Avicenna Medical & Dental College

STUDY GUIDE

2023-2024



Program: MBBS
Year: Final Year Professional Year
Subject: Surgery
Batch No: M-19
Session: 2023-2024

Department of Medical Education

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Introduction to Study Guide

Welcome to the Avicenna Medical & Dental College Study Guide!

This guide serves as your essential resource for navigating the complexities of your general surgery education at Avicenna Medical & Dental College. It integrates comprehensive details on the 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.

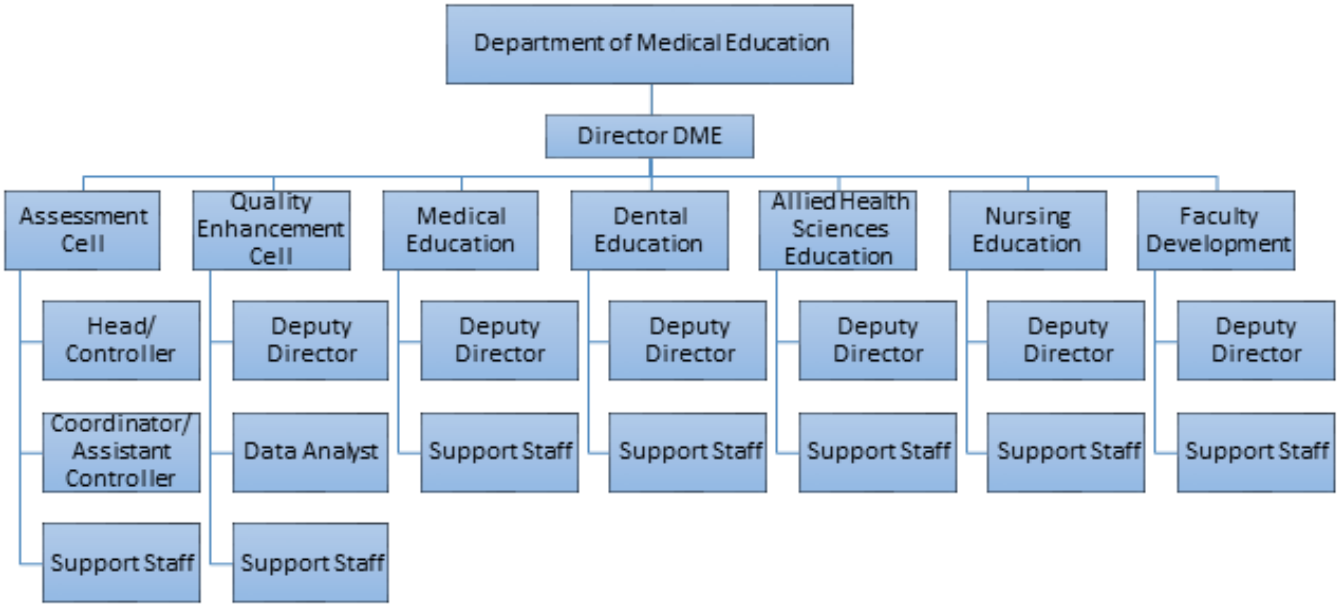
This guide, meticulously developed in collaboration with your subject departments, is designed to support your academic journey and help you achieve excellence in accordance with the highest standards set by PMDC and HEC.

DEPARTMENT OF MEDICAL EDUCATION

The Department of Medical Education (DME) serves as a cornerstone in delivering effective and high-quality education to both undergraduate and postgraduate medical and dental students. The DME is integral to the implementation and adoption of the latest curriculum provided by UHS and is responsible for organizing and managing related academic activities.

The DME will oversee the spirals of PERLs and C-FRC and monitor students' portfolio development and logbook completion. Additionally, the department is developing a mentoring platform and plans to initiate faculty development training which will focus on mentorship, reflective writing, and portfolio development skills. DME has a duty to collaborate with other disciplines to ensure that AVMDC students are not only competent in their respective fields but also well-trained in affective domains such as professionalism, ethics, research, and leadership.

A key responsibility of the DME is to plan and implement an effective training competency acquisition framework in collaboration with the academic council.



General Responsibilities of DME include:

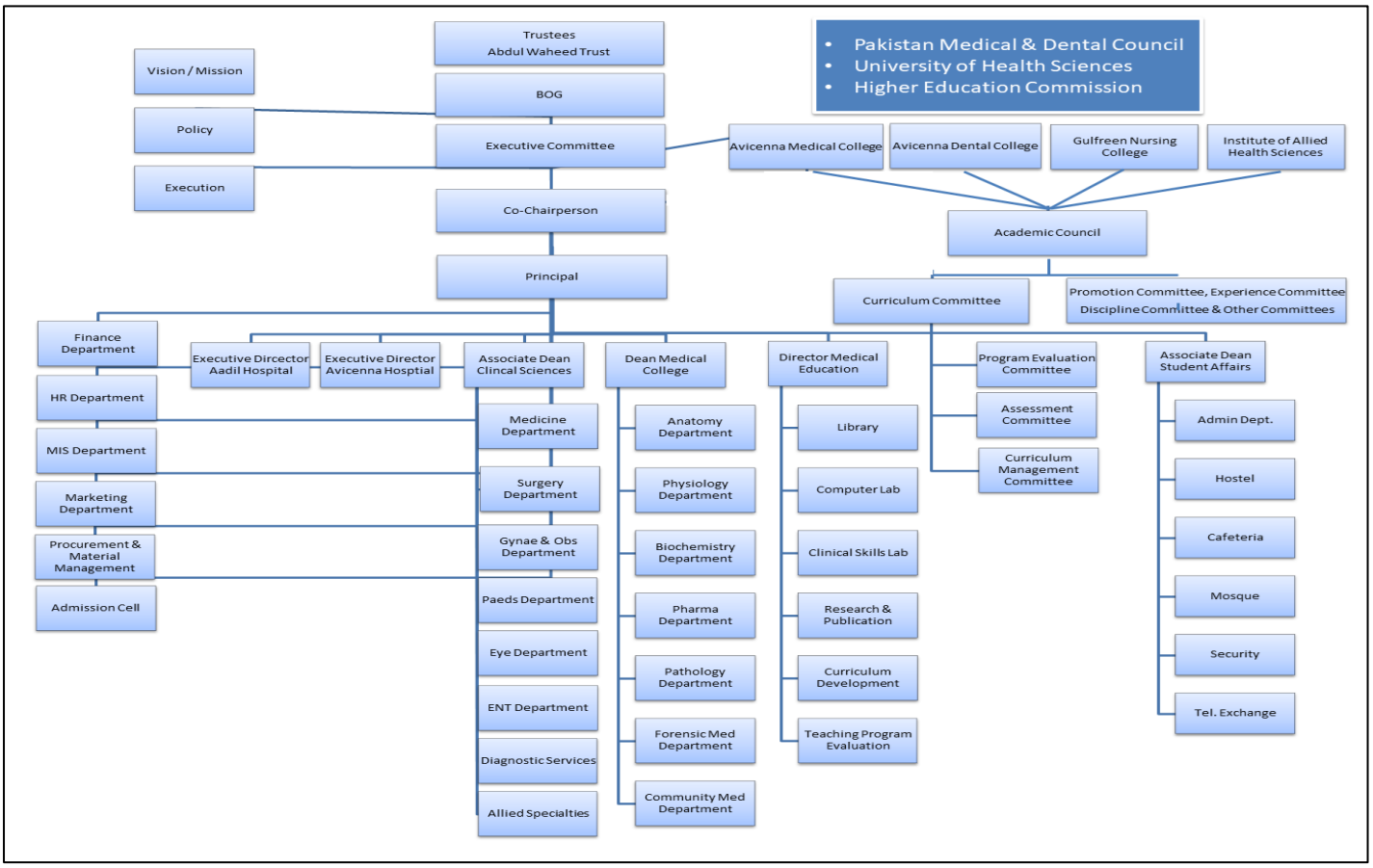
- Contribute and design, train the trainer activities which fulfill the need for undergraduate and postgraduate training.
- Shape and develop medical education research activities of the college.
- Facilitating & organizing workshops, seminars, symposia & conferences.
- Conducting CME activities to leverage culture of awareness, journal club.
- Networking by representing the college, when needed, in national /international meetings or conferences.
- Student counseling.
- Supervising students' academic progress.
- Academic Committees Development and Support.
- Staff Support and Development.
- Curriculum development and reform.
- Collaborate with curriculum committee and faculty members to develop quality instructional material such as modules, lecture, or study guides.
- Standard Operating Procedures for DME development.
- Skill lab management.

- Assessment analysis which includes blue printing, pre-exam review, item analysis and standard setting and provides feedback to concerned faculty and students on the learning outcome achievement.
- Develop and conduct periodical review of process of the program, learning and teaching activities, and assessment process.
- Identify opportunities for use of IT in teaching and learning, assessment and faculty development activities.
- Exam Cell management.
- Quality Assurance Cell management.
- Record keeping of departmental data.
- Leadership and management.
- Participation in overall planning and management of teaching in liaison with the departments.

Faculty	**Department**
Assistant Director / Assistant Professor Medical Education	Dr. Saman Fatima
Coordinator Medical Education	Dr. Javaid Shabkhaiz Rab
Deputy Director / Demonstrator Dental Education	Dr. Salar Arsalan
Deputy Director / Demonstrator Allied Health Sciences	Dr. Talha
Deputy Director / Demonstrator Nursing Education	Dr. Muneeba

Avicenna Medical & Dental College Overview

Institutional Organogram



Vision & Mission

Avicenna Medical & Dental College

Vision

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

Mission

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

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

Message from the Principal

Prof. Dr. Gulfreen Waheed
Principal Medical College
MBBS, FCPS, MHPE, PHD Scholar, (HPE)



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.

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

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.

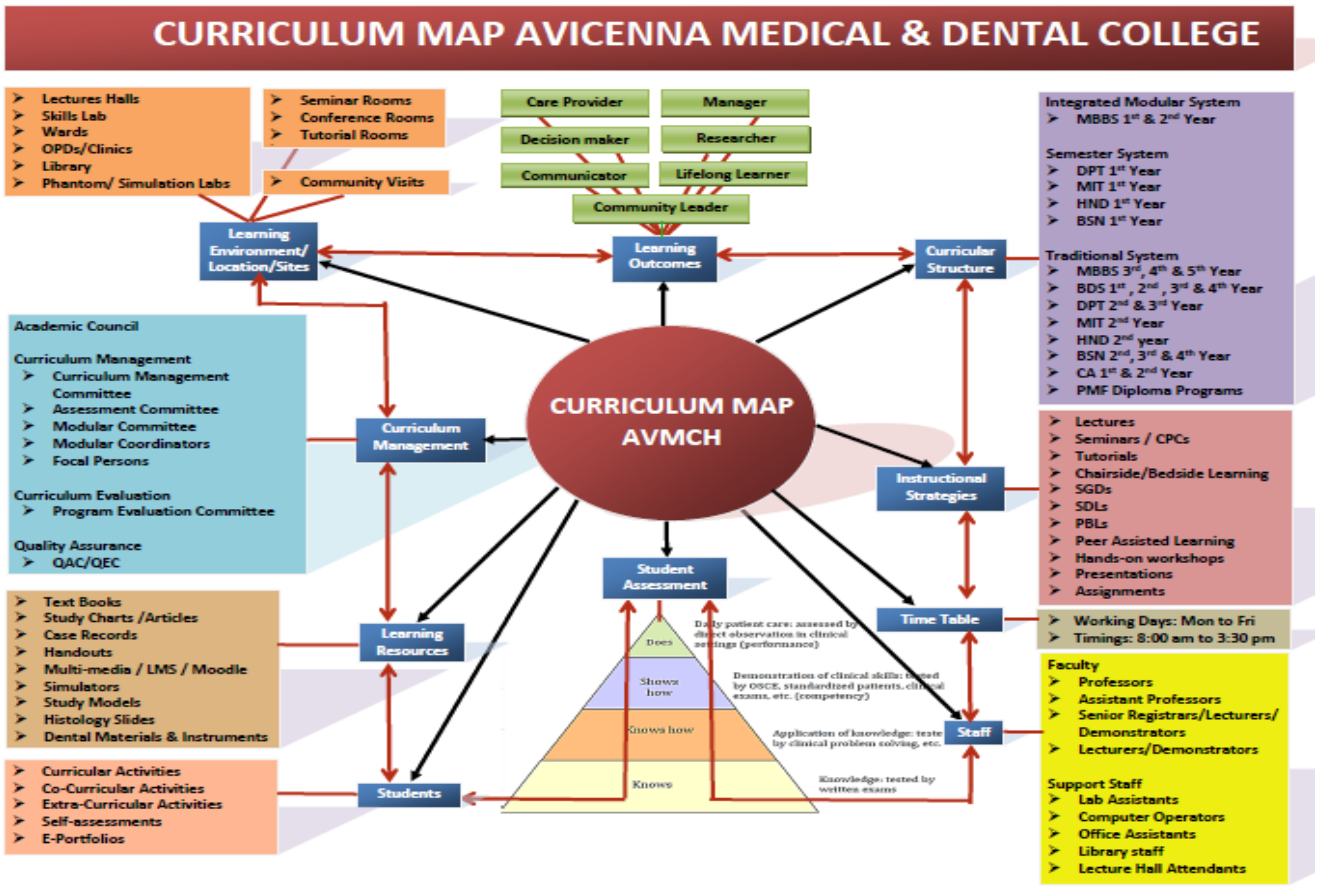
Avicenna Medical & Dental College runs under the umbrella of Abdul Waheed Trust. Abdul Wahid Trust is a non-profit social welfare organization and registered under the Societies Act with the Registrar of Societies. The Trust is legalized through a Trust Deed that bears necessary rectifications. The Trust 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.



