentation	Dr. Saba Iqbal
Week:21	Holy Quran							
Week:21	23	1	Lecture	Business (Bay-o-tijarat)	i. Importance of fair business and its necessary constituents ii. Permissible and impermissible conditions of businesses iii. Concept of loan in businesses		Islamiyat Notes	Amna Syed
Week:21	SDL							
Week:21	24	1	Self Directed Learning					
Week:21	25	2	Self Directed Learning					
Week:21	26	3	Self Directed Learning					



Week:21	27	4	Self Directed Learning			
Week:21	Clinical Skill					
Week:21	28	1	Clinical skills	revision of Examination of thyroid Gland	LOG BOOK	Medical Faculty
Week:21	29	2	Clinical skills	revision of Examination of thyroid Gland	LOG BOOK	Medical Faculty
Week:21	Assessment					
Week:21	30	1	Module-8			
Week:21	31	2	Module-8			
Week:21	32	3	Key Discussion			
Week:21	33	4	OSPE/VIVA			
Week:21	34	5	OSPE/VIVA			

Week: No	Total Hours	No.	Mode of Teaching	Topic	Code	Learning Objective	Reference	Facilator
Week:26	Physiology							
Week:26	1	1	Lecture	Sence of Hearing	HNSS-P-014	Describe the physiological anatomy of outer and middle ear.Enlist the functions of middle earDiscuss clinical features and treatment of impacted Wax.Define causes and clinical features of OtomycosisDescribe the mechanism of impedance matching and its significanceDescribe the mechanism of attenuation reflex and its significance	Guyton & Hall Edition 14 CH:53Pg: 664	Prof. Dr. Shaheena
Week:26	2	2	Lecture	Inner ear/cochlea/Organ of Corti	HNSS-P-016.017,018	Describe the physiological anatomy of inner earDescribe the mechanism of transmission of sound waves in cochleaDescribe the physiological anatomy and function of organ of Corti  Describe the mechanism of generation of endo-cochlear potential and its significance	Guyton & Hall Edition 14 CH:53 Pg: 665-668	Dr. Hafsa
Week:26	3	3	Lecture	Inner ear/cochlea/Organ of Corti	HNSS-P-016.017,018	Describe the physiological anatomy of inner earDescribe the mechanism of transmission of sound waves in cochleaDescribe the physiological	Guyton & Hall Edition 14 CH:53 Pg: 665-668	Dr Amna illyas

						anatomy and function of organ of Corti Describe the mechanism of generation of endo-cochlear potential and its significance		
Week:26	4	4	Lecture	SENSE OF TASTE/"Taste preference and aversion"Sense of smell	HNSS-P-024,025,026	Enlist the primary taste sensationsDefine and explain the term taste blindness.Describe the physiological anatomy and location of taste buds.Describe the mechanism of stimulation of taste buds/ receptor potentialTrace the pathway of taste sensationDefine and explain the terms: Ageusia, Hypergeusia, Hypogeusia and dysgeusiaDescribe the senile changes in taste budsxplain the terms:	Guyton & Hall Edition 14 CH:52 Pg: 657	Prof. Dr. Shaheena
Week:26	5	5	Lecture/INTEGRATED	Sense of hearing ,Auditory pathway	HNSS-P016	Discuss clinical features and treatment of impacted wax ,Discuss the clinical features and investigations of Congenital and Acquired hearing loss	Dhingra 7th Ed.	Dr. Behram
Week:26	6	6	Practical	Light reflex	HNSS-P- 28	Examination of Light Reflex	Guyton & Hall Edition 14 Ch: 82 Pg: 1032-1035	Dr. Ayesha

Week:26	7	7	Tutorial	Lactation	EnR-P-015	Explain the physiology of lactation .Discuss the actions of prolactin.Justify the suppression of ejection of milk during pregnancy Discuss the physiological basis of suppression of the female ovarian cycles in nursing mothers for many months after delivery	Guyton & Hall Edition 14 Ch: 83 Pg: 1050	Dr. Shaista
Week:26	Anatomy							
Week:26	8	1	Gross Anatomy	Prevertebral Muscles and Deep Cervical Fascia	HNSS-A 018-019	List the prevertebral muscles of cervical region. Describe their attachments, actions and innervation. Enumerate parts of deep cervical fascia with their respective extents, attachments, relations and contents.	Snell Clinical Anatomy by Region, 10th ed. Pg. No 700	Dr. Kalsoom
Week:26	9	2	Gross Anatomy	Facial Spaces and Infrahyoid and Suprahyoid Muscles and Ansa Cervicalis	HNSS-A 020-022	Describe the facial spaces in head and neck mentioning their communications and their relation to spread of infection.Describe the attachments, actions and nerve supply of infrahyoid and suprahyoid muscles of neck. Describe the location, formation and distribution of ansa cervicalis.	Snell Clinical Anatomy by Region, 10th ed. Pg. No671-679	Dr. Kalsoom
Week:26	10	3	Gross Anatomy	Sternocleidomastoid and Trapezius Muscle and	HNSS-A 023-024	Describe the attachments, actions and nerve supply of sternocleidomastoid and	Snell Clinical Anatomy by Region, 10th ed.	Dr.Sumera

				Triangles of Neck		trapezius. Describe the boundaries and contents of suboccipital, anterior and posterior triangles of neck.	Pg. No 671-676	
Week:26	11	4	Gross Anatomy	Trachea and Esophagus	HNSS-A 025	Describe the cervical part of trachea and esophagus with their neurovascular supply.	Snell Clinical Anatomy by Region, 10th ed. Pg. No 214-230	Dr. Sumera
Week:26	12	5	EMBRYOLOGY	Development of nose	HNSS-A 040	Describe the development of nasal cavity and paranasal sinuses. Give the associated congenital anomalies.	Langman Medical Embryology, 5th ed. Ch. NoPg. No 302	Dr. Razia
Week:26	13	6	EMBRYOLOGY	Development of nose	HNSS-A 040	Describe the development of nasal cavity and paranasal sinuses. Give the associated congenital anomalies.	Langman Medical Embryology, 5th ed. Ch. NoPg. No 302	Dr. Razia
Week:26	14	7	HISTOLOGY	Eye	HNSS-A 047	Describe the histological structure of layers of eyeball, eyelid and retina. Describe the light and electron microscopic structure of cornea.	Medical Histology By Laiq Hussain 6th ed Pg. No 243-254	Dr. Madiha
Week:26	15	8	Practical	Thyroid, Parathyroid	HNSS-A 052	Draw and label a diagram to show histological structure of thyroid and parathyroid gland.	Histology practical note book	Dr. Shaista
Week:26	16	9	Practical	Sternocleidomastoid and Trapezius Muscle and Triangles of Neck	HNSS-A 023-024	Describe the attachments, actions and nerve supply of sternocleidomastoid and trapezius. Describe the boundaries and contents of suboccipital, anterior and posterior	practical note book	Dr. Shazia/Dr. Madiha

