Frontier Medical & Dental College Study Guide (Adapted from Bahria University Guide)

1st Year MBBS

FRONTIER MEDICAL & DENTAL COLLEGE,
FMDC ABBOTTABAD

FMDC STUDY GUIDE

The study guide serves as a useful handy resource, helping you to navigate your journey at FMDC.

The study guide is more than an academic guide.

It not only highlights what, as a student, you should aim to achieve as you work through the curriculum, but also provides essential information about various administrative protocols that you as students of Frontier Medical & Dental College are expected to follow.

Vision Statement of FMDC

To become an internationally recognized medical institution that contributes towards development of community health through excellence in medical education.

Mission Statement of FMDC

To attain highest standard in teaching, learning and research according to WFME and PMDC standards.

Program Learning Outcomes (PLOs)

The MBBS programs aims to produce medical graduates who are able to:

1.0 Knowledge

1.1 Explain the microscopic, macroscopic and gross structure of different organ systems in the human body, including musculoskeletal system with their clinical correlation.
1.2 Explain the normal functions of the human body at the molecular, cellular and organ level with their regulation.
1.3 Describe the basic biochemical reactions, synthesis and function of body enzymes and hormones, metabolism of carbohydrate, proteins and lipids with their clinical correlation and basics of human genetics.
1.4 Describe the general principles and concepts of diseases along with etiology, pathogenesis, gross and microscopic morphology of diseases in different organ systems.
1.5 Describe the pharmacokinetics and pharmacological properties of different drugs in common use for human diseases with their different actions, adverse effects and interactions.
1.6 Describe life cycle, mode of transmission and microbiological properties of pathogens affecting human body including bacteria, viruses and parasites, with emphasis on body defense mechanism with their immunological bases and autoimmune diseases.
1.7 Recognize basics of forensic medicine and toxicology along with their clinical applications.
1.8 Recognize clinical presentations, differential diagnosis, investigations and principles of treatment of common diseases affecting the pediatrics age group including congenital and developmental diseases.
1.9 Recognize clinical presentations, differential diagnosis, investigations and principles of treatment of common internal medicine, psychiatric and dermatological diseases including medical emergencies.
1.10 Recognize clinical presentations, differential diagnosis, investigations and principles of treatment of common surgical diseases including diseases of the eye and ear and their surgical emergencies.
1.11 Recognize clinical presentations, differential diagnosis, investigations and principles of treatment of common gynecological diseases and stages of normal and abnormal pregnancy and delivery with their

complications.
1.12 Recognize basics of biostatistics and methods of medical research.
1.13 Explain the principles of problem solving & management strategies.
1.14 Analyze symptoms and signs of different diseases with their impact in differential diagnosis.
1.15 Interpret the results of commonly used diagnostic procedures (laboratory and radiological).

2.0 Skills

2.1 Perform different laboratory experiments with proper handling of laboratory tools.
2.2 Construct a complete medical history in the outpatient, inpatient or emergency settings.
2.3 Perform and document a complete or focused physical and mental examination with eliciting different special physical signs essential for diagnosing different diseases.
2.4 Illustrate the principles and international guidelines for management of traumatic conditions with emphasis on the severely polytraumatized patients.
2.5 Perform basic clinical procedures under strict supervision as and accordingly listed.

3.0 Attitude

3.1 Show respect, empathy and responsibility with the patients and respect for their privacy and dignity.
3.2 Demonstrate communication with the patients and to provide knowledge to patients and their families about the possible therapies and risks in alternative treatment along with obtaining informed consent.
3.3 Demonstrate how to work with the colleagues in a team and to seek consultation from senior doctors.
3.4 Illustrate and present different case studies and give accurate and clear oral summary of the patient's illness.
3.5 Illustrate ethical behavior expected from the doctors towards patients with recognition of patients' rights, particularly as regards to confidentiality and informed consent, access to health care for the members of the underserved populations.
3.6 Demonstrate professional image in manner, dress, speech and interpersonal relationships that is consistent with the accepted contemporary medical profession standards.