Curricular 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:



Department & Subject Overview

Professor Khalid Nizami

Head of Surgery Department

MBBS FCPS

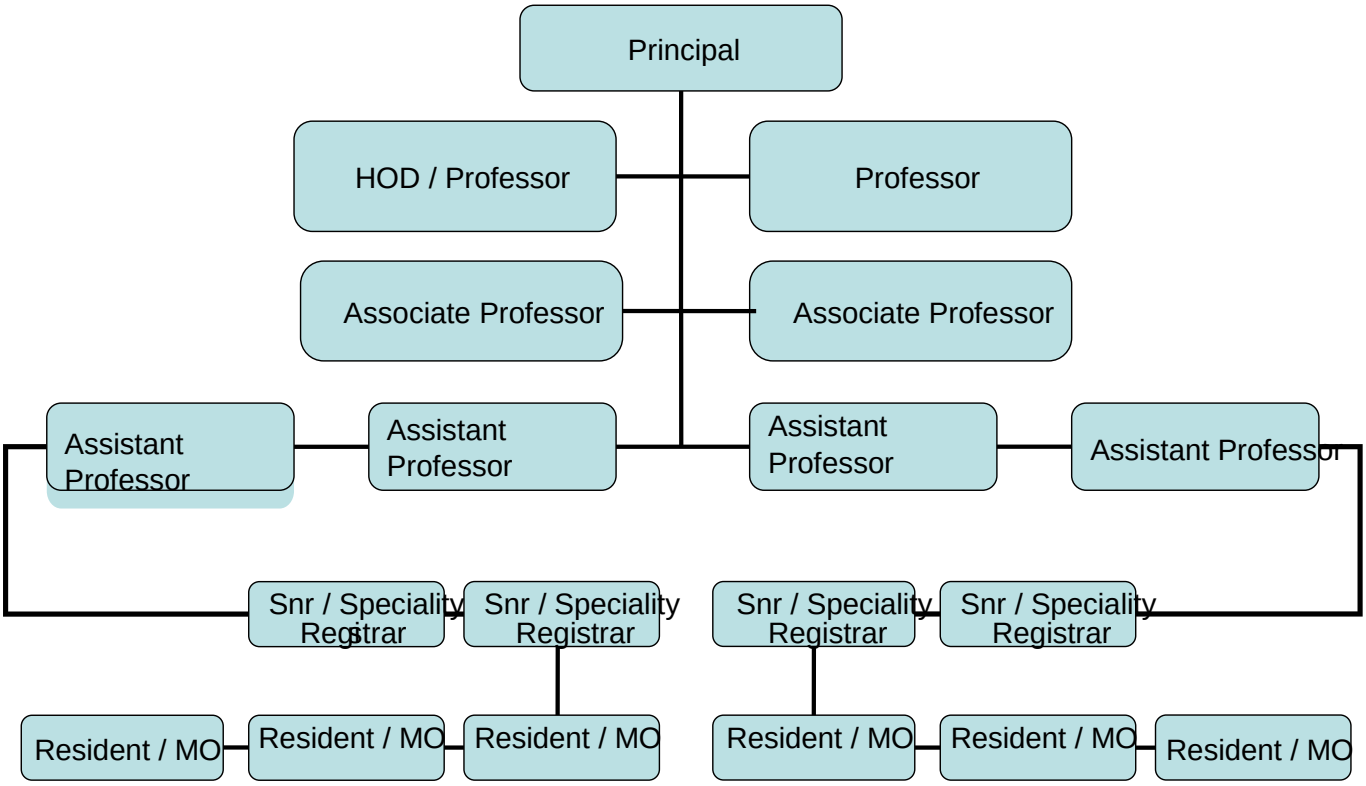


Note from the Head of Department

To lead the surgical departments in surgical excellence through innovative research, compassionate patient care, and exceptional education, transforming the future of surgery and improving health outcomes. To Train the next generation of surgeons and healthcare professionals and provide patient-centered care with empathy and respect.

The department of Surgery consists of 2 surgical units. Each unit has male and female wards with a total of 120 beds. There are 8 state of the art Operation Theatres. They are fully equipped for all types of surgical operations i.e., laparoscopic surgery, vascular surgery, thoracic surgery, neurosurgery & Urology. The surgical ICU has ventilators and dialysis units. All types of endoscopes are also available including cystoscopes, gastroscopes, and colonoscopies. Additionally, the department also caters for surgical emergencies and elective surgery is being performed by a team of highly professional surgeons.

Departmental Organogram (as per PMDC guidelines)



Faculty Members

Unit	Name	Designation	Qualification
II	Professor Khalid Nizami	Professor and Head of Department	MBBS FCPS
	Dr Fatima Ahmad	Associate Professor	MBBS FCPS FRCS
	Dr Mohammad Basil Rizvi	Associate Professor	MBBS FRCS
	Dr Javed Ahmad	Senior Registrar	MBBS MS
I	Dr Hassan Khan	Professor	MBBS FRCS
	Dr Zulfiqar Saleem	Professor	MBBS FCPS
	Dr Mahboob Alam Chishti	Assistant Professor	MBBS FCPS
	Dr Usman Khan	Senior Registrar	MBBS MRCP

Goal of the Department

The goals of our surgical department mainly focus on providing high-quality patient care, advancing medical knowledge, and fostering a supportive environment for staff and students. Here are some common goals:

1. **Patient Care**: Delivering the best possible surgical care to patients, ensuring safety, and improving health outcomes.
2. **Education**: Providing comprehensive training and educational programs for medical students, residents, and fellows.
3. **Research**: Conducting innovative research to advance surgical techniques and improve patient care.
4. **Quality Improvement**: Continuously improving surgical practices and patient care through quality assurance programs.
5. **Collaboration**: Promoting interdisciplinary collaboration within the hospital and with other institutions to enhance patient care and research.
6. **Community Engagement**: Engaging with the community to provide education and support on surgical health issues.
7. **Resource Management**: Efficiently managing resources to provide cost-effective care without compromising quality

Curriculum with Learning Objectives

To create measurable and observable learning objectives

TOPICS	LEARNING OUTCOMES **Remember:** Define, List, Recall and Identify **Understand:** Describe, Explain, Summarize an Interpret **Apply:** Demonstrate, Use, Implement and Solve **Analyse:** Differentiate, Compare, Contrast and Examine **Evaluate:** Assess, Critique, Judge and Recommend **Create:** Design, Construct, Develop, Formulate
Breast	1. Diseases of the breast, nipple and areola 2. Benign and malignant tumours.
Head, Face and neck	1. Developmental abnormalities of the face, palate and lips. 2. Principles of management of head injuries and its complications. 3. Oral cavity including tongue. 4. Diseases of salivary glands(Inflammation, Calculus, Tumours) 5. Neck lumps including lymph nodes, thyroid and parathyroid
Chest Wall & Thorax	1. Blunt & penetrating injuries and their complications. 2. Lung abscess and empyema thoracis. 3. Tumours and cysts in the lungs.
Gastro Intestinal Tract	1. Diseases causing oesophageal obstruction. 2. Peptic ulcer disease & its complications. 3. Tumours of stomach. 4. Conditions causing chronic abdomen including malignant lesions of small and large bowel 5. Ano-rectal and peri-anal conditions requiring surgery.
Abdominal, Pelvic and Genital Trauma and Hernia	1. Principles in management of abdominal pelvic and urogenital trauma. 2. Inguinal/ Inguinoscrotal and femoral hernia. 3. Epigastric hernia/umbilical/ para-umbilical hernia. 4. Incisional hernia.
Liver	1. Trauma. 2. Obstructive jaundice

TOPICS	LEARNING OUTCOMES **Remember:** Define, List, Recall and Identify **Understand:** Describe, Explain, Summarize an Interpret **Apply:** Demonstrate, Use, Implement and Solve **Analyse:** Differentiate, Compare, Contrast and Examine **Evaluate:** Assess, Critique, Judge and Recommend **Create:** Design, Construct, Develop, Formulate
Pancreas	1. Acute, relapsing and chronic pancreatitis. 2. Pancreatic masses including cysts 3. Benign and malignant neoplasia.
Spleen	1. Trauma 6. Surgical aspects of spleen
Urinary Tract	1. Common congenital anomalies. 2. Infection & its sequelae. 3. Calculus disease and its sequelae. 4. Bladder lesions. 5. Enlarged prostate. 6. Urogenital trauma. 7. Neoplasms of the kidney and urinary tract. 4.
External Genitalia, Male and Female	1. Developmental abnormalities. Common pelvic conditions
Scrotal and testicular lesions	1. Scrotal swelling. 5. Testicular swelling
Skin & Soft Tissues	1. Common benign and malignant skin lesions. 2. Wounds/ulcers/abscesses/sinuses/fistulae. Soft tissue lumps.
Orthopaedics and Trauma	1. Common congenital malformations of locomotive system. 2. Bone fractures & their complications. 3. Sports injuries and afflictions of tendons and bursae. 4. Bone and joint infections. 5. Arthritis. 6. Bone and cartilage tumours. 7. Spinal trauma. 8. Spinal tumours. 4. Common spinal deformities and other surgically correctable lesions.

Essential Skills to be Acquired

Measurable methods

CEX/ WBA/ CBD/ DOPS

1. Provide First Aid: Resuscitation (ABC) of polytrauma, CPR.
2. Collect blood samples, urine, stool, sputum, pus swab etc.
3. Insert Naso-gastric tube, have observed chest intubation and paracentesis.
4. Do IV cannulation, have observed CV-line insertion and cut-down of veins.
5. Catheterize male and female patients.
6. Prepare the patient for and know the procedure of doing an X-ray chest, abdomen, KUB, bones, IVU, barium studies, ultrasound and other imaging investigations.
7. Principles of pre-operative preparations, and sterilization/disinfection techniques.
8. Principles of wound care, skin suturing and suture removal, incision tissue lumps, needle biopsies, aspiration of localized fluids, etc
9. Have observed common surgical procedures, treatment of fracture/ dislocation and methods of general/local anaesthesia.
10. Apply bandage and splint/pop cast to the patient's limbs.
11. Have observed the instillation of chemotherapy and principles of radiotherapy.

Attendance Requirement & Internal Assessment Criteria

The institution follows the regulations for examinations of the UHS in letter and spirit. The students require **85% attendance** in all academic sessions and **50% marks** in internal assessments and send-up examinations to be eligible for the UHS Professional Examinations.



Learning Resources & Pedagogy

Book Recommendations



Sr.	Book Name	Author	Latest Editions
1.	Short Practice of Surgery	Bailey And Love's	28th Edition
2.	Text Book Of Surgery	By Ijaz Ahsan	3rd Edition
3.	General Surgery (Lecture Notes Series)	Harold Ellis, Roy Calne, Chris Watson	13th Edition
4.	An Introduction to the Symptoms and Signs of Surgical Disease	Norman Browse	6th Edition
5.	Current Surgical Practice	Norman L. Browse, Alan G. Johnson, and Tom.	Volume 6
6.	Schwartz's Principles of Surgery	F. Charles Brunicardi, Dana K. Andersen,	10th Edition

		Timothy R. Billiar, and David L. Dunn	
7.	Online Journals and Reading Materials	Avicenna Medical and Dental College and HEC Digital Library	
8.	Textbook of Anaesthesia	G. Smith and A.R. Aitkenhead	7th Edition
9.	Short Practice of Anaesthesia	M. Morgan, G. Hall	1st Edition
10.	A Synopsis of Anaesthesia	J.Alfred Lee	4th Edition

Traditional & Innovative Teaching Methodologies

Sr.	Pedagogical Methodologies	Description
1.	Lectures	In the traditional method, 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 discussions (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 and encourages students to explore issues in depth. It also provides opportunities for peer feedback and discussion.
6.	Assignment	Tasks are given to students to complete outside of class. Assignments can include research papers, case studies, or practical reports. They are designed to reinforce learning, assess understanding, and develop critical thinking and problem-solving skills.
7.	Self-directed Learning	Students take initiative and responsibility for their own learning process. Students are encouraged to seek resources, set goals, and evaluate their progress. This is a learner-centered approach where students take the initiative to plan, execute, and assess their own learning activities. This method promotes independence, critical thinking, and lifelong learning skills.
8.	Flipped Classroom	In this model, students first engage with learning materials at home (e.g., through videos, readings) and then use class time for interactive activities, discussions, or problem-solving exercises.