						triangles of neck.		
Week:26	17	10	Tutorial	Sternocleidomastoid and Trapezius Muscle and Triangles of Neck	HNSS-A 023-024	Describe the attachments, actions and nerve supply of sternocleidomastoid and trapezius. Describe the boundaries and contents of suboccipital, anterior and posterior triangles of neck.	Snell Clinical Anatomy by Region	Dr. Shazia/Dr.Madiha
Week:26	Biochemistry							
Week:26	18	1	Lecture	Metabolism of fructose & associated diseases	HNSS-B-001	DISCUSS METABOLISM OF MONO AND DISACCHARIDES	Lippincott 7th edition Chapter 28	Dr Yusra
Week:26	19	2	Lecture	Metabolism of galactose & associated diseases	HNSS-B-001	Interpret Hereditary fructose intolerance, fructosuria, galactosemia and lactose intolerance, in relevance to the clinical findings	Lippincott 7th edition Chapter 12	Dr Yusra
Week:26	20	3	Lecture	Vitamin A	HNss-B-001	Discuss the sources, metabolically active forms, biochemical role and clinical correlation of Vit-A with vision	Lippincott 7th edition Chapter 14	Dr Yusra

Week:26	21	5	Lecture	Vitamin A	HNss-B-001	Discuss the sources, metabolically active forms, biochemical role and clinical correlation of Vit-A with vision	Lippincott 7th edition Chapter 14	Dr Yusra
Week:26	22	6	Practical	interpret the lysosomal storage diseases on given data , Nieman pick disease, Gaucher disease etc	HNSS-B 005	Perform HbA1C by chromatographic method	Lab Manual	Monday: Dr. Maryam Tuesday: Dr. Seemal Wednesday: Dr. Zahra Thursday: Dr. Aleena
Week:26	23	7	Tutorial	Digestion and absorption of lipids	NS-B-001	Explain the digestion and absorption of lipids with enzymes involved in it. Discuss role of bile acids and salts in lipid digestion and absorption	Lippincott 7th edition	Monday: Dr. Maryam Tuesday: Dr. Seemal Wednesday: Dr. Zahra Thursday: Dr. Aleena
Week:26	PERLs							
Week:26	24	1	Lecture	Research		Building Evidence-Based Arguments	Lecture Presentation	Dr. Saba Iqbal
Week:26	Holy Quran							
Week:26	25	1	Lecture	h. Interest (Riba or Sudi karobar)	i. Meaning of Riba or interest and its different forms		Islamiyat Notes	Amna Syed

					ii. Impact of Riba on a society in general iii. Devine declaration and its punishment both in this world and Hereafter			
Week:26	Com.Medicine							
Week:26	26	1	Lecture	HEARING LOSS	HNSS-CM-001	Identify factors leading to noise pollution	K.Park & Notes	Dr Sana Noor
Week:26	Pathology							
Week:26	27	1	Lecture	Eye/Ear infections	HNSS- Pa001	Enlist the common causative agents of Eye, Ear infections Discuss the pathogenesis and clinical features of common pathogens	Robbins	Dr. Majid
Week:26	28	1	Practical	Ear infections	Eye/Ear infections	Enlist the common causative agents of Eye, Ear infections Discuss the pathogenesis and clinical features of common pathogens	Lab Manual	Demo
Week:26	SDL							
Week:26	29	1	Self Directed Learning					
Week:26	30	2	Self Directed Learning					
Week:26	31	3	Self Directed Learning					
Week:26	32	4	Self Directed Learning					
Week:26	Clinical Skill							
Week:26	33	1	Clinical skills	Revision Measurement of blood glucose level			LOG BOOK	Medical Faculty



Week:26	34	2	Clinical skills	Revision Measurement of blood glucose level	LOG BOOK	Medical Faculty
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Week: No	Total Hours	No.	Mode of Teaching	Topic	Code	Learning Objective	Reference	Facilator
Week:27	Physiology							
Week:27	1	1	Lecture	SENSE OF smell preference and aversion"Sense of smell	HNSS-P-024,025,026	Define and describe the visual acuity.Define Emmetropia Enlist the errors of refraction.Explain the cause, features, physiological basis, and correction of Hyperopia	Guyton & Hall Edition 14 CH:50 Pg:631-634	Dr. Nida
Week:27	2	1	Lecture	Neurosciences	NS-P-001	Describe the general organization of nervous system.Classify synapses.Explain physiological anatomy of synapses	<a href="#">Guyton &amp; Hall Ed 14th. Ch: 46.Pg:569</a>	Dr. Hafsa
Week:27	3	2	Lecture	Neurosciences	NS-P-001	Describe the properties of synaptic transmission.Classify the substances that act as neurotransmitters.Classify all sensory receptors in the body.Enumerate the properties of receptors.Explain the mechanism of adaptation of receptors.Enlist the rapid adapting mechanism of receptors	Guyton & Hall Ed 14th Ch. 46 Pg 587,589	Prof: Dr . Sadia
Week:27	4	3	Lecture	Nerve fiber	NS-P-002	Explain the properties of receptors.Explain the general classification of nerve fibers.Explain the numerical classification of nerve	<a href="#">Guyton &amp; Hall Ed 14th.Ch. 47Pg 594</a>	Prof:Dr Sadia