7 Star Competencies

The graduate doctor must be a:

1. **Skillful** – Demonstrates proficiency in clinical and procedural skills, applying them safely and effectively in patient care.
2. **Knowledgeable** – Possesses comprehensive medical knowledge integrating basic, clinical, and applied sciences.
3. **Community Health Promoter** – Advocates for public health, engages in preventive care, and addresses community health challenges.
4. **Critical Thinker** – Analyzes clinical problems, applies evidence-based reasoning, and makes sound clinical decisions.
5. **Professional** – Upholds ethical standards, empathy, and integrity while respecting patients' rights and dignity.
6. **Scholar** – Engages in lifelong learning, research, and academic activities to advance medical practice.
7. **Leader and Role Model** – Demonstrates leadership in healthcare teams, mentors peers, and serves as an example for future professionals.

PMDC'S 7 STAR DOCTOR



POLICIES

This section summarizes some key aspects of policies in vogue at FMDC. The student is advised to read the detail in the latest edition of FMDC's Student Handbook.

Student's Code of Conduct

Every student shall observe the following code of conduct in the University premises, in the University administered hostels (on and off-campus) and places of other activities being held under the auspices of the University:

- Loyalty to Pakistan and refraining from doing anything which is repugnant to its honor and prestige in any way.
- Respect for convictions and traditions of others in matters of religion, conscience and customs while observing own religious duties/customs.
- Truthfulness and honesty in dealing with other people.
- Respect for elders and politeness to all, especially to women, children, elders, the weak and the helpless.
- Special respect for teachers and others in authority in the FMDC and BU.
- Cleanliness of body, mind, speech and habits.
- Helpfulness to fellow beings.
- Devotion to studies and prescribed co-curricular activities.
- Observance of thrift and protection of public property.
- Observance of the rules and regulations of FMDC in force from time to time.

Prohibited Acts & Misconduct/Ill-Discipline

The following acts shall be unacceptable, and their commission shall be construed as misconduct or ill-discipline:

- Breach of the Code of Conduct.
- Smoking in the areas prohibited by the college.
- Consumption or possession of alcoholic drinks or other intoxicating drugs within the college vicinity or while attending off-site instructions, sports, cultural tours or survey camps.
- Organizing or taking part in any function inside the campus, or organizing any club or society of students, except were permitted and in accordance with the prescribed rules and regulations.
- Collecting donations or receiving funds or pecuniary assistance for or on behalf of the college except with the written permission of the Head of the College or any other person authorized in this behalf.
- Staging, inciting or participating in or abetting any walk-out, strike or other form of agitation against FMDC or students, teachers, officers or authorities; inciting others to violence; disruption of the peaceful atmosphere in any way; making inflammatory speeches or gestures which may cause resentment; issuing of pamphlets or cartoons which cast aspersions on the students, teachers, staff or college authorities/bodies; doing anything in a way likely to promote rift and hatred amongst the students; issuing statements in the press; making false accusations against or lowering the prestige of BU or its students, teachers, administrators, staff or bodies.
- Disobeys the lawful orders of a teacher or other person in authority.
- Habitually neglects work or absents from the classroom without valid reason.
- Willfully damages public property or the property of fellow students or any teacher or employees of FMDC.

- Does not pay the fees, fines, or other dues payable under the laid down rules and regulations; uses indecent language; wears immodest dress; makes indecent remarks; gestures; behaves in a disorderly manner; commits any criminal, immoral or dishonorable act (whether committed within the FMDC or outside) or any act which is prejudicial to the interests of FMDC; and/or
- Commits an act of sexual harassment, as defined in the HEC's document 'Policy Guideline against Sexual Harassment in Institutions of Higher Learning'.

Action against Misconduct

Every member of the faculty shall have the power to check any disorder or improper conduct, or any breach of the rules, by students in any part of the campus or outside when the visit is sponsored or organized by it. Misconduct in a classroom when a student is under the charge of a teacher shall not be allowed and a punitive action such as a fine, removal from the classroom or a punishment of greater magnitude may be imposed as decided by the authority so empowered. The Student Advisor, the Admin Officer or any other employee authorized by the college shall be responsible for the maintenance of good behavior and law and order amongst the students on the premises of the college.