		This approach aims to maximize in-class engagement and application of knowledge.
9.	Peer-Assisted Learning (PAL)	A collaborative learning approach where students help each other understand course material. PAL involves structured peer tutoring, study groups, or collaborative tasks. It enhances comprehension through teaching, reinforces learning, and builds teamwork skills.

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

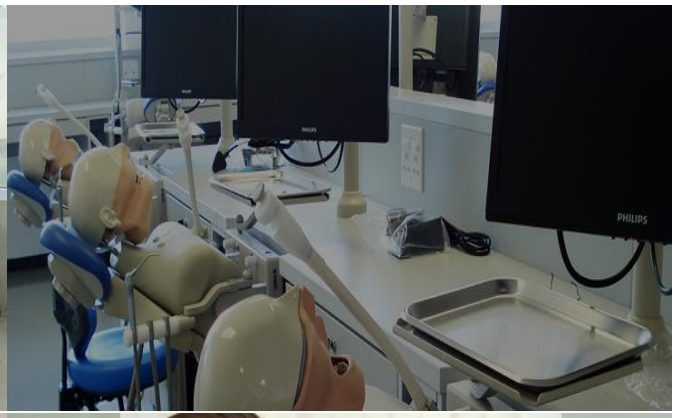
Flipped Classroom



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 full floor 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 procedures. These labs provide high-fidelity simulators that help students refine their clinical skills in a controlled environment.
7.	Mess & Cafeteria	The College has its own on-campus Mess which caters to 600 students. All food items including dairy, meat, and vegetables are sourced organically and bought in at the time of cooking, to ensure that students get freshly cooked meals at all times Students form the Mess committee which decides the mess menu in consultation with other students. The Mess offers fresh food to all residents three times a day. However, day scholars are also welcome to use the Mess facility at a reasonable cost. Two 50- inch LCD screens provide students an opportunity to get entertained during their meal times.
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.





Digital Library & Learning Management System (LMS)

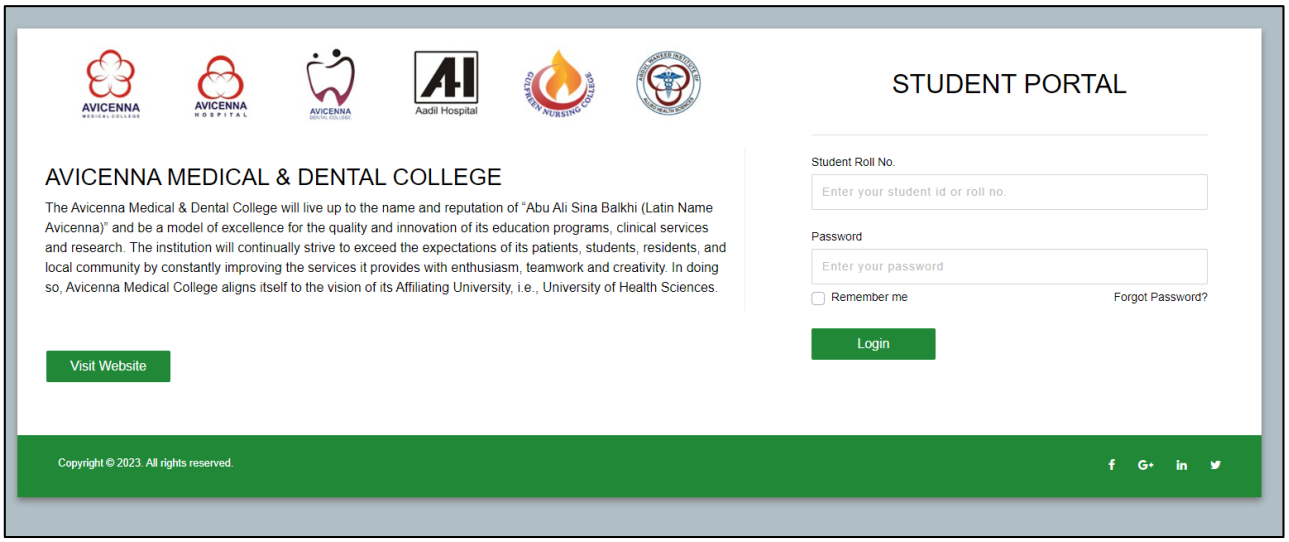
1. The COVID-19 pandemic highlighted the necessity of interactive online teaching for better retention of topics by students. Strategies like online learning management system (LMS), online discussions, online quizzes, assignment design, and flipped learning enhance student engagement in online education when needed.

2. Avicenna Medical & Dental College lays emphasis on the provision of learning material and online video lectures, video tutorials in the e-library and learning resource center, which has a dedicated website of Avicenna Medical College to enable the students to develop concepts and clarify their doubts, if they have not been able to do so in the teaching sessions during college hours. The digital library can be approached on http://digital.avicennamch.com/.



3. The institution has also endeavored to link itself with the digital libraries and e-library of the University of Health Science (UHS) and Higher Education Commission (HEC) to enable the students to benefit from the valuable resource material, lectures and knowledge bank at these sites. The links are available with the HEC http://www.digitallibrary.edu.pk/ and learning management system of UHS http://lms.uhs.edu.pk .

4. The Learning Management System (LMS) at Avicenna Medical & Dental College is a comprehensive platform managed by the Department of Student Affairs. It is designed to facilitate effective communication and information exchange between students, parents, faculty, and administrative staff. The LMS portals are specifically tailored to meet the needs of the following stakeholders:
   a. **Students**: For academic resources and scheduling.
   b. **Parents:** For monitoring academic progress and other relevant information.
   c. **Faculty:** For managing course content and academic activities.
   d. **Department of Student Affairs:** For overseeing administrative functions.
   e. **Department of Medical/Dental Education:** For overseeing academic functions.



5. Students can access a comprehensive range of academic resources and information through the student portal. By logging in with their roll number and password, students can:

   - Look at their attendance and results.
   - Review academic activities and weekly timetables/schedules.
   - Access rotation planners and test schedules.
   - Check for any notification, assignment or resource material from their teachers.

6. The information to the parent is duplicated by the issuance of the password and login to the Students Learning Management System which is dedicated to the Academic Program of the students. The parents can view the following by logging in to the mobile app of Avicenna Student Management System:

   a) Syllabus
   b) Table of specifications
   c) Annual Planner
   d) Synopsis
   e) Block Time Table
   f) Weekly training program
   g) Allocation of Marks
   h) Assessment calendar
   i) Results of tests / exams*
   j) Students' attendance record
   k) Fees & fines

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.

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

Internal Assessment

How is Internal Assessment Calculated for your department?

Internal Assessment		Assessment Methods (MCQ/SEQ/OSCE/Viva/ Practical)	Percentage Weightage (write N/A where not applicable)
Session Exams	Early Session Exam	MCQs SEQs Viva OSPE	70%
	Mid-term Session Exam		
	Late Session/Send up Exam		
Grand Tests			30%
Ward Test	Early Ward Test	20 %	100%
	Mid Ward Test	30%	
	Grand Ward Test	50%	
Final Clinical Assessment			100%

Avicenna Medical College

Examination Marks Scheme 2023-2024

Final Year MBBS

Form No	MBBS-5 Form-1		MBBS-5 Form-2		MBBS-5 Form-3		MBBS-5 Form-4	
Mode of Exam	Theory							
Test Type	Grand Test / Grand Ward Test		Revision Test		Session Exam		Send Up	
Weightage	30%		0%		70%		100%	
Medicine - I & Allied	MCQs 50, SEQs 50	100	MCQs 25, SEQs 25	50	MCQs 40, SEQs 40	80	MCQs 40, SEQs 40	80
Medicine - II & Allied	MCQs 50, SEQs 50	100	MCQs 25, SEQs 25	50	MCQs 35, SEQs 35	70	MCQs 40, SEQs 40	80
Surgery - A & Allied	MCQs 50, SEQs 50	100	MCQs 25, SEQs 25	50	MCQs 45, SEQs 45	90	MCQs 45, SEQs 45	90
Surgery - B & Allied	MCQs 50, SEQs 50	100	MCQs 25, SEQs 25	50	MCQs 55, SEQs 55	110	MCQs 55, SEQs 55	110
Obstetrics	MCQs 50, SEQs 50	100	MCQs 25, SEQs 25	50	MCQs 35, SEQs 30	65	MCQs 35, SEQs 30	65
Gynaecology	MCQs 50, SEQs 50	100	MCQs 25, SEQs 25	50	MCQs 30, SEQs 25	55	MCQs 30, SEQs 25	55
Paediatrics	MCQs 50, SEQs 50	100	MCQs 25, SEQs 25	50	MCQs 35, SEQs 45	80	MCQs 35, SEQs 45	80

Form No	MBBS-5 Form-5		MBBS-5 Form-6		MBBS-5 Form-7		MBBS-5 Form-8		MBBS-5 Form-9		MBBS-5 Form-10	
Mode of Exam	Clinical											
Test Type	*1 Batch Clinical Assessment (BCA)								*2 Final Clinical Assessment (FCA) (Late Session)			
	Early Ward Test		Mid Ward Test		Grand Ward Test							
Weightage	20%		30%		50%				100%			
					SC, LC		OSPE		SC, LC, IA		OSPE	
Medicine - I & Allied	Viva 20, OSPE 30	50	Viva 60, OSPE 40	100	SC-I 30, SC-II 30, SC-III 30 SC-IV 30 LC 85	205	OSPE 70	70	SC-I 25, SC-II 25, SC-III 25, SC-IV 25, LC 80	180	OSPE 70	70
Medicine - II & Allied	Viva 20, OSPE 30	50	Viva 60, OSPE 40	100	SC-I 30, SC-II 30, SC-III 30 SC-IV 30 LC 85	205	OSPE 70	70				
Surgery - A & Allied	Viva 20, OSPE 30	50	Viva 60, OSPE 40	100	SC-I 25, SC-II 25, SC-III 25, SC-IV 25, LC 70	170	OSPE 55	55	SC-I 20, SC-II 20, SC-III 20, SC-IV 20, LC 65	145	OSPE 55	55
Surgery - B & Allied	Viva 20, OSPE 30	50	Viva 60, OSPE 40	100	SC-I 25, SC-II 25, SC-III 25, SC-IV 25, LC 70	170	OSPE 55	55				
Obstetrics Gynaecology	Viva 20, OSPE 30	50	Viva 40, OSPE 60	100	LC-OBS 30, LC-GYN 30	60	OSPE 75	75	LC-OBS 22, LC-GYN 23	45	OSPE 75	75
Paediatrics	Viva 20, OSPE 30	50	Viva 60, OSPE 40	100	SC-I 08, SC-II 08, SC-III 08, SC-IV 08, LC 18	50	OSPE 40	40	SC-I 06, SC-II 06, SC-III 06, SC-IV 06, LC 16	40	OSPE 40	40

Page 1

Avicenna Medical College

Examination Marks Scheme 2023-2024

Final Year MBBS

NOTE 1 : * Batch Clinical Assessment(BCA) Clinical exam held at the end of each rotation for each batch

NOTE 2 : * Final Clinical Assessment(FCA) Exit exam at the end of Late Session & Send up exam Before Final Prof for all students

Note : Students have to pass Clinical VIVA(short case , long case) & OSPE both.They will be considered Fail if they are unable to pass any one of them.