						fibers.Explain Gasser classification of nerve fibers Explain summation and its types		
Week:27	5	5	Practical	vision	HNSS-P-29	Determine the Visual Acuity for Far and Near vision	Experimental Physiology Manual By Pro: Dr . Zfar Ali Ch:	DR. Neelum
Week:27	6	6	Tutorial	Visual Acuity	HNSS-P-001	Explain the cause, features, physiological basis, and correction of myopia.Explain the cause,	Guyton & Hall Ed 14th Ch. 46 Pg 587,589	Dr. Qutub
Week:27	Anatomy							
Week:27	7	1	Gross Anatomy	Mandible	HNSS-A 010	Classify temporomandibular joint mentioning its ligaments, relations, nerve supply and movements (with their mechanics and muscles producing them).	Snell Clinal Anatomy by Region, 10th ed. Pg. No 623-630	Dr. Kalsoom
Week:27	8	1	Gross Anatomy	Otic and Submandibular Gland	HNSS-A 015	Describe the location, roots and distribution of otic and submandibular ganglia.	Snell Clinal Anatomy by Region, 10th ed. Pg. No 702-724	Dr.Sumera
Week:27	9	2	Gross Anatomy	Cervical Vertebrae	HNSS-A 017	Classify the joints of cervical vertebrae mentioning their ligaments, movements with muscle producing them and neurovascular supply.	Snell Clinal Anatomy by Region, 10th ed. Pg. No 77-80	Dr.Sumera
Week:27	10	3	EMBRYOLOGY	Lips and palate	HNSS-A 041	Describe the development of lip and palate and their associated congenital malformations. Explain the types and embryologic basis of cleft lip and cleft palate.	Langman Medical Embryology, 5th ed. Ch. NoPg. No 301-302	Dr. Razia

Week:27	11	5	EMBRYOLOGY	Eye & ear	HNSS-A 042	Describe the development of cornea, sclera, choroid, iris, ciliary body and lens and relate it to their respective congenital anomalies.	Langman Medical Embryology, 5th ed. Ch. NoPg. No 351-364	Dr. Razia
Week:27	12	6	HISTOLOGY	Thyroid, Parathyroid glands	HNSS-A 046	Describe the histological structure of thyroid gland and parathyroid gland.	Medical Histology By Laiq Hussain 6th ed Pg. No 151-160	Dr. Madiha
Week:27	13	7	Practical	Head & Neck	HNSS-A 051	Draw and label diagrams to show histological structure of serous demilunes, serous and mucous acini.	Histology practical note book	Dr. Shaista
Week:27	14	8	Practical	Mandible	HNSS-A 010	Classify temporomandibular joint mentioning its ligaments, relations, nerve supply and movements (with their mechanics and muscles producing them).	Practical note book	Dr. Madiha/Dr.S hazia
Week:27	15	9	Tutorial	Lips and palate	HNSS-A 041	Describe the development of lip and palate and their associated congenital malformations. Explain the types and embryologic basis of cleft lip and cleft palate.	Practical note book	Dr. Shaista/Dr.S hazia
Week:27	16	10	Tutorial	Cervical Vertebrae	HNSS-A 017	Classify the joints of cervical vertebrae mentioning their ligaments, movements with muscle producing them and neurovascular supply.	Snell Clinal Anatomy by Region	Dr. Madiha/Dr.S hazia
Week:27	Biochemistry							
Week:27	17	1	Lecture	Digestion and absorption of lipids	NS-B-001	Explain the digestion and absorption of lipids with enzymes involved in it. Discuss role of bile acids and salts in lipid digestion and absorption	Lippincott 7th edition	Prof dr Haroon Habib

Week:27	18	2	Lecture	Lipid transport and storage and cholesterol metabolism	NS-B-002	Explain the concept of lipid transport and storage. Discuss the metabolism of cholesterol along with its regulations and associated disorders	Lippincott 7th edition	Prof dr Haroon Habib
Week:27	19	3	Practical	Abnormal constituents in urine	HNSS-B 006	Detect abnormal constituents in urine by chemical methods	Lab Manual	Monday: Dr. Saba Tuesday: Dr. Misbah Wednesday: Dr. Asad Thursday: Dr. Hamza
Week:27	20	4	Tutorial	Citrate Shuttle	NS-B-003	Discuss the reactions of beta-oxidation, alpha and omega oxidation of unsaturated and saturated fatty acids Calculate energy yield from palmitate in oxidation	Lippincott 7th edition	Monday: Dr. Maryam Tuesday: Dr. Seemal Wednesday: Dr. Zahra Thursday: Dr. Aleena
Week:27	PERLs							
Week:27	21	1	Lecture	Ethics		Informed Consent	Lecture Presentation	Dr. Javaid Shabkhez
Week:27	Holy Quran							
Week:27	22	1	Lecture	i. Nikah-o-talaq	i. Basic rulings regarding marriage and divorce ii. Importance of Nikah and its constituents iii. Conditions of Nikah and various forms of prohibited/impermissible nikah iv. Misconception of dowry v. Talaq and its various forms vi. Meaning of Khula and its conditions		Islamiyat Notes	Amna Syed

Week:27	Beh.Sciences							
Week:27	23	1	Lecture	HNSS-BhS001	Pain	At end of module the students will learn the psychosocial aspects of pain which will help in understanding the complex and multidimensional nature of pain.	RM	Dr Farhat Minhas
Week:27	Pharma							
Week:27	24	1	Lecture	REVISION LECTURE		thyroxine and antithyroid drugs		Dr.Javeria
Week:27	SDL							
Week:27	25	1	Self Directed Learning					
Week:27	26	2	Self Directed Learning					
Week:27	27	3	Self Directed Learning					
Week:27	28	4	Self Directed Learning					
Week:27	Clinical Skill							
Week:27	29	1	Clinical skills	Revision Suturing			LOG BOOK	Medical Faculty
Week:27	30	2	Clinical skills	Revision Suturing			LOG BOOK	Medical Faculty
Week:27	Assessment							
Week:27	31	1	Grand Test					
Week:27	32	2	Grand Test					
Week:27	33	3	OSPE/VIVA					
Week:27	34	4	OSPE/VIVA					