Distribution of marks of Internal assessment: Log book 10 marks, Ward Card 10 marks, Attendance 5 marks in surgery and medicine.
Gynaeacology & obstetrics: 10 marks for log books& ward card and 5 marks for attendance
Paediatrics: 5 marks for log books & ward card &5 marks for attendance

The log books will be signed and stamped at the end of each clinical rotation by the respective Head of Department and Examination Department

External Assessment

Surgery & Allied

Subject	Theory	Practical	Total Marks
Surgery & Allied	**Paper I** Part I MCQs: 45 Marks Part II SEQs: 45 Marks **Paper II** Part I MCQs: 45 Marks Part II SEQs: 45 Marks Internal Assessment: 25 Marks	Oral & Practical: 65 Marks Clinical Examination: 210 Internal Assessment: 25 Marks	500
	200	300	

Sample Paper

MCQ

AUTHOR: Professor Khalid Nizami
DATE: 26th August 2024
DISCIPLINE/SUBJECT: General Surgery
TOPIC: Basic Surgical Skills
LEVEL OF STUDENT: Final year MBBS
AREA: Treatment

Item Writing Template

A 40-year-old man came to the emergency department after sustaining a laceration on her left index finger while using a kitchen knife 4 hours ago. On examination, there was a gaping wound on the base of his left index finger, which was 3 cm in size. After initial wound care, you decide to close the wound with prolene suture. **The characteristics of prolene suture are:**

Option:

a. easier to knot
b. high tissue reaction
c. multifilament
d. non-absorbable *
e. tensile strength is 50 % at 6 months

Mark the key with an Asterix*

COGNITIVE LEVEL: Application

DIFFICULTY LEVEL: Moderate

IMPORTANCE: Need to Know

REFERENCE: Bailey and Love's Short Practice of Surgery Edition 28
Chapter 7 Basic Surgical Skills (Basic Principles))
Page 105

SEQ/SAQ

AUTHOR: Professor Khalid Nizami
DATE: 26th August 2024
DISCIPLINE/SUBJECT: General Surgery
TOPIC: Laparoscopic Surgery
LEVEL OF STUDENT: Final Year MBBS
AREA: Basic Principles of Laparoscopic Surgery

Scenario You were asked to see a patient by the in-charge nurse in the medical ward who has been listed for cholecystectomy for biliary colic due to gallstones. He is on the next day morning list. The patient is unsure whether to undergo open or laparoscopic procedure and wants to discuss the options

Question	**Marks**
a) Which one of the two methods of cholecystectomy is better open or laparoscopic and why	2
b) Name 3 limitations of laparoscopic procedure	2
c) Name 2 methods of creating pneumoperitoneum. Which is safer 1)	1

Key	Marks
a) Laparoscopic method Decreased wound size, decreased wound pain, reduced wound infection, reduced dehiscence, reduced bleeding, reduced heat loss, improved mobility and improved vision.	2
b) 1. Reliance on remote vision 2. Loss of tactile sensation 3. Dependence on hand-eye coordination 4. Difficulty in haemostasis 5. Reliance on new techniques 6. Extraction of large specimen	2
Open (Hasson's) and closed (verress needle). Open method is safe.	1

COGNITIVE LEVEL: Recall

DIFFICULTY LEVEL: Moderate

IMPORTANCE: Must Know

REFERENCE: Bailey and Love's Short Practice of Surgery Edition 28
Principles of laparoscopic and robotic surgery
Chapter 8 Page 105

OSCE COVER SHEET

Station Title: Suturing
Type of Station: Observed
Specialty: General Surgery
Marks: 5
Class Level: 5th Year MBBS
Time: 5 minutes
Estimated difficulty: Moderate
Exam: Early Session

Taxonomy level: Understanding & Application (Applying Knowledge in Practical Situations)

List of resources required: 2 chairs, 1 table/desk

Instructions for the Candidate: Your task is to read the provided scenario below thoroughly and then provide answers to the questions listed for the examiner.

Scenario: **A 25 years woman came to emergency after sustaining a laceration on her left index finger while doing her kitchen work. On examination, there was a gaping wound on the base of her left index finger, which was 4 cm in size. After initial management, you decide to close the wound with prolene suture**

Demonstrate
Vertical mattress suture in the given suturing pad

Key: (in the form of rubric) You may use rating scale. (binary/global/analytical/holistic)

CURRICULUM DETAILS

Curricular Framework including Allocation of Hours (PMDC)

Basic & Clinical Medical Sciences / Preclinical & Para Clinical Years			
1st & 2nd Professional Year	**3rd Professional Year**	**4th Professional Year**	**5th Professional Year**
Anatomy 500 Hours	**General & Special Pathology** 500 Hours	**Eye** 150 Hours	**General Surgery** 600 Hours
Physiology 450 Hours	**Pharmacology** 300 Hours	**ENT** 150 Hours	**General Medicine** 600 Hours
Biochemistry 250 Hours	**Forensic Medicine & Toxicology** 100 Hours	**General & Special Pathology** 500 Hours	**Paediatrics** 300 Hours
General Education 450 Hours • Quran Kareem – 50 Hours • Pakistan Studies / Ideology & Pakistan Constitution – 25 Hours • Islamiyat / Ethics – 25 Hours • Professionalism – 25 Hours • Communication Skills -25 Hours	**Psychiatry & Beh. Sciences** 150 Hours	**Community Medicine & Public Health** 200 Hours	**OBS &Gynae** 300 Hours
	Pre-clinical Operative Dentistry 80 Hours	**Research Methodology & Evidence Based Medicine** 100 Hours	**Surgical specialties** 225 Hours • Neurosurgery • Vascular surgery • Adult Cardiac surgery • Paediatrics surgery • Thoracic surgery • Plastic surgery

• English Expository Writing – 25 Hours • Arts & Humanities (One Course) -25 Hours • Co-curricular activities – 200 Hours			
			Medical specialties 225 Hours • Neurology • Rheumatology • Geriatrics • Endocrinology • Paediatrics Cardiology • Infectious Diseases • Oncology

Academic Planner

Avicenna Medical & Dental College
Calendar 2023- 2024
5th Year MBBS

January 2024

	Su	Mo	Tu	We	Th	Fr	Sa
		1	2	3	4	5	6
	7	8	9	10	11	12	13
	14	15	16	17	18	19'	20
	21	22	23	24	25	26	27
	28	29	30	31			

February 2024

	Su	Mo	Tu	We	Th	Fr	Sa
					1	2	3
	4	s5	6	7	8	9	10
	11	12	13	14	15	16	17
	18	19	20	21	22	23	24
	25	26	27	28	29		

March 2024

	Su	Mo	Tu	We	Th	Fr	Sa
						1	2
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	ii 23
	24	25	26	27	28	29	30
	31						

April 2024

	Su	Mo	Tu	We	Th	Fr	Sa
1		1	2	3	4	5	6
Eid-ul-Fitr	7	iii 8	iii 9	iii 10	iii 11	iii 12	iii 13
2	14	15	16	17	18	19' EWT	20
3	21	22 S1	23	24	25	26	27
4	28	29 M2	30				

May 2024

	Su	Mo	Tu	We	Th	Fr	Sa
4				iv 1	2	3 MWT	4
5	5	6 Obs	7	8	9	10	11
6	12	13 GWT1	14	15	16	17	18
7	19	20 P	21	22	23	24 EWT	25
8	26	27 M2	v 28	29	30	31	

June 2024

	Su	Mo	Tu	We	Th	Fr	Sa
8							1
9	2	3 S2	4	5	6	7 MWT	8
10	9	10 Gy	11	12GWT2	13	14	15
Eid-ul-Adha+Su.V	16	vi 17	vi 18	vi 19	20	21	22
Su.V	23	24	25	26	27	28	29
Su.V	30						

July 2024

	Su	Mo	Tu	We	Th	Fr	Sa
Su.V		1	2	3	4	5	6
Su.V	7	8	9	10	11	12	13
Su.V	14	15	vii 16	vii 17	18	19'	20
11 ESE	21	22 S1	23	24 OBS	25	26 Gynae	27
12 ESE	28	29 Med1	30	31 Med2			

August 2024

	Su	Mo	Tu	We	Th	Fr	Sa
12 ESE					1	2 Sur1	3
13 ESE	4	5 Sur2	6	7p	8	9	10
14	11	12	13	viii 14	15	16 EWT	17
15	18	19 Obs	20	21	22	23M1	24
16	25	26 S2	27	28	29	30 MWT	31

September 2024

	Su	Mo	Tu	We	Th	Fr	Sa
17	1	2 M2	3	4	5	6	7
18	8	9	10 GWT3	11	12	13	14
19	ix 15	16 Gy	17	18	19	20 EWT	21
20	22	23 P	24	25	26	27MWT	28
21	29	30 S1					

October 2024

	Su	Mo	Tu	We	Th	Fr	Sa
21			1	2	3GWT4	4	5
22	6	7 M1	8	9	10	11EWT	12
23 MSE	13	14	15	16 Med1	17	18 Med2	19
24 MSE	20	21 OBS	22	23 Gynae	24	25 Sur1	26
25 MSE	27	28 Sur2	29	30 Paeds	31 MWT		

November 2024

	Su	Mo	Tu	We	Th	Fr	Sa
25						1	2
26	3	4	5	6	7GWT5	8	9
27	10	11 M2	12	13	14	15EWT	16
28	17	18 S1	19	20	21	22 Obs	23
29	24	25 P	26	27	28	29 MWT	30

December 2024

	Su	Mo	Tu	We	Th	Fr	Sa
30	1	2 S2	3	4	5GWT6	6	7
31	8	9 Gy	10	11 M1	12	13 P	14
32 LSE/SendUp	15	16	17	18	19	20	21
33 LSE/SendUp	22	23	24	x 25	26	27	28
34 FCA	29	30	31				

January 2025

	Su	Mo	Tu	We	Th	Fr	Sa
34 FCA				1	2	3	4
35	5	6	7	8	9	10	11
36	12	13	14	15	16	17	18
37	19	20	21	22	23	24	25
	26	27	28	29	30	31	

February 2025

	Su	Mo	Tu	We	Th	Fr	Sa
							1
	2	3	4	5	6	7	8
	9	10	11	12	13	14	15
	16	17	18	19	20	21	22
	23	24	25	26	27	28	

March 2025

	Su	Mo	Tu	We	Th	Fr	Sa
							1
	2	3	4	5	6	7	8
	9	10	11	12	13	14	15
	16	17	18	19	20	21	22
	23	24	25	26	27	28	29
	30	31					

SESSION START: 1st April,2024

Gazetted Holidays

- **i- Kashmir Holiday** - 5th Feb,2024
- **ii- Pakistan Day** -23rd March,2024
- **iii - Eid- Ul- Fitr**-7th April-14th April,2024
- **iv- Labor Holiday**- 1st May,2024
- **v- Youm-e-Takbeer Holiday**-28th May,2024
- **vi- Eid- Ul- Adha**- 17th June-19th June,2024
- **vii- Ashura**- 16 &17 July,2024
- **viii- Independence Day**- 14th Aug,2024
- **ix- Rabi Ul Awal**-15th Sep,2024
- **x- Quaid-e-Azam Day/Christmas**- 25th Dec,2024

Vacations

- **Spring Vacations**- 7th April,2024- 14th April,2024
- **Summer Vacations**-15th June-21st July,2024
- **Winter Vacations**-22nd Dec-29th Dec,2024

Events

- **White Coat Ceremony**-17 April,2024
- **Sports Day**- 6 March,2024
- **Funfair**- 20th April,2024
- **Trips and Tours**-

Session Exam

- **Early Session**-24th July,2024- 7th Aug,2024
- **Mid Session**- 16th Oct,2024- 30th Oct,2024
- **Late Session/Send Up**-
- **OSPE+Viva**-

AVICENNA
MEDICAL COLLEGE

ALLOCAION OF CURRICULUM HOURS

MBBS - FINAL YEAR / 2023-2024

Subject Title	Clinical Rotation	Lecture	SDL	Evening clinical Rotation	CST	Assessment	Total Hours (36 Weeks)	Interactive Sessions (3 Weeks)	AVMC (Total Hours Achivement)	(PMDC Hours)
Surgery	144	180	12	120	60	24	540	28	568	850
Medicine	144	180	12	120	60	24	540	28	568	850
Paeds	72	108	6	60	30	12	288	15.5	303.5	300
OBS/Gynae	72	144	6	60	30	12	324	18.5	342.5	300
TOTAL	**432**	**612**	**36**	**360**	**180**	**72**	**1692**	**90**	**1782**	**2300**

Table of Specification

Contents	Learning Objectives	Cognition			Psychomotor	Attitude	Skill	%	Assessment Method
		C1	C2	C3					
	1.List common diseases 2.Identify different disorders 3.Plan and interpret investigations appropriate to the disorder 4.Able to justify investigations to reach diagnosis 4.Outline management plan 5.Demonstrate necessary Evaluation skills to reach clinical diagnosis 6.Demonstrate key clinical signs on examination								
	Learning methods 1.Lectures 2.MCQ 3.SEQ 4.Long and short cases 5.OSCE								

Skin & S/C tissue		1	1	2	2	1	3	10%	MCQ SEQ OSCE
Head & neck		2	1	3	2	1	1	20%	MCQ SEQ
Breast & endocrine		1	1	3	2	1	2	20%	MCQ SEQ Long cases
Cardiothoracic		1	1	3	2	1	2	10%	MCQ SEQ
Vascular		2	1	2	2	1	2	10%	MCQ SEQ Short cases
Abdomen		1	1	3	2	1	2	20%	SEQ Long cases
Genitourinary		1	1	3	2	1	2	10%	MCQ Short cases Long cases
Total		9	7	19	14	7	14	100%	

Sr#	TOPIC	LEARNING OBJECTIVES	KNOWLEDGE Cognitive Domain			SKILL Psychomotor Domain	ATTITUDE Effective Domain	TOTAL %	Mode of Information Transfer MIT						TOTAL HOURS	Lecture Topics	References	Clinical Rotation /Skills References
			C1	C2	C3	P	A		Lecture (hours)	M.Clinical Rotation (hours)	E.Clinical Rotation (hours)	Clinical Skill (hours)	Practical	SDL				
1	Introduction to surgery and the Department of surgery and Allied	The student should be able to: 1. Discuss the definition of surgical diseases. 2. Describe the role of surgery and allied subjects in MBBS course.	–	–	1%	–	1%	2%	1 1	1 1	2	1				1. Introduction 2. History of surgery	B&L 27th Edi.	1. ward round 2. ward round
	PRINCIPLES OF SURGERY	To understand: • Classical concepts of homeostasis •Mediators of the metabolic response to injury •Physiological and biochemical changes during injury and recovery •Avoidable factors that compound the metabolic response to injury									1	1		1			B&L 27th Edi.	
2	Metabolic response to injury	To understand: • Classical concepts of homeostasis •Mediators of the metabolic response to injury •Physiological and biochemical changes during injury and recovery •Avoidable factors that compound the metabolic response to injury	–	1%	–	–	–	1%	1 1	1 1						1. Metabolic response 2. Metabolic response to injury	B&L 27th Edi.	1. History taking 2. Clinical examination
3	Shock and blood transfusion	To understand:• The pathophysiology of shock and ischaemia–reperfusion injury• The different patterns of shock • Appropriate monitoring and end points of resuscitation • Use of blood and blood products, the benefits and risks of blood transfusion	–	1%	1%	–	–	2%	1 1 1	1 1	2	1				1. shock 2. blood transfusion 3. blood products	B&L 27th Edi.	1. Cannulation 2. IV fluid infusion 3. human body venous system
4	Wounds, healing and tissue repair	To understand: • Normal healing and how it can be adversely affected • How to manage wounds of different types. •Aspects of disordered healing that lead to conic wounds •The variety of scars and their treatment •How to differentiate between acute and conic wounds	–	1%	1%	–	–	2%	1 1	1 1	2					1. Wound healing 2.Tissue repair	B&L 27th Edi.	1. Ulcer examination 2. debridement & surgical dressings

5	Surgical infection	To understand: • The characteristics of the common surgical pathogens and their sensitivities •The classification of sources of infection • The clinical presentation of surgical infections • The indications for and choice of prophylactic antibiotics To learn: •The management of abscesses To appreciate: • The importance of aseptic and antiseptic techniques and delayed primary or secondary closure in contaminated wounds To be aware of: •The causes of reduced resistance to infection (host response) To know: •The definitions of infection, particularly at surgical sites •What basic precautions to take to avoid surgically relevant hospital acquired infections						2%	1 1 1		2							
6			1%		1%	–	–			1 1	2					1. types of surgical infections 2. 2. antibiotics 3. aseptic measures	B&L 27th Edi.	1. gown & gloving 2. drapping
7	Tropical infections and infestations	To be able to list: • The common surgical infections and infestations that occur in the tropics To appreciate: • That many patients do not seek medical help until late in the course of the disease because of socioeconomic reasons To be able to describe: • The emergency presentations of the various conditions, as patients may not seek treatment until they are very ill To be able to: • Diagnose and treat these conditions, particularly as emergencies. The ease of global travel has connected areas where tropical infections are common to areas where they are not. Patients with such an infection who are recently returned from the tropics will mostly present as emergencies	1%	–	1%	–	–				2							
								2%	1 1 1	1 1	2	1		1		1. Tropical infections 2. tropical infestations 3. emergency presentations	B&L 27th Edi.	1. history of swelling 2. examination of swelling

8	Basic surgical skills and anastomoses	To understand: • The principles of patient positioning and operating theatre safety •The principles of skin and abdominal incisions • The principles of laparoscopic trocar insertion • The principles of wound closure To know the principles in performing: • Bowel anastomoses • Vascular anastomoses To be aware of: •The principles of drain usage	_	_	1%	1%	_	2%	1 1 1 1	1 1 1 1 1 1 1 1	2	1		1		1.surgical instruments 2. sutures 3. types & techniques of anastomosis 4. complications of anastomosis	B&L 27th Edi.	1. instruments2. sutures 3. suturing techniqes 4. techniqes of anastomosis 5. surgical incisions 6. vascular anastomosis 7. drains 8. diathermy types
9	Principles of laparoscopic and robotic surgery	To understand: • The principles of laparoscopic and robotic surgery • The advantages and disadvantages of such surgery •The safety issues and indications for laparoscopic and robotic surgery •The principles of postoperative care	1%	1%	_	_	_	2%	1 1 1	1 1 1 1	2					1. history of lap surgery 2. 1aparoscopicsurgery 3. robotic surgery	B&L 27th Edi.	1 . laparoscopic instruments 2. priciples of lap surgery 3. port sites for different operations 4. complications of lap surgery
10	Principles of paediatric surgery	Be able to: • Describe clinically important differences between adults and children • Explain the principles of trauma management in children • Safely prescribe perioperative fluids in children • Avoid the pitfalls that often delay the diagnosis of common emergency conditions • Outline some congenital malformations		1%		_	_	1%	1 1 1 1	1 1 1 1						1. paediatric trauma 2. paediatric perioperative care 3. congenital malformations 4. common paediatric	B&L 27th Edi.	1.Examination of paediatric patient 2. examination of hernia 3. examination of hydrocele 4. circumscion
11	Principles of oncology	To understand: • The biological nature of cancer • That treatment is only one component in the overall management of cancer • The principles of cancer prevention and early detection • The principles underlying non-surgical treatments for cancer To appreciate: • The principles of cancer aetiology and the major known causative factors • The likely shape of future developments in cancer management	1%	1%	_	_	_	2%	1 1	1	2	1				1. principles of oncology 2. multidisciplinary cancer management	B&L 27th Edi.	1. common surgical malignancies 2. diganosis

	INVESTIGATIONS AND DIAGNOSIS										2	1					B&L 27th Edi.	
12	Diagnostic imaging	To understand:• The advantages of good working relationships and close collaboration with the imaging department inplanning appropriate investigations• The basic principles of radiation protection and knowthe law in relation to the use of ionising radiation• The principles of different imaging techniques and theiradvantages and disadvantages in different clinical scenarios • The role of imaging in directing treatment in various surgical scenarios	–	1%	1%	–	–	2%	1 1 1	1 1 1 1						1. imaging in surgery 2. principles of imaging 3. indications of imaging	B&L 27th Edi.	1. x ray films 2. CT scan films 3. FNAC steps 4. trucut biopsy steps 5 . Ultrasound
13	Gastrointestinal endoscopy	To gain an understanding of: • The role of endoscopy as a diagnostic and therapeutic tool • The basic organisation of an endoscopy unit and its equipment • Consent and safe sedation • Special situations: the key points in managing endoscopy in at-risk patients • The indications for diagnostic and therapeutic endoscopic procedures including endoscopic ultrasound • The recognition and management of complications • Novel techniques for endoscoping the	–	–	2%	–	–	2%	1 1	1 1	1	1		1		1. anatomy of GIT 2. capsule endoscopy	B&L 27th Edi.	1. parts of upper & lower GI endoscopy 2. method of upper & lower GI endoscopy

	PERIOPERATIVE CARE										2	1		1			B&L 27th Edi.	
14	Preoperative care including the high-risk surgical patient	To be able to organise the preoperative care and the operating listTo understand preoperative preparation for surgery: • Surgical, medical and anaesthetic aspects of assessment • How to optimise the patient's condition• How to identify and optimise the patient at higher risk • Importance of critical care in management• How to take consent • How to organise an operating list	–	–	1%	–	1%	2%	1 1 1	1 1						1. preoperative assesment 2. high risk patients 3. informed written consent & OT list	B&L 27th Edi.	1. ATLS protocol 2. pre anesthesia assesment
15	Anaesthesia and pain relief	To gain an understanding of: • Techniques of anaesthesia and airway maintenance • Methods of providing pain relief • Local and regional anaesthesia techniques • The management of conic pain and pain from malignant disease	–	1%	–	–	–	1%	1 1	1 1	1	1				1. types of anaesthesia 2. pain management	B&L 27th Edi.	1. endotracheal intubation 2. anesthesia drugs

16	Nutrition and fluid therapy	To understand: • The causes and consequences of malnutrition in the surgical patient • Fluid and electrolyte requirements in the pre- and postoperative patient • The nutritional requirements of surgical patients and the nutritional consequences of intestinal resection • The different methods of providing nutritional support and their complications	1%	1%		–	–	2%	1 1 1	1 1	2	1		1		1. malnutrition 2. fluid therapy 3. nutrition in surgery	B&L 27th Edi.	1. NG tube insertion 2.. IV fluids
17	Postoperative care	To understand: • What is required to deliver immediate postoperative care • What are the common postoperative problems seen in the immediate postoperative period • How to predict and prevent common postoperativecomplications• How to recognise and treat common postoperativecomplications • The principles of enhanced recovery• A system for discharging patients	–	–	1%	–	–	1%	1 1 1	1 1	2	1				1. postoperativecmplications 2. prevention of postop complications 3. system of discharge of patient	B&L 27th Edi.	1,. Ward roud 2. ward round
18	Day case surgery	To understand: • The concept of the day surgery pathway • The importance of patient selection and preoperative assessment • Basic principles of anaesthesia for day surgery • The spectrum of surgical procedures suitable for daysurgery • Postoperative management and discharge arrangements	–	1%	–	–	–	1%	1 1	1 1	2	1				1. Day case pathway 2. spectrum of day care surgery	B&L 27th Edi.	1. Intramuscular injection 2. day care case discussion
	TRAUMA																B&L 27th Edi.	

19	Introduction to trauma	Become familiar with the timeline concept in trauma management • Understand how to assess a trauma problem • Learn how to respond to a trauma problem • Understand how to select early total care and damage control surgical strategies	–	1%	–	–	–	1%	1 1	1 1	2	1				1. trauma types 2. trauma management	B&L 27th Edi.	1. ATLS introduction 2. ATLS practical
20	Early assessment and management of severe trauma	Learning objectives • How to identify and assess the severely injured patient • Early treatment goals for multiply injured patients • Understand the role of permissive hypotension, tranexamic acid and massive transfusion protocols • Understand the principles of damage control surgery(DCS) versus early total care (ETC)	–	1%	1%	–	–	2%	1 1 1	1 1	2					1. assesment of trauma patients 2. treatment goals of trauma patient 3. damage control surgery & early total care	B&L 27th Edi.	1. maintainence of airway 2. management of breathing problems in trauma
21	Traumatic brain injury	To understand: • The physiology of cerebral blood flow and thepathophysiology of raised intracranial pressure • The classification and assessment of head injury • Management and sequelae of minor and mild traumaticbrain injury • Medical and surgical management of moderate andsevere traumatic brain injury	–	–	2%	–	–	2%	1 1	1 1	2	1				1. pathophysiology 2. assesment & management	B&L 27th Edi.	1. GCS 2. surgery in head injury
22	Neck and spine	To be familiar with: • The accurate assessment of spinal trauma • The basic management of spinal trauma and the majorpitfalls • The pathophysiology and types of spinal cord injury • The prognosis of spinal cord injury	–	1%	1%	–	–	2%	1 1	1 1	1	1				1. Neck 2. spine	B&L 27th Edi.	1. Intravenous access 2. care of neck & spine in trauma