Week: No	Total Hours	No.	Mode of Teaching	Topic	Code	Learning Objective	Reference	Facilator
Week:28	Physiology							
Week:28	1	1	Lecture	Sensory areas of the brain	NS-P-003	Explain summation and its types.Describe the sensory areas of brain.Enlist Brodmann number of sensory areas.Describe the effects produced by damage to each.sensory area of brain.Describe the pathophysiology and features of.personal neglect syndrome	<a href="#">Guyton &amp; Hall Ed 14th Ch. 46.Pg 571</a>	Prof: Dr Sadia
Week:28	2	2	Lecture	Somatic Sensations	NS-P-004	Classify and explain Somatic sensations	Guyton & Hall Ed 14th Ch. 48 Pg 599	Dr Amna Ilyas
Week:28	3	3	Lecture	Ascending Tracts/ pathways/Anterolateral System	NS-P-005, 006	enumerate the ascending tracts/Pathways,Name the sensations carried by Dorsal column medial lemniscus system DCMLSTrace the pathway of DCMLS	Guyton & Hall Ed 14th.Ch. 49,613	Dr. Nida
Week:28	4	4	lecture	Anterolateral	NS-P-004	Trace the pathway of	Guyton & Hall Ed	Prof: Dr

				<b>Pathway</b>		<b>DCMLS/Anterolateral pathway</b>	<b>14th Ch. 48 Pg 602</b>	<b>Sadia</b>
<b>Week:28</b>	<b>5</b>	<b>5</b>	<b>Practical</b>	<b>ophthalmoscopy</b>	<b>HNSS-P-30</b>	<b>Perform Ophthalmoscopy</b>	<b>Experimental Physiology Manual By Pro: Dr . Zfar Ali Ch:</b>	<b>Dr. Shaista</b>
<b>Week:28</b>	<b>6</b>	<b>6</b>	<b>Tutorial</b>	<b>Retina</b>	<b>HNSS-P-005</b>	<b>Eye chapter 51</b>	<b>Guyton &amp; Hall Edition 14 CH:51 Pg: 642</b>	<b>Dr. Ayesha</b>
<b>Week:28</b>	<b>Anatomy</b>							
<b>Week:28</b>	<b>7</b>	<b>1</b>	<b>Gross Anatomy</b>	<b>Carotid Arteries Carotid Bodies</b>	<b>HNSS-A 027-028</b>	<b>Describe the carotid arteries mentioning their origin, course, branches, distribution and termination. Describe carotid body and carotid sinus and give their clinical significance.</b>	<b>Snell Clinal Anatomy by Region, 10th ed. Pg. No 678-681</b>	<b>Dr. Kalsoom</b>
<b>Week:28</b>	<b>8</b>	<b>2</b>	<b>Gross Anatomy</b>	<b>Head and Neck Venous Supply, Lymphatics and Cervical Plexus</b>	<b>HNSS-A 0229-031</b>	<b>Give the venous drainage of Head and Neck region. Describe the formation, tributaries and area of drainage of vessels constituting jugular venous system. Name the superficial and deep cervical lymph nodes and give their location and drainage areas. Describe the location, formation, branches, distribution and lesions of cervical plexus</b>	<b>Snell Clinal Anatomy by Region, 10th ed. Pg. No 682-687</b>	<b>Dr. Sumera</b>
<b>Week:28</b>	<b>9</b>	<b>3</b>	<b>Gross Anatomy</b>	<b>Head and Neck Venous Supply,</b>	<b>HNSS-Ag 002</b>	<b>Discuss the age changes of mandible</b>	<b>Snell Clinal Anatomy by</b>	<b>Dr. Sumera</b>

				<b>Lymphatics and Cervical Plexus</b>			<b>Region, 10th ed. Pg. No 682-687</b>	
<b>Week:28</b>	<b>10</b>	<b>4</b>	<b>EMBRYOLOGY</b>	<b>Eye &amp; ear</b>	<b>HNSS-A 042</b>	<b>Describe the development of internal ear and give the embryological basis of associated congenital anomalies.</b>	<b>Langman Medical Embryology, 5th ed. Ch. NoPg. No 351-364</b>	<b>Dr. Razia</b>
<b>Week:28</b>	<b>11</b>	<b>5</b>	<b>EMBRYOLOGY</b>	<b>Eye &amp; ear</b>	<b>HNSS-A 042</b>	<b>Describe the development of optic vesicle and retina.</b>	<b>Langman Medical Embryology, 5th ed. Ch. NoPg. No 351-364</b>	<b>Dr. Razia</b>
<b>Week:28</b>	<b>12</b>	<b>6</b>	<b>Histology</b>	<b>Ear</b>	<b>HNSS-A 048</b>	<b>Describe the Histological features of Internal ear</b>	<b>Medical Histology By Laiq Hussain 6th ed Pg. No 2550260</b>	<b>Dr. Madiha</b>
<b>Week:28</b>	<b>13</b>	<b>7</b>	<b>Practical</b>	<b>Carotid Arteries Carotid Bodies</b>	<b>HNSS-A 027-028</b>	<b>Describe the carotid arteries mentioning their origin, course, branches, distribution and termination. Describe carotid body and carotid sinus and give their clinical significance.</b>	<b>Snell Clinical Anatomy by Region, 10th ed. Pg. No 678-681</b>	<b>Dr. Shazia/Dr.M adiha</b>
<b>Week:28</b>	<b>14</b>	<b>8</b>	<b>Practical</b>	<b>Eye</b>	<b>HNSS-A 053</b>	<b>Draw and label diagrams to show histological structure of eyelid and cornea. Draw and label a diagram to show histological structure of retina. List its histological layers and their respective components</b>	<b>Histology practical note book</b>	<b>Dr. Shaista</b>



Week:28	15	9	Tutorial	Head and Neck Venous Supply, Lymphatics and Cervical Plexus	HNSS-A 0229-031	Give the venous drainage of Head and Neck region. Describe the formation, tributaries and area of drainage of vessels constituting jugular venous system. Name the superficial and deep cervical lymph nodes and give their location and drainage areas. Describe the location, formation, branches, distribution and lesions of cervical plexus	Snell Clinical Anatomy by Region	Dr. Shaista/Dr.S hazia
Week:28	16	10	Tutorial	Eye & ear	HNSS-A 042	Describe the development of optic vesicle and retina.	Langman Medical Embryology, 5th ed. Ch. NoPg. No 351-364	Dr. Shazia/Dr.M adiha
Week:28	Biochemistry							
Week:28	17	1	Lecture	Sphingolipidosis, Carnitine Shuttle	NS-B-003	Discuss the reactions of beta-oxidation, alpha and omega oxidation of unsaturated and saturated fatty acids Calculate energy yield from palmitate in oxidation	Lippincott 7th edition	Prof dr Haroon Habib
Week:28	18	2	Lecture	Sphingolipidosis, Carnitine Shuttle	NS-B-003	Discuss the reactions of beta-oxidation, alpha and omega oxidation of unsaturated and saturated fatty acids Calculate energy yield from palmitate in oxidation	Lippincott 7th edition	Prof dr Haroon Habib

Week:28	19	3	Lecture	Alpha and Omega oxidation	Ns-B-003	Discuss the reactions of beta-oxidation, alpha and omega oxidation of unsaturated and saturated fatty acids Calculate energy yield from palmitate in oxidation	Lippincott 7th edition	Prof dr Haroon Habib
Week:28	20	4	Practical	PERFORM ESTIMATION OF SERUMTAG, CHOLESTEROL,HDL BY KIT METHOD AND CALCULATE LDL AND VLDL	NS-B-016	Detect abnormal constituents in urine by chemical methods	Lab Manual	Monday: Dr. Saba Tuesday: Dr. Misbah Wednesday: Dr. Asad Thursday: Dr. Hamza
Week:28	21	5	Tutorial	Fatty acid synthesis: regulation	NS-B-006	Explain the pathway of fatty acid synthesis and its regulation	Lippincott 7th edition Chapter31	Monday: Dr. Saba Tuesday: Dr. Misbah Wednesday: Dr. Asad Thursday: Dr. Hamza
Week:28	Holy Quran							
Week:28	22	1	Lecture	Interest (Riba or Sudi karobar)	Interest (Riba or Sudi karobar) i. Meaning of Riba or interest and its different forms ii. Impact of Riba on a society in general iii. Devine declaration and its punishment both in this world and Hereafter		Islamiyat Notes	Amna Syed

Week:28	Com Medicine.							
Week:28	23	1	Lecture	BLIDNESS	HNSS CM-002	Describe the common causes of blindness in community	K.Park & Notes	Dr Sana Noor
Week:28	PERLs							
Week:28	24	1	Lecture	Leadership		Patient Counselling about disease	Lecture Presentation	Dr. Saba Iqbal
Week:28	SDL							
Week:28	25	1	Self Directed Learning					
Week:28	26	2	Self Directed Learning					
Week:28	27	3	Self Directed Learning					
Week:28	28	4	Self Directed Learning					
Week:28	Clinical Skill							
Week:28	29	1	Clinical skills	Revision of Examination of the Nose			LOG BOOK	Medical Faculty
Week:28	30	2	Clinical skills	Revision of Examination of the Nose			LOG BOOK	Medical Faculty
Week:28	Assessment							
Week:28	31	1	Grand Test					
Week:28	32	2	Grand Test					
Week:28	33	3	OSPE/VIVA					
Week:28	34	4	Grand Test					

Week: No	Total Hours	No.	Mode of Teaching	Topic	Code	Learning Objective	Reference	Facilator
Week:29	Physiology							
Week:29	1	1	Lecture	DCML pathway	NS-P-004	Trace the pathway of DCMLS/Anterolateral pathway	Guyton & Hall Ed 14th Ch. 48 Pg 602	Prof: Dr. Shaheena
Week:29	2	2	Lecture	Pain	NS-P-007	Classify pain.Differentiate between slow pain and fast pain	Guyton & Hall Ed 14th Ch. 48 Pg 612	Prof: Dr Sadia
Week:29	3	3	Lecture	Pain	NS-P-007	Describe the analgesia system in brain and spinal	Guyton & Hall Ed 14th Ch. 48 Pg 602	Prof. Dr Nida
Week:29	4	2	Lecture	Pain	NS-P-007	Classify pain.Differentiate between slow pain and fast pain	Guyton & Hall Ed 14th Ch. 48 Pg 612	Prof. Dr.Sadia

Week:29	5	5	Practical	Color vision	HNSS-P-32	EXAMINE COLOR VISION	Experimental Physiology Manual By Pro: Dr . Zfar Ali Ch:	Dr. Ayesha
Week:29	6	6	Tutorial	Field of vision/Eye movements	HNSS-P-010,012	Define the physiological blind spot and describe its location Define scotoma/ pathological blind spot and enlist causes, Describe the muscular and neural control of eye movements	Guyton & Hall Edition 14 CH:52 Pg: 657	Dr. Neelum
Week:29	Anatomy							
Week:29	7	1	Gross Anatomy	Nervous System	NS-A-001	Describe the basic organization of nervous system, Identify and describe the components of the Nervous system and their function	Snell Clinical Neuroanatomy 8th edition Page No 1-10	Dr. Kalsoom
Week:29	8	2	Gross Anatomy	Spinal Nerves	NS-A-002	Trace the Origin, exit from vertebral canal, branches & Distribution of typical spinal nerve.	Snell Clinical Neuroanatomy 8th edition Page No 6,12,13	Dr. Kalsoom
Week:29	9	3	Gross Anatomy	Spinal Cord Clinical Correlates	NS-A-003	Identify the Location, Extent, Coverings and Blood supply of spinal cord Discuss & tabulate nuclear organization at different levels of Spinal cord. Describe, draw & label the transverse section of spinal cord at mid cervical level showing ascending & descending tracts Tabulate the sensory nerve endings, and anatomical sites of first, second,	Snell Clinical Neuroanatomy 8th edition Page No 136-138	Dr.Sumera

						third order neurons of ascending tracts Tabulate first, second, third order neurons of descending tracts.		
Week:29	10	4	Gross Anatomy	Spinal Cord Clinical Correlates	NS-A-003	Identify the Location, Extent, Coverings and Blood supply of spinal cord Discuss & tabulate nuclear organization at different levels of Spinal cord. Describe, draw & label the transverse section of spinal cord at mid cervical level showing ascending & descending tracts Tabulate the sensory nerve endings, and anatomical sites of first, second, third order neurons of ascending tracts Tabulate first, second, third order neurons of descending tracts. Elaborate on the Cross-sectional details of white and gray matter of cervical, thoracic and lumbar segments of Spinal cord for localization of site of lesion.	Snell Clinical Neuroanatomy 8th edition Page No 136-138	Dr.Sumera
Week:29	11	5	EMBRYOLOGY	Neural tube development	NS-A-019	Explain the Development of Neural tube and Brain vesicles. Discuss related clinical anomalies	Langman Medical Embryology, 5th ed. Ch. NoPg. No 324-335	Dr. Razia