23	Maxillofacial trauma	To be able to:• Identify and understand the significance of potentially life-teatening injuries to the face, head and neck To have:• A systematic methodology for examining facial injuries To know:• The classification of facial fracturesTo understand:• The diagnosis and management of fractures of themiddle third of the facial skeleton and the mandible• The principles of the diagnosis and management offacial soft tissue injuriesTo appreciate	–	1%	–	–	–	1%	1 1	1 1	2	1		1		1. examination & classification 2. diaganosis & treatment	B&L 27th Edi.	1. tracheostomy 2. cricothyroidotomy
24	Torso trauma	To understand: • That the management of trauma is based on physiologyas well as anatomy (as in general surgery) • The gross and surgical anatomy of the chest andabdomen • The pathophysiology of torso injury • The strength and weaknesses of clinical assessment inthe injured patient • The use of special investigations and	–	1%	2%	–	–	3%	1 1 1 1	1 1	2					1. chest trauma 2. abdominal trauma 3. chest intubation 4. DPL	B&L 27th Edi.	1. Chest tube insertion 2. DPL 3. FAST
25	Extremity trauma	To gain an understanding of: • How to identify whether an injury exists • The important injuries not to miss • The principles of the description and classification offractures • The range of available treatments • How to select an appropriate treatmen	–	1%	1%	–	–	2%	1 1	1 1	1	1		1		1. upper limb trauma 2. lower limb trauma 3. complications	B&L 27th Edi.	1. Examination of extremities 2. POP
26	Disaster surgery	To recognise and understand: • The common features of various disasters • The principles behind the organisation of the relief effortand of triage in treatment and evacuation • The role and limitations of field hospitals in disaster • The features of conditions peculiar to disaster situationsand their treatment	1%	–	–	–	–	1%	1 1	1	1	1				1. disaster features 2. management protocols	B&L 27th Edi.	ATLS

27	Conflict surgery	To understand and appreciate: • Fundamental differences of war surgery • Injury patterns of modern warfare • Principles of war surgical management • Blast and ballistic injury	1%	–	–	–	–	1%	1 1	1 1	2	1				1. war surgery 2. blast and ballistic injury	B&L 27th Edi.	1. clinical examination in musculoskeletal disease 2. assessment in mass casualities
	ELECTIVE ORTHOPAEDICS																B&L 27th Edi.	
28	History taking and clinical examination in musculoskeletal disease	To understand how to: • Take a comprehensive musculoskeletal history • Perform a structured and systematic musculoskeletalexamination • Use and interpret special tests • Use findings to understand the impact on a patient'spain and function	–	–	–	1%	–	1%	1 1	1 1	1	1				1. history of musculoskeletal disease 2. examination of MSD	B&L 27th Edi.	1. history 2. examination 3. imaging 4. treatment
29	Sports medicine and sports injuries	To understand the important issues behind a patient'ssporting injury in the context of taking a history • To know the common sports injuries • To know the appropriate ways of imaging to confirm orrefute a diagnosis • To assess the patient and offer treatment andrehabilitation plans	–	–	1%	–	–	1%	1 1	1	2	1				1. Sports medicine 2. sports injuries	B&L 27th Edi.	sprain management
30	The spine	To learn: • The salient features relating to the history andexamination of the spine • The investigations commonly used in the field of spinaldisorders • The treatment principles for common conditionsaffecting the spine • The global issues in spinal surgery	–	1%	–	–	–	1%	1 1	1						1. history & examination 2. diaganosis & treatment	B&L 27th Edi.	Examination of spine

31	Upper limb	To understand: • Anatomy and physiology relevant to upper limbpathology To be able to explain: • The diagnosis and treatment of common upper limb conditions	–	–	–	–	–		1 1	1 1						1. anatomy of Upper limb 2. diseases	B&L 27th Edi.	1. Examination of shoulder joint 2. knee joint examination
32	Hip and knee	To understand: • The anatomy and biomechanics of the hip and knee andtheir clinical implications • The clinical presentation, aetiology and management ofcommon hip and knee pathologies • The principles of joint replacement including importantcomplications • The advances in surgical practice in this field	–	1%	–	–	–	1%	1 1 1 1	1	2	1				1.anatomy Hip 2.anatomy knee 3. diseases 4. diaganosis & treatment	B&L 27th Edi.	examination of hip & knee joints
33	Foot and ankle	To understand: • The basic anatomy and biomechanics of the foot andankle • The common problems affecting the foot and ankle ineach age group • The principles behind the treatment of each condition,be it conservative or surgical • The significance of progressive neurological diseases	–	–	1%	–	–	1%	1 1 1 1	1	2	1				1. anatomy Foot 2. anatomy ankle 3. diseases 4. diaganosis & treatment	B&L 27th Edi.	examination of ankle & foot
34	Musculoskeletal tumours	Learning objectives • List the symptoms and signs associated with amusculoskeletal tumour • Understand why a patient with a suspectedmusculoskeletal tumour should be referredto a specialist centre for staging, biopsy andmultidisciplinary management • Understand why staging should be completed beforebiopsy • Explain why a diagnosis is required before treatment • Understand the principles of biopsy • Describe the principles of surgical	–	1%	–	–	–	1%	1 1	1	1	1				1. types of musculoskeletal tumours 2. management	B&L 27th Edi.	ward round for MS tumours

35	Infection of the bones and joints	To understand: • Characteristic features in the history and examination ofinfection of bone and joint • Diagnostic principles in bone and joint infection • Treatment of infection of native bone and joint • Treatment of implant-associated orthopaedic infection	–	–	1%	–	–	1%	1 1	1	2	1		1		1. Infection of the bones 2. infections of joints	B&L 27th Edi.	Orthopadic imaging
	SKIN AND SUBCUTANEOUS TISSUE										2	1					B&L 27th Edi.	
37	Skin and subcutaneous tissue	To understand: • The structure and functional properties of skin • The classification of vascular skin lesions • The cutaneous manifestations of generalised disease asrelated to surgery • The management of malignant skin tumourss The classification of benign skin	1%	–	–	–	–	1%	1 1	1 1 1 1	2	1				1. Skin subcutaneous tissue anatomy 2. diseases	B&L 27th Edi.	1. swelling .2. ulcer 3. excision biopsy 4. knoting techniqes 5. sutures 5. suturing techniqes
38	Burns	To assess: • The area and depth of burns To understand: • Methods for calculating the rate and quantity of fluids tobe given • Techniques for treating burns and the patient • The pathophysiology of electrical and chemical burns	–	–	1%	–	–	1%	1 1	1 1	2	1				1. pathophysiology of burns 2. management	B&L 27th Edi.	1. Surgical dressings 2. venous cut down
39	Plastic and reconstructive surgery	To understand: • The spectrum of plastic surgical techniques used torestore bodily form and function • The relevant anatomy and physiology of tissues used inreconstruction • The various skin grafts and how to use themappropriately • The principles and use of flaps • How to use plastic surgery to manage	–	1%	–	–	–	1%	1 1	1 1	2	1				1. techniqes in plastic surgery 2. grafts & flaps	B&L 27th Edi.	1. STSG method 2. flpas for pilonidal sinus
	HEAD AND NECK																B&L 27th Edi.	
41	Cleft lip and palate: developmental abnormalities of the face, mouth and jaws	To understand: • The aetiology and classification of developmental abnormalities of the face, mouth and jaws • Perinatal and early childhood management • The principles of reconstruction of cleft lip and palate • The key features of perioperative care • The management of complications associated with cleft lip and palate	–	–	1%	–	–	1%	1 1	1	2	1		1		1. cleft lip 2. cleft palate	B&L 27th Edi.	examination of oral cavity

43	Oral cavity malignancy	To understand: • The relationship between oral (pre)malignancy and theuse of alcohol and tobacco • The cardinal features of premalignant and malignantlesions of the oral cavity • The investigation and treatment of these patients	–	–	1%	–	–	1%	1 1 1	1 1	1	1				1. anatomy 2. types of malignancy 3 diagnaosis & treatment	B&L 27th Edi.	1. examination of oral cavity 2. imaging in oral tumours 3. upper GI endoscopy
	BREAST AND ENDOCRINE										2	1					B&L 27th Edi.	
45	The thyroid gland	To understand the development and anatomy of the thyroid gland • To know the physiology and investigation of thyroidfunction • To know when to operate on a thyroid swelling • To describe thyroidectomy • To know the risks and complications of thyroid surgery	1%		1%	–	1%	3%	1 1 1 1	1 1 1 1	1	1				1. anatomy 2. physiology 3.. diseases 4. treatment	B&L 27th Edi.	1. history 2. examination of thyroid 3, long case of thyroid 4. ward round 5. investigations
48	The breast	To understand: • Appropriate investigation of breast disease • Breast anomalies and the complexity of benign breast disease • The modern management of breast cancer	–	1%	1%	–	1%	3%	1 1 1 1	1 1 1 1	1	1				1. anatomy & physiology 2. breast workup 3. treatment 4. ca breast	B&L 27th Edi.	1. Breast history 2. examination 3. mamamogram 4. trucut biopsy 5. MRM
	CARDIOTHORACIC SURGERY										2	1					B&L 27th Edi.	
50	The thorax Cardiac Surgery	To understand: • The anatomy and physiology of the thorax • Investigation of chest pathology • The role of surgery in pleural disease • The assessment of patients requiring lung surgery • Surgical oncology as applied to chest surgery	–	1%	1%	–	–	2%	1 1 1 1	1 1	2	1				1. anatomy and physiology of thorax 2.anatomy and physiology of heart 3. cardiac surgery 4. CABG	B&L 27th Edi.	1. examination of chest 2. cvs examination 3. Blood pressure
	VASCULAR SURGERY																B&L 27th Edi.	

51	Arterial disorders	To understand: • The nature and associated features of occlusivep eripheral arterial disease • The investigation and treatment options for occlusiveper ipheral arterial disease• The principles of management of the severely ischaemiclimb • The nature and presentation of peripheral aneurysmal disease, particularly of the abdominal aorta • The investigation and treatment options for peripheral aneurysmal disease • The arteritides and vasospastic disorders	–	1%	1%	–	–	2%	1 1 1 1	1 1 1 1	2	1				1. occlusive peripheral arterial diseases 2.investigation and treatment 3.principles of management of arterial disorders 4. aneurysms	B&L 27th Edi.	1. Examination of ischemic limb 2. BKA 3. AKA
52	Venous disorders	To understand: • Venous anatomy and the physiology of venousreturn • The pathophysiology of venous hypertension • The clinical significance and management of superficialvenous reflux • The management of venous ulceration • Venous tromboembolism	–	–	1%	–	–	1%	1 1 1 1	1 1 1 1	2	1				1. Venous anatomy and the physiolog2.enous hypertension 3 .varicose veins 4. DVT	B&L 27th Edi.	1. history 7 examination of varicose veins 2. flush ligation & stripping 3. DVT 4. CBD of varicose
53	Lymphatic disorders	To understand: • The main functions of the lymphatic system • The development of the lymphatic system • The various causes of limb swelling • The aetiology, clinical features, investigations and treatment of lymphoedema	–	–	1%	–	–	1%	1 1	1	1	1				1. Lymphatic anatomy & physiology 2. lymphedema	B&L 27th Edi.	Examination of lymphoedema
	GASTRINTESS TINAL TRACT										2	1					B&L 27th Edi.	
54	History and examination of the abdomen	To understand: • The pathway for clinical diagnosis of a patientpresenting with an abdominal complaint • The importance of recognising the organ or systemresponsible for the clinical features • The pathophysiological basis of common abdominalsymptoms and signs To identify:	–	–	–	–	1%	1%	1 1	1 1 1 1	2	1				1. History of the abdomen 2.. examination of the abdomen	B&L 27th Edi.	1. history 2.examination 3. ward round 4. CBD. 5. hepatomegaly 6 splenomegaly
55	Abdominal wall, hernia and umbilicus	To know and understand: • Basic anatomy of the abdominal wall and its weaknesses • Causes of abdominal hernia • Types of hernia and classifications • Clinical history and examination findings in hernia • Complications of abdominal hernia • Non-surgical and surgical management of hernia –including mesh • Complications of hernia surgery • Other abdominal wall conditions	1%	–	1%	–	–	2%	1 1 1	1 1 1 1	1	1				1. abdominal wall 2. hernia3. umbilicus	B&L 27th Edi.	1. history of abdominal diseases 2. examination of the abdomen 3. acute appendicitis 4. ward round 5. CBD