Week:29	12	6	HISTOLOGY	Nervous tissue	NS-A-022	Describe the histological structure of Nervous tissue, Neuron, Nerve fiber, Sensory & motor nerve endings, Neuroglia, Blood brain barrier, ganglia	Medical Histology By Laiq Hussain 6th ed Pg. No 95-109	Dr. Madiha
Week:29	13	7	Practical	Nervous System	NS-A-001	Describe the basic organization of nervous system, Identify and describe the components of the Nervous system and their function	Practical note book	Dr., Shazia/Dr. Madiha
Week:29	14	8	Practical	CNS	NS-A-025	Identify draw & label light microscopic structure of Peripheral nerve sensory ganglia, autonomic ganglia	Histology practical note book	Dr. Shaista
Week:29	15	9	Tutorial	Neural tube development	NS-A-019	Explain the Development of Neural tube and Brain vesicles. Discuss related clinical anomalies	Snell Clinical Neuroanatomy 8th edition	Dr., Shazia/Dr. Shaista
Week:29	16	10	Tutorial	Spinal Nerves	NS-A-002	Trace the Origin, exit from vertebral canal, branches & Distribution of typical spinal nerve.	Snell Clinical Neuroanatomy 8th edition	Dr., Shazia/Dr. Madiha
Week:29	Biochemistry							
Week:29	17	1	Lecture	Carnitine shuttle	NS-B-004	Discuss role of carnitine shuttle	Lippincott 7th edition Chapter 12	Prof Dr Haroon Habib
Week:29	18	2	Lecture	Fatty acid synthesis	NS-B-005	Explain the pathway of fatty acid synthesis and its regulation	Lippincott 7th edition Chapter31	Prof Dr Haroon Habib
Week:29	19	3	Lecture	Fatty acid synthesis	NS-B-006	Explain the steps of the reactions of hepatic ketogenesis and regulation	Lippincott 7th edition Chapter32	Prof Dr Haroon Habib

Week:29	20	4	Practical	PERFORM ESTIMATION OF SERUMTAG, CHOLESTEROL,HDL BY KIT METHOD AND CALCULATE LDL AND VLDL	HNSS-B 006	Detect abnormal constituents in urine by chemical methods	Lab Manual	Monday: Dr. Saba Tuesday: Dr. Misbah Wednesday: Dr. Asad Thursday: Dr. Hamza
Week:29	21	5	Tutorial	Revision for Module 09				Monday: Dr. Saba Tuesday: Dr. Misbah Wednesday: Dr. Asad Thursday: Dr. Hamza
Week:29	PERLs							
Week:29	22	1	Lecture	Professionalism		Task Management & Productivity	Lecture Presentation	Dr. Javaid
Week:29	Pakistan Studies							
Week:29	23	1	Lecture	1. Describe brief the salient features of the Pakistan movement.			Notes	Amna Syed
Week:29	Aging/ Ent							
Week:29	24	1	Lecture	Rhinitis	HNSS-P027	Enlist the causes and clinical features of Rhinitis	Dhingra 7th Ed.	Dr. Behram
Week:29	SDL							
Week:29	25	1	Self Directed Learning					



Week:29	26	2	Self Directed Learning				
Week:29	27	3	Self Directed Learning				
Week:29	28	4	Self Directed Learning				
Week:29	Clinical Skill						
Week:29	29	1	Clinical skills	Revision of Examination of neck lump		LOG BOOK	Medical Faculty
Week:29	30	2	Clinical skills	Revision of Examination of neck lump		LOG BOOK	Medical Faculty
Week:29	Assessment						
Week:29	31	1	Grand Test				
Week:29	32	2	Grand Test				
Week:29	33	3	OSPE/VIVA				
Week:29	34	4	OSPE/VIVA				

Week: No	Total Hours	No.	Mode of Teaching	Topic	Code	Learning Objective	Reference	Facilator
Week:30	Physiology							
Week:30	1	1	Lecture	Spinal Cord	NS-P-008	Describe the Physiological anatomy of spinal cord.Name the anterior motor neurons and their locationExplain the Renshaw cells feedbackClassify the spinal cord reflexes according to number of synapsesDescribe the structure & functions of Muscle spindle	Guyton & Hall Ed 14th Ch. 55 Pg 685,686	Prof: Dr Shaheena

Week:30	2	2	Lecture	Muscle spindle and stretch reflex	NS-P-009	Trace the reflex arc of stretch reflex, Discuss the clinical significance of stretch reflex	Guyton & Hall Ed 14th Ch. 55 Pg 689	Prof: Dr Sadia
Week:30	3	3	Lecture	Muscle spindle and stretch reflex	NS-P-009	Trace the reflex arc of stretch reflex, Discuss the clinical significance of stretch reflex	Guyton & Hall Ed 14th Ch. 55 Pg 689	Dr. Hafsa
Week:30	4	4	Lecture	Tone, GTO	NS-P-110,011	Define tone and how it is maintained Trace the reflex arc of Golgi Tendon Organ GTO, Golgi tendon reflex Explain the importance of Golgi tendon reflex	Guyton & Hall Ed 14th Ch. 55, Pg 691	Dr NIDA
Week:30	5	5	Practical	Sensory system	NS-P-028	Examination of sensory system	Zafar Ch. Vol. II	Dr. Neelum
Week:30	6	6	Tutorial	Neurosciences	NS-P-001	Describe the general organization of nervous system. Classify synapses. Explain physiological anatomy of synapses	<a href="#">Guyton &amp; Hall Ed 14th. Ch: 46. Pg: 569</a>	Dr. Shaista
Week:30	Anatomy							
Week:30	7	1	Gross Anatomy	Spinal Cord Clinical Correlates	NS-A-003	Identify the Location, Extent, Coverings and Blood supply of spinal cord Discuss & tabulate nuclear organization at different levels of Spinal cord. Describe, draw & label the transverse section of spinal cord at mid cervical level showing ascending & descending tracts Tabulate the sensory nerve endings, and anatomical sites of first, second, third order neurons of ascending tracts Tabulate first, second, third order neurons of descending tracts.	Snell Clinical Neuroanatomy 8th edition Page No 136-153	Dr. Kalsoom