57	The oesophagus	To understand: • The anatomy and physiology of the oesophagus andtheir relationship to disease • The clinical features, investigations and treatment of benign and malignant disease with particular reference to the common adult disorders	–	1%	1%	–	–	2%	1 1	1 1	2	1				1. anatomy, physiology & benign esophageal disorders 2.ca oesophagus	B&L 27th Edi.	1. ward round 2. CBD 3. barium fradiographs
58	Stomach and duodenum	To understand the gross and microscopic anatomy and pathophysiology of the stomach in relation to disease • To be able to decide on the most appropriatetechniques to use in the investigation of patients withcomplaints relating to the stomach and duodenum • To understand the critical importance of gastritis andHelicobacter pylori in upper gastrointestinal disease • To be able to investigate and treat peptic ulcer diseaseand its complications • To be able to recognise the	–	–	1%	–	–	1%	1 1 1 1	1 1	2	1				1. benign stomach diseases 2 ca stomach 3. . Benign duodenal diseases 4. ca duodenum.	B&L 27th Edi.	1. types of internal hernias 2. succussion splash
60	The liver	To understand: • The anatomy of the liver • The signs of acute and conic liver disease • The investigation of liver disease • The management of liver trauma • The management of liver infections • The management of colorectal liver metastases • The management of hepatocellular carcinoma	–	–	1%	–	–	1%	1 1	1 1	1	1				1. benign liverdisorders 2. HCC	B&L 27th Edi.	1. LFTs interpretition 2. CLD & surgery
61	The spleen	To understand: • The function of the spleen • The common pathologies involving the spleen • The principles and potential complications ofsplenectomy • The potential advantages of laparoscopic splenectomy • The benefits of splenic conservation • The importance of prophylaxis against infection following splenectomy	–	1%	–	–	–	1%	1 1	1	2	1				1. spleenic disorders 2. splenectomy	B&L 27th Edi.	examination of spleen & splenomegaly

62	The gallbladder and bile ducts	To understand the anatomy and physiology of the gallbladder and bile ducts • To be familiar with the pathophysiology and management of gallstones • To be aware of unusual disorders of the biliary tree • To be aware of malignant disease of the gallbladder and bile ducts	1%	–	1%	–	–	2%	1 1 1	1 1 1	2	1				1. gallbladder diseases 2. bile ducts disorders 3. ERCP/MRCP	B&L 27th Edi.	1. ward round 2. CBD 3. ERCP /MRCP radiographs
63	The pancreas	To understand: • The anatomy and physiology of the pancreas • Investigations of the pancreas • Congenital abnormalities of the pancreas • Assessment and management of pancreatitis • Diagnosis and treatment of pancreatic cancer	–	–	1%	–	–	1%	1 1 1 1	1 1	1	1				1. acute pancreatitis 2. chronic pancreatitis 3. ca pancreas 4. congenital anaomalies	B&L 27th Edi.	1. obstructive jaundice 2. ward round
64	The small intestine	To appreciate: • The basic anatomy and physiology of the small intestine • The range of conditions that may affect the small intestine To understand: • The aetiology and pathology of common small intestinalconditions • The principles of investigation of small intestinalsymptoms • The importance of non-surgical	–	1%	–	–	–	1%	1 1 1 1	1 1	2	1		1		1. duodenum 2. jejunum 3. ilium	B&L 27th Edi.	1. small bowel obstruction 2. laparotomy
65	The large intestine	To appreciate: • The basic anatomy and physiology of the large intestine • The range of conditions that may affect the largeintestine To understand: • The aetiology and pathology of common large intestinalconditions • The principles of investigation of large intestinalsymptoms • The importance of non-surgical	–	–	1%	–	–	1%	1 1 1	1 1	2	1				1.anatomy and physiolog 2.range of conditions of colon 3. ca colon	B&L 27th Edi.	1. large bowel obstruction 2. colonic surgery types

66	Intestinal obstruction	To understand: • The pathophysiology of dynamic and adynamicintestinal obstruction • The cardinal features on history and examination • The causes of small and large bowel obstruction • The indications for surgery and other treatment options in bowel obstruction	–	1%	1%	–	2%	4%	1 1 1 1	1 1	1	1				1. small ntestinal obstruction 2. large bowel obstruction 3. dynamic obstruction 4. adynamic obstruction	B&L 27th Edi.	1. bowel obstruction radiographs 2. CBD
67	The vermiform appendix	To understand: • The aetiology and surgical anatomy of acuteappendicitis • The clinical signs and differential diagnoses ofappendicitis • The investigation of suspected appendicitis • Evolving concepts in management of acute appendicitis	1%		1%		2%	4%	1 1	1 1	2	1				1. anatomy appendix 2. acute appendicitis	B&L 27th Edi.	1. examination of appendicitis 2. appendectomy 3. lap appendectomy 4. ca appendix
68	The rectum	To understand: • The anatomy of the rectum and its relationship tosurgical disease and its treatment • The pathology, clinical presentation, investigation,differential diagnosis and treatment of diseases thataffect the rectum To appreciate: • That carcinoma of the rectum is common and canpresent with symptoms	1%	–	1%	–	–	2%	1 1 1 1	1 1	2	1				1. anatomy rectum 2. rectal imaging 3. benign rectal conditions 4. ca rectum	B&L 27th Edi.	1. DRE 2. sigmoidoscopy & punch biopsy
69	The anus and anal canal	To understand • The anatomy of the anus and anal canal and theirrelationship to surgical disease and its treatment • The pathology, clinical presentation, investigation,differential diagnosis and treatment of diseases thataffect the anus and anal canal • That anal disease is common and its treatment tends tobe conservative, although surgery may be required • That any damage to the anus, including too aggressiveor inappropriate surgery,	–	1%	1%	–	–	2%	1 1 1 1	1 1	2	1				1. anatomy anus and anal canal 2. common anal disorders 3.	B&L 27th Edi.	DRE and Proctoscopy

	URINARY SYSTEM																B&L 27th Edi.	
70	Urinary symptoms and investigations	To understand the significance of pain relating to urinary tract pathology • To understand the difference between renal pain andureteric colic • To understand the definitions of common lower urinarytract symptoms • To be able to select the appropriate diagnostic tests to establish a diagnosis of urinary tract disease	–	1%	–	–	–	1%	1 1 1	1 1	2	1		1		1. Urinary symptoms 2 urinary investigations 3. hematuria.	B&L 27th Edi.	1. folleys catherization 2. radiographs
71	Kidneys and ureters	To recognise and understand: • Important congenital abnormalities of the upper urinarytract • Important cystic diseases of the kidney • The management of sepsis in the upper urinary tract • The pathophysiology of renal stone formation • The management of urinary tract calculi • The aetiology, presentation and surgical managementof obstruction to the upper urinary tract	–	1%	–	–	–	1%	1 1 1	1 1	2	1				1. Kidneys 2. ureters 3. operations	B&L 27th Edi.	1. Examination of kidneys 2. Examination of genitilia 3. TURP
72	The urinary bladder	To understand: • The anatomy, vascular supply and innervation of thebladder in relation to function and disease • The principles of management of bladder trauma,incontinence and fistulae • The common causes of acute and conic urinaryretention and management • The different types of bladder cancer and the principles of management	–	–	2%	–	–	2%	1 1 1	1	2	1				1.urinary bladder anatomy 2. BOO 3. ca bladder	B&L 27th Edi.	1Examination of iabdomen

71	Kidneys and ureters	To recognise and understand: • Important congenital abnormalities of the upper urinarytract • Important cystic diseases of the kidney • The management of sepsis in the upper urinary tract • The pathophysiology of renal stone formation • The management of urinary tract calculi • The aetiology, presentation and surgical managementof obstruction to the upper urinary tract	–	1%	–	–	–	1%	1 1 1	1 1	2	1				1. Kidneys 2. ureters 3. operations	B&L 27th Edi.	1. Examination of kidneys 2. Examination of genitilia 3. TURP
72	The urinary bladder	To understand: • The anatomy, vascular supply and innervation of thebladder in relation to function and disease • The principles of management of bladder trauma,incontinence and fistulae • The common causes of acute and conic urinaryretention and management • The different types of bladder cancer and the principles of management	–	–	2%	–	–	2%	1 1 1	1	2	1				1.urinary bladder anatomy 2. BOO 3. ca bladder	B&L 27th Edi.	1Examination of iabdomen
72	Urethra and penis	To recognise and understand: • The common congenital abnormalities of the ureta • The diagnosis and management of uretal trauma • The diagnosis and management of uretal stricture • The diagnosis and management of phimosis • The principles of management of a man with erectiledysfunction • The common diseases of the penis and	–	–	–	1%	–	1%	1 1 1	1	2					1. Urethral disorders 2. penile diseas 3. phimosis & paraphimosis	B&L 27th Edi.	1. Urinary cathetrization 2. visual lithotomy
73	Testis and scrotum	• To recognise testicular maldescent and to appreciatethe reasons for intervention • To recognise and manage testicular torsion • To be able to recognise and understand themanagement of the common scrotal swellings(varicocoele, hydrocoele and epididymal cysts) • To recognise and understand the management oftesticular tumours • To understand the treatment options for infertile men	–	–	1%	–	–	1%	1 1 1	1 1	2	1				1. anatomy 2. Testicular disorders 3. scrotal diseases	B&L 27th Edi.	1. Examination of inguinoscrotal swelllings 2. ward round 3. CBD
Total			13%	30%	45%	3%	9%	100%	180	144	120	60		12	516			

Assessment Schedule

Avicenna Medical College
5thYear MBBS (M-19)
1st Term Test Schedule

Week	Date	Day	Subject	Test	Topic	Reference
1st	1-Apr-24	Mon	All Subjects	Lecture	Lecture Time Divided Paeds / Gynae	
Eid- Ul- Fitr Holidays:7th April-14th April,2024						
2nd	15-Apr-24	Mon	All Subjects	Lecture	Lecture Time Divided Surgery / Medicine	
	19-Apr-24	Fri	Early Ward Test			
3rd	22-Apr-24	Mon	Surgery unit-1	Grand Test	Skin & subcutaneous tissue. (Paples 2) Liver (Benign), Acute limb ischemia, chronic limb ischemia	(Paper-2) Bailey & love 28 Ed. Ch # 45, 61,69
4th	29-Apr-24	Mon	Medicine-I	Grand Test	Pulmonolgy	Davidson 24th Edi
	3-May-24	Fri	Mid Ward Test			

5th	6-May-24	Mon	OBS	Grand Test	Hist&Exam , Ante.Care , Normal fetal growth & Develop , Fetal well being ,Prenatal Dx , Obstet Complica, Physio pf Pregnanacy	Chap 1-6 (Ten Teachers OBS 20th Edi), Ch :3 (Ten Terachers OBS 19th Edi)
6th	13-May-24	Mon	Grand Ward Test-1			
7th	20-May-24	Mon	Paeds	Grand Test	Growth, development, Nutrition, IMNCI, infectious diseases, hematological diseases	Pervaiz Akbar
	24-May-24	Fri	Early Ward Test			
8th	27-May-24	Mon	Medicine-II	Grand Test	Cardiology	Davidson 24th Edi
9th	3-Jun-24	Mon	Surgery unit-2 (Paper-1)	Grand Test	Metabolic response to injury (Paper 1)Surgical infections,Wound healing & tissue repair shock and blood transfusion, hemostasis, Tropical lifections conflict surgay Chest trauma, conflict Disaster surgery, Peri-operative Care	Bailey & love 28th Ed. Ch#1,2,3,5,6,33,34, 24, 29.
	7-Jun-24	Fri	Mid Ward Test			
10th	10-Jun-24	Mon	Gynae	Grand Test	The develop & Anat. Gyane Hist & Exam , Hormo cont, Dis of menst bleeding , Implant . & early preg ., contrcep & Abortion	Ch 1-6 , Ten Teachers Gynae 20th Edition
10th	12-Jun-24	Wed	Grand Ward Test-2			
Eid- Ul- Adha+Summer Vacations:15th June,2024 - 21st July,2024						

11th	22-Jul-24	Mon	Surgery unit-1 (Paper-2)	Grand Test	Venous disorders, Lymphatic disorders, Thorax, Cardiac Surgery, Cleft lip & Palate, Plastic & reconstructive surgery, Liver-2, Cranial neurosurgery, Burns, Pharynx & larynx	Bailey & love 28 Ed. Ch# 61,62A, 60, 59,50,47,48,46,52
Early Session: 24th July,2024 - 7th Aug,2024						
11th	24-Jul-24	Wed	OBS	ESE	Hist&Exam , Ante.Care , Normal fetal growth & Develop , Fetal well being ,Prenatal Dx , Obstet	Chap 1-6 (Ten Teachers OBS 20th Edi), Ch :3 (Ten Terachers OBS 19th
11th	25-Jul-24	Thu	Day Off			
11th	26-Jul-24	Fri	Gynae	ESE	The develop & Anat. Gyane His	Ch 1-6 , Ten Teachers Gynae 20th Edition
11th	27-Jul-24	Sat	Day Off			
11th	28-Jul-24	Sun	Day Off			
11th	29-Jul-24	Mon	Medicine-I	ESE	Entire Syllabus Covered	
12th	30-Jul-24	Tue	Day Off			