Week:30	8	2	Gross Anatomy	Brainstem	NS-A-004	Differentiate clearly between upper and lower motor neuron lesions, Location, Relations, Blood supply and external features of medulla, pons midbrain. Cross sectional details of white and grey matter of Brain stem (mid brain, pons, medulla)	Snell Clinical Neuroanatomy 8th edition Page No 197-204	Dr.Sumera
Week:30	9	3	Gross Anatomy	Brainstem	NS-A-004	Differentiate clearly between upper and lower motor neuron lesions, Location, Relations, Blood supply and external features of medulla, pons midbrain. Cross sectional details of white and grey matter of Brain stem (mid brain, pons, medulla) Discuss clinical correlates of brain stem Medial and lateral medullary syndrome Weber syndrome, Benedikt syndrome	Snell Clinical Neuroanatomy 8th edition Page No 197-204	Dr.Sumera
Week:30	10	4	EMBRYOLOGY	Pituitary gland	NS-A-021	Describe development of Pituitary gland	Langman Medical Embryology, 5th ed. Ch. NoPg. No 313-323	Dr. Razia
Week:30	11	5	HISTOLOGY	Nervous tissue	NS-A-022	Describe the histological structure of Nervous tissue, Neuron, Nerve fiber, Sensory & motor nerve endings, Neuroglia, Blood brain barrier, ganglia	Medical Histology By Laiq Hussain 6th ed Pg. No 95-108	Dr. Madiha
Week:30	12	6	Practical	CNS	NS-A-025	Identify draw & label light microscopic structure of Peripheral nerve sensory ganglia, autonomic ganglia	Histology Practical note book	Dr. Shaista

Week:30	13	7	Tutorial	Spinal Cord Clinical Correlates	NS-A-003	Identify the Location, Extent, Coverings and Blood supply of spinal cord Discuss & tabulate nuclear organization at different levels of Spinal cord. Describe, draw & label the transverse section of spinal cord at mid cervical level showing ascending & descending tracts Tabulate the sensory nerve endings, and anatomical sites of first, second, third order neurons of ascending tracts Tabulate first, second, third order neurons of descending tracts.	Snell Clinical Neuroanatomy 8th edition	Dr,. Shazia/Dr. Madiha
Week:30	Biochemistry							
Week:30	14	1	Lecture	Metabolism of phosphor and sphingolipids	NS-B-007	Describe utilization of ketone bodies by extrahepatic tissue	Lippincott 7th edition Chapter33	Prof Dr Haroon Habib
Week:30	15	2	Lecture	Metabolism of phosphor and sphingolipids	NS-B-007	Describe utilization of ketone bodies by extrahepatic tissue	Lippincott 7th edition Chapter33	Prof Dr Haroon Habib
Week:30	16	3	Practical	PERFORM ESTIMATION OF SERUMTAG, CHOLESTEROL,HDL BY KIT METHOD AND CALCULATE LDL AND VLDL	NS-B-015	Interpret the lysosomal storage diseases on given data Neiman pick disease,	Lab Manual	Monday: Dr. Maryam Tuesday: Dr. Seemal Wednesday: Dr. Zahra Thursday: Dr. Aleena
Week:30	17	4	Tutorial	Revision Block V				Monday: Dr. Saba Tuesday: Dr. Misbah

								Wednesday: Dr. Asad Thursday: Dr. Hamza
Week:30	Allied Assessment							
Week:30	18	1	Grand Test	Whole Syllabus				
Week:30	PERLs							
Week:30	19	1	Lecture	Research	Literature Search Strategy		Lecture Presentation	Dr. Saba Iqbal
	Surgery							
Week:30	20	2	Lecture	Stroke/CVA	NS-S-001	Discuss the role of surgery in stroke	B & L	Dr. Umer
Week:30	Beh.Sciences							
Week:30	21	1	Lecture	HNSS-BhS001	pain.	At end of module the students will learn the psychosocial aspects of pain which will help in understanding the complex and multidimensional nature of Pain	M.R	Dr Farhat Minhas
Week:30	Pakistan Studies							

Week:30	22	1	Lecture	Describe brief the salient features of the Pakistan movement. 2. Explain the basis for the creation of Pakistan. 3. Give a brief account of the history of Pakistan. 4. Explain the ethnic and cultural distribution of the population of Pakistan. 5. Describe the Provinces and resources available in Pakistan. 6. Explain current problems faced by Pakistan.7 Describe the social, economic and health problems of the rural population of Pakistan.	Lecture Notes	Amna Syed
Week:30	23	1	Lecture	Describe brief the salient features of the Pakistan movement. 2. Explain the basis for the creation of Pakistan. 3. Give a brief account of the history of Pakistan. 4. Explain the ethnic and cultural distribution of the population of Pakistan. 5. Describe the Provinces and resources available in Pakistan. 6. Explain current problems faced by Pakistan.7 Describe the social, economic and health problems of the rural population of Pakistan.	Lecture Notes	Amna Syed
Week:30	SDL					
Week:30	24	1	Self Directed Learning			
Week:30	25	2	Self Directed Learning			
Week:30	26	3	Self Directed Learning			
Week:30	27	4	Self Directed Learning			
Week:30	Clinical Skill					
Week:30	28	1	Clinical skills	Revision of Assess Glasgow coma scale	LOG BOOK	Medical Faculty

<b>Week:30</b>	<b>29</b>	<b>2</b>	<b>Clinical skills</b>	<b>Revision of Assess Glasgow coma scale</b>	<b>LOG BOOK</b>	<b>Medical Faculty</b>
<b>Week:30</b>	<b>Assessment</b>					
<b>Week:30</b>	<b>30</b>	<b>1</b>	<b>Module-9</b>			
<b>Week:30</b>	<b>31</b>	<b>2</b>	<b>Module-9</b>			
<b>Week:30</b>	<b>32</b>	<b>3</b>	<b>Key Discussion</b>			
<b>Week:30</b>	<b>33</b>	<b>4</b>	<b>OSPE/VIVA</b>			
<b>Week:30</b>	<b>34</b>	<b>2</b>	<b>OSPE/VIVA</b>			

## Operational Definitions

### 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	<p>A collection of student's work that showcases learning achievements, reflections, and progress over time.</p> <p>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)</p>
13.	Seminar	A seminar is an academic or professional setting where individuals discuss, present, and explore specific topics, often with expert guidance

**AVICENNA MEDICAL & DENTAL COLLEGE**  
**DEPARTMENT OF MEDICAL EDUCATION**

Internal Assessment Policy

## **Introduction**

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

## **Internal Assessment Components**

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

### **1. Attendance**

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

### **2. Continuous Assessment**

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

### **3. Grand Test and Module Exams**

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

### **4. Attitude and Behavior**

- Students' attitude towards learning, participation in class activities, and adherence to college rules and regulations will be assessed.
- 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.

- Written examinations, including multiple-choice and essay questions, will test your grasp of theoretical concepts and subject matter.
- Practical assessments will require you to demonstrate your clinical skills and ability to apply knowledge in real-world scenarios.

- Clinical exams will evaluate your communication skills and reasoning abilities through case discussions and problem-solving exercises.
- 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.

<b>Internal Assessment Weightage</b>	20%	100%
<b>External Assessment Weightage</b>	80%	

## Assessment Schedule

Avicenna Medical & Dental College					
2nd Year MBBS (M-23)					
Test Schedule Block-5					
Week	Date	Day	Subject	Test	Topic
15th	5-Jun-25	Thu	All Subjects	Lecture	Lecture Time Divided
16th	12-Jun-25	Thu	Biochemistry	Grand Test	Endocrinology EnR-B-001 to EnR-B-008
				OSPE+VIVA	
17th	19-Jun-25	Thu	Anatomy	Grand Test	All the covered topics
				OSPE+VIVA	
18th	26-Jun-25	Thu	Physiology	Grand Test	Endocrinology Guyton & Hall Ed 14th
				OSPE+VIVA	
19th	3-Jul-25	Thu	Biochemistry	Grand Test	Genetics EnR-B-009 to EnR-B-029
				OSPE+VIVA	
20th	10-Jul-25	Thu	Anatomy	Grand Test	All the covered topics
				OSPE+VIVA	
21st	17-Jul-25	Thu	Integrated	Module Exam:8	Whole Syllabus of Module-8
				OSPE+VIVA	
22nd	Summer Vacations-20th July -17th Aug ,2025				
23rd					
24th					
25th					
26th	21-Aug-25	Thu	All Subjects	Lecture	Lecture Time Divided
27th	28-Aug-25	Thu	Physiology	Grand Test	Special Senses (Eye & Reproduction) Guyton & Hall Ed 14th
				OSPE+VIVA	
28th	4-Sep-25	Thu	Biochemistry	Grand Test	Genetics - Techniques, Metaboilsm of Fructose & Galactose, Vitamin A EnR-B-030 to HSSN-B-001
				OSPE+VIVA	
29th	11-Sep-25	Thu	Anatomy	Grand Test	All the covered topics
				OSPE+VIVA	
30th	18-Sep-25	Thu	Integrated	Module Exam:9	Whole Syllabus of Module-9
				OSPE+VIVA	
31st	22-Sep-25	Mon	Allied Subjects	Grand Test	Whole Syllabus of Module 8 & 9
31st	25-Sep-25	Thu	Integrated	Block-5 Exam	Whole Syllabus of Module- 8 & 9
	26-Sep-25	Fri		OSPE+VIVA	Whole Syllabus of Module- 8 & 9
End Of Block-5					

## Table of Specification

### **MBBS 2<sup>nd</sup> Professional**

#### **Block-4**

Theme	Subject	Written Exam			Oral/Practical/Clinical Exam			
		MCQ (1 mark)	SEQ (5 mark each)	Marks	OSPE (8 marks each observed)	OSCE (5 marks each observed)	OSVE (14 marks each observed)	Marks
Normal Structure	Anatomy applied/clinical	23	03	38	04	-	01	46
Normal Function	Physiology applied/clinical	18	02	28	03	-	01	38
	Biochemistry applied/clinical	22	03	37	02	-	01	30
Disease Burden & Prevention	Community Medicine & Public Health	06	-	06	-	-	-	-
	Behavioral Sciences	05	-	05	-	-	-	-
Pathophysiology & pharmacotherapeutics	Pathology	11	01	16	01	-	-	08
	Pharmacology	05	01	10	01	-	-	08
CFRC	CF-2	-	-	-	-	01	-	05
PERLs	PERLs-2	-	-	-	-	01	-	05
<b>Total</b>		<b>90</b>	<b>10x5=50</b>	<b>140</b>	<b>11 stations x 08 = 88</b>	<b>02 stations x 05 = 10</b>	<b>03 stations x 14=42</b>	<b>140</b>

## Recommended Books & Reading Resources

### **Anatomy**

Snell's Clinical Anatomy 10th ed.

Langman's Medical Embryology 12th ed

Medical Histology by Laiq Hussain Siddiqui 8th edition.

General Anatomy by Laiq Hussain Siddiqui 6th edition.

### **Biochemistry**

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

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

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

### **Pathology**

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

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

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

Walter and Israel. General Pathology. Churchill Livingstone.

Robbins & Kumar, Medical Microbiology and Immunology Levinson.



## **General Medicine**

Principles and Practice of Medicine by Davidson (latest edition)

Clinical Medicine by Parveen J Kumar & Michael Clark

Oxford Handbook of Medicine

Macleod's Clinical Examination book

Medicine and Toxicology by C.K. Parikh

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

## **Pharmacology And Therapeutics**

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

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

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

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

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

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

Katzung Basic and Clinical pharmacology, Lippincott Illustrated reviews.

Clinical Pathology Interpretations by A. H. Nagi

## **Behavioural Sciences**

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

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

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

## **Community medicine**

Parks Textbook of Preventive and Social Medicine. K. Park

Public Health and Community Medicine by Ilyas Ansari

MSDS manual of Government of Punjab

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

## **Surgery**

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

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

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

## **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 & Michael Clark

Hutchison's Clinical Methods by Michael Swash

## **Radiology**

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

Elsevier Science Limited; 2003.

## **Forensic Medicine**

Knight's Forensic Pathology by Barnard Knight 3rd edition

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

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

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

Gun Shot Wounds 2nd edition by V.J.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 pediatrics medicine

### **Islamiyat**

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

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

## 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	<p>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</p> <p>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.</p> <p>Two 50- inch LCD screens provide students an opportunity to get entertained during their meal times.</p>
8.	Gymnasium & Sports	<p>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.</p> <p>The gym itself is fully equipped with modern machinery both for students and faculty.</p>
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.



## 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

### 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





## **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.