12th	31-Jul-24	Wed	Medicine-II	ESE	Entire Syllabus Covered
12th	1-Aug-24	Thu	Day Off		
12th	2-Aug-24	Fri	Surgery unit-1	ESE	(Paper-2) Entire Syllabus Covered
12th	3-Aug-24	Sat	Day Off		
12th	4-Aug-24	Sun	Day Off		
12th	5-Aug-24	Mon	Surgery unit-2	ESE	(Paper-1) Entire Syllabus Covered
13th	6-Aug-24	Tue	Day Off		
13th	7-Aug-24	Wed	Paeds	ESE	Entire Syllabus Covered
End Of 1st Term					

Avicenna Medical College

5thYear MBBS (M-19)

2nd Term Test Schedule

Week	Date	Day	Subject	Test	Topic	Reference
14th	12-Aug-24	Mon	All Subjects	Lecture	Lecture Time Divided	
	16-Aug-24	Fri	Early Ward Test			
15th	19-Aug-24	Mon	OBS	Grand Test	Multiple Preg, PTL , HTN in preg , Medical Dis, Perinatal Infect.	CH : 7-11 TEN TEACHERS OBS 20TH EDITION
	23-Aug-24	Fri	Medicine-I	Grand Test	Central nervous system,Infectious diseases	Davidson 24th Edi
16th	26-Aug-24	Mon	Surgery unit-2	Grand Test	Spine trauma, Traumatic Brain injury 1,Pediatric surgery Laparoscopic surgery, Principle of Oncology. Dignostic Imaging in Surgery, Gastrointestinal endoscopy, Nutrition and fluid therapy, Pre-operative assessment in high sick patient, Pain relief, Post operative care	(Paper-1) Bailey & love 28th Ed. Ch#30, 28. 17,12,8,9,25,21,23
	30-Aug-24	Fri	Mid Ward Test			

17th	2-Sep-24	Mon	Medicine-II	Grand Test	Gastroentrology, hepatology, haematology, oncology	Davidson 24th Edi
18th	10-Sep-24	Tue	Grand Ward Test-3			
19th	16-Sep-24	Mon	Gynae	Grand Test	Subfertility, Menopause, Genitourinary, Urogynae & POP, Gynae surgery & Therapeutics	Ch 7-10 ,17, Ten Teachers Gynae 20th Edition
20th	23-Sep-24	Mon	Paeds	Grand Test	GIT, CNS, CVS, Neonatology	Pervaiz Akbar
	27-Sep-24	Fri	Mid Ward Test			
21st	30-Sep-24	Mon	Surgery unit-1	Grand Test	Aneurysms, Abdominal wall & hernias, Umbilical diseases, Peritoneum & Omentum, Mesentery and Retroperitoneal space, Esophagus. Stomach, Duodenum, Thyroid Parathyroid gland, ilium, Bariatric surgery , Metabolic Surgery	(Paper-2) Bailey & love 28th Ed. Ch#55, 56, 64, 65, 66, 67, 68, 74.
	3-Oct-24	Thu	Grand Ward Test-4			

22nd	7-Oct-24	Mon	Medicine-I	Grand Test	Nephrology	Davidson 24th Edi
23rd	14-Oct-24	Mon	All Subjects	Lecture	Lecture Time Divided	
Mid Session: 16th Oct 2024 - 30th Oct,2024						
23rd	16-Oct-24	Wed	Medicine-I	MSE	All Syllabus Covered	
23rd	17-Oct-24	Thu	Day Off			
23rd	18-Oct-24	Fri	Medicine-II	MSE	All Syllabus Covered	
23rd	19-Oct-24	Sat	Day Off			
24th	20-Oct-24	Sun	Day Off			
24th	21-Oct-24	Mon	OBS	MSE	All Syllabus Covered	T. T OBS 20TH Edition CH : 1-11
24th	22-Oct-24	Tue	Day Off			
24th	23-Oct-24	Wed	Gynae	MSE	ALL Syllabus Covered	T.T GYNAE 20TH Edition CH : 1-10, 17
24th	24-Oct-24	Thu	Day Off			
24th	25-Oct-24	Fri	Surgery unit-1	MSE	(Paper-2) Entire Syllabus Covered	
24th	26-Oct-24	Sat	Day Off			
25th	27-Oct-24	Sun	Day Off			
25th	28-Oct-24	Mon	Surgery unit-2	MSE	(Paper-1) Entire Syllabus Covered	
25th	29-Oct-24	Tue	Day Off			
25th	30-Oct-24	Wed	Paeds	MSE	Entire Syllabus Covered	
End Of 2nd Term						

Avicenna Medical College
5thYear MBBS (M-19)

3rd Term Test Schedule

Week	Date	Day	Subject	Test	Topic	Reference
26th	4-Nov-24	Mon	All Subjects	Lecture	Lecture Time Divided	
	7-Nov-24	Thu	**Grand Ward Test-5**			
27th	11-Nov-24	Mon	Medicine-II	Grand Test	Endocrinology, Rheumatology, Metabolic diseases,Dermatology	Davidson 24th Edi
28th	18-Nov-24	Mon	Surgery unit-1 +Urology	Grand Test	Gallbladder and bile ducts, Jejunum, , Large intestine, vermiform appendix, Pancreas	(Paper-2) Bailey & love 28th Ed. Ch# 71, 72, 77,76 + Urology
28th	22-Nov-24	Fri	OBS	Grand Test	Normal & abn labor, Operti. Obstet, Obs Emerg , Puerpurium, Neonatology	CH 12-16 , OBS TEN TEACHERS 20TH Edition

29th	25-Nov-24	Mon	Paeds	Grand Test	Respiratory diseases, nephrology, endocrinology, genetics, surgery,	Pervaiz Akbar
	29-Nov-24	Fri	Mid Ward Test			
30th	2-Dec-24	Mon	Surgery unit-2+ Orthopaedics	Grand Test	Day case surgery, introduction to trauma, Early management & assessment of severe trauma, Traumatic brain injury-2, Neck trauma, Torso trauma, Tissue engineering & regeneration, tissue & molecular diagnosis, Abdominal trauma, Radiology in surgery	(Paper-1) Bailey & love 28th Ed. Ch. 22,26,27, 4, 11, 7 Orthopaedics
	6-Dec-24	Thu	Grand Ward Test-5			
31st	9-Dec-24	Mon	Gynae	Grand Test	Benign & Malignant Diseases of female Genital Tract	CH 11-16 , GYNAE TEN TEACHERS 20th Edition
	10-Dec-24	Tue	Day Off			
	11-Dec-24	Wed	Medicine- 1	Grand Test	Psychiatry	Davidson 24th Edi
	12-Dec-24	Thu	Day Off			
	13-Dec-24	Fri	Paeds	Grand Test	IMNCI, psychiatry, poisoning. metabolic diseases, rheumatology, acutely ill child, acid base balanace	Pervaiz Akbar

LSE/Send Up:16th Dec,24 - 30th Dec,24

32nd	16-Dec-24	Mon	Paeds	LSE/Send Up	Entire Syllabus Covered
	17-Dec-24	Tue	Day Off		
	18-Dec-24	Wed	OBS	LSE/Send Up	Entire Syllabus Covered
	19-Dec-24	Thu	Day Off		
	20-Dec-24	Fri	Gynae	LSE/Send Up	Entire Syllabus Covered
	21-Dec-24	Sat	Day Off		
33rd	22-Dec-24	Sun	Day Off		
	23-Dec-24	Mon	Surgery unit-1	LSE/Send Up	(Paper-2) Entire Syllabus Covered
	24-Dec-24	Tue	Day Off		
	25-Dec-24	Wed	Quaid-e-Azam Day/Christmas Holiday- 25th Dec,2024		
	26-Dec-24	Thu	Surgery unit-2	LSE/Send Up	(Paper-1) Entire Syllabus Covered
	27-Dec-24	Fri	Day Off		
	28-Dec-24	Sat	Medicine-I	LSE/Send Up	Entire Syllabus Covered

34th	29-Dec-24	Sun	Day Off		
	30-Dec-24	Mon	Medicine-II	LSE/Send Up	Entire Syllabus Covered
	31-Dec-24	Tue	Final Clinical Assessment		
	1-Jan-25	Wed	Final Clinical Assessment		
	2-Jan-25	Thu	Final Clinical Assessment		
	3-Jan-25	Fri	Final Clinical Assessment		
	4-Jan-25	Sat	Final Clinical Assessment		
35th	5-Jan-25	Sun	Day Off		
	6-Jan-25	Mon	Final Clinical Assessment		
End Of 3rd Term					

Clerkships

Avicenna Medical College

Final Year MBBS M-19

Ward Test Schedule

CLINICAL ROTATION DURATION	CLINICAL ROTATION - 1 1-April-24 to 11-May-24		GRAND WARD TEST-1	CLINICAL ROTATION -2 14-May-24 to 11-June-24		GRAND WARD TEST- 2	CLINICAL ROTATION - 3 22-July-24 to 7-Sep-24		GRAND WARD TEST-3	CLINICAL ROTATION - 4 10-Sep-24 to 12-Oct-24		GRAND WARD TEST-4	CLINICAL ROTATION - 5 15-Oct-24 to 7-Dec-24		GRAND WARD TEST-5	CLINICAL ROTATION - 6 10 Dec-24 to 18-Jan-25		GRAND WARD TEST-6
TEST DATE:	Early Ward Test	Mid Ward Test		Early Ward Test	Mid Ward Test		Early Ward Test	Mid Ward Test		Early Ward Test	Mid Ward Test		Early Ward Test	Mid Ward Test		Early Ward Test	Mid Ward Test	
	19-Apr-24	3-May-24	13 May, 2024	24-May-24	7-Jun-24	12 June, 2024	16-Aug-24	30-Aug-24	9 Sep, 2024	20-Sep-24	4-Oct-24	14 Oct 2024	15-Nov-24	29-Nov-24	9 Dec, 2024	20-Dec-24	10-Jan-25	20 Jan 2025
BATCH: A	M-I	M-I	GRAND WARD TEST MEDICINE -I	M-II	M-II	GRAND WARD TEST MEDICINE-II	OBG.GYNAE	OBG.GYNAE	GRAND WARD TEST OBG.GYNAE	S-I	S-I	GRAND WARD TEST SURGERY-I	S-II	S-II	GRAND WARD TEST SURGERY-II	PAEDS	PAEDS	GRAND WARD TEST PAEDS
BATCH: B	M-II	M-II	GRAND WARD TEST MEDICINE-II	OBG.GYNAE	OBG.GYNAE	GRAND WARD TEST OBG.GYNAE	S-I	S-I	GRAND WARD TEST SURGERY-I	S-II	S-II	GRAND WARD TEST SURGERY-II	PAEDS	PAEDS	GRAND WARD TEST PAEDS	M-I	M-I	GRAND WARD TEST MEDICINE -I
BATCH: C	OBG.GYNAE	OBG.GYNAE	GRAND WARD TEST OBG.GYNAE	S-I	S-I	GRAND WARD TEST SURGERY-I	S-II	S-II	GRAND WARD TEST SURGERY-II	PAEDS	PAEDS	GRAND WARD TEST PAEDS	M-I	M-I	GRAND WARD TEST MEDICINE -I	M-II	M-II	GRAND WARD TEST MEDICINE-II
BATCH: D	S-I	S-I	GRAND WARD TEST SURGERY-I	S-II	S-II	GRAND WARD TEST SURGERY-II	PAEDS	PAEDS	GRAND WARD TEST PAEDS	M-I	M-I	GRAND WARD TEST MEDICINE -I	M-II	M-II	GRAND WARD TEST MEDICINE-II	OBG.GYNAE	OBG.GYNAE	GRAND WARD TEST OBG.GYNAE
BATCH: E	S-II	S-II	GRAND WARD TEST SURGERY-II	PAEDS	PAEDS	GRAND WARD TEST PAEDS	M-I	M-I	GRAND WARD TEST MEDICINE -I	M-II	M-II	GRAND WARD TEST MEDICINE-II	OBG.GYNAE	OBG.GYNAE	GRAND WARD TEST OBG.GYNAE	S-I	S-I	GRAND WARD TEST SURGERY-I
BATCH: F	PAEDS	PAEDS	GRAND WARD TEST PAEDS	M-I	M-I	GRAND WARD TEST MEDICINE -I	M-II	M-II	GRAND WARD TEST MEDICINE-II	OBG.GYNAE	OBG.GYNAE	GRAND WARD TEST OBG.GYNAE	S-I	S-I	GRAND WARD TEST SURGERY-I	S-II	S-II	GRAND WARD TEST SURGERY-II

Prepared by DME **Principal Prof.Dr.Gulfreen Waheed**


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