Penalties:

A student guilty of an act of indiscipline shall be liable to the penalties specified below or promulgated through written orders/notifications:

Penalty Code	Penalty	Awarding Authority	Appellate Authority
1	Removal from classroom, laboratory, or field work, for a maximum period of two contact hours	Teacher In-Charge	HOD
2	Expulsion from games or field work for not more than one week	Games/ Field Work In-Charge	Head of FMDC
3	Expulsion from educational visits and sports tours	Director Admin	Head of FMDC
4	Suspension from classes for a period not exceeding two weeks	Director/ Principal	Head of FMDC
5	Monetary penalties	Director/ Principal	Head of the FMDC
6	Removal from a position of authority on the advice of the Student Advisor / HOD	Director/ Principal	Head of the FMDC
7	Expulsion from the hostel	Head of FMDC	Next Higher Authority
8	Cancellation of remission of fees/assistantship/scholarship etc.	Head of FMDC	Next Higher Authority
9	Rustication for one or more semester	Head of FMDC with concurrence of BUHO	Rector
10	Expulsion from FMDC	Head of FMDC with concurrence of BUHO	Rector

Procedure In case of breach of discipline:

A teacher, a staff member in whose presence or in relation to whom an act of indiscipline has been committed or who gets to know of such act, may deal with the case him/herself, or if in his/her view the case is one which can be more appropriately dealt by another authority or which warrants a penalty of greater magnitude than they are competent to impose, shall refer the case to the Student Advisor or Deputy Director (Admin & Coord) or the higher authority as the case maybe.

All cases of serious breach of discipline shall be referred to the Disciplinary Committee for investigation which, after due process of investigation, will either impose the penalties if within its powers or recommend them to the Campus Head/Rector, as the case may be.

When a case against a student is referred to the Disciplinary Committee, it may, if it deems fit, suspend the student from the classes till the finalization of the case, with the approval of the Head of FMDC.

Appeals

An appeal against the penalty may be filed by the student with the Appellate Authority within 30 days of announcement of the punishment. No appeal by a student shall be entertained unless it is presented within 30 days from the date of communication of the decision, provided that the Rector may, for valid reasons, extend this period.

No appeal shall lie against the decision of an authority imposing a penalty other than rustication or expulsion except on the grounds that such authority imposed a penalty which it was not competent to impose.

An appeal on the grounds that an authority imposed a penalty which it was not competent to impose, shall lie with the body or person of higher authority than the one who imposed the 44 penalty.

Compensation for loss

The Head FMDC, or any teacher or officer to whom he may delegate the powers, may instruct a student to pay compensation for any loss or damage to property belonging to FMDC, public authority, a fellow student or an employee of FMDC, caused by a willful act or gross negligence of the student. If the student does not pay such compensation within a specified period, the Head of FMDC will proceed against the student in the manner as prescribed in these rules.

Offences during examination

Cases of indiscipline in or around the Examination Hall, and use of unfair means, shall be dealt with by the Examination Committee.

Dress code:

Male students:

1. Dress/Casual Trousers
2. Jeans (Plain blue) without an image, graphics, and write ups
3. Casual Shirts (Half/ Full sleeves)
4. T Shirts without any messages, images, graphics, and write ups
5. Dress/Casual shoes or Joggers with socks (no sandals)
6. Shalwar Kameez with shoes (only on Friday)
7. Suit/ Combination
8. Coat/ Pullovers/ Sweaters/ Jackets in winter

Female students:

1. Shalwar Qameez (no sleeveless)
2. Hijab, Abaya, Chaddar etc.
3. Full length Trousers (no tights) with long shirt/ kurta (knee length)
4. Light jewelry and light makeup
5. Shoes, Sandals and Joggers
6. Dupatta/ Scarf is compulsory with all dresses

NOTE: All FMDC students are expected to wear white coat during classes, laboratory and hospital rotations, as well as outside the campus, when on official visit.

Student card

Students shall be issued ID Cards. The students shall be required to wear their ID Cards in the campus and show them to the authorized persons on demand.

Loss of ID card

In case ID card is lost, it should be immediately reported to Admin Office who will make arrangements for re-issue of a new card by FMDC after payment of fine.

Personal behavior

FMDC expects that all students should sustain professional manner when interacting with colleagues and others. The University recognizes that personalities, characters, and management styles may differ but, notwithstanding these differences, as a minimum standard, all are expected to:

- Work co-operatively with each other to achieve objectives and establish good working relationships.
- All should behave and speak professionally, respectfully, and courteously at all times.
- Tidiness and cleanliness must be always adhered to within the Campus premises which will help us maintain a safe, clean, and professional learning environment.
- Use the college's property, facilities, supplies, and other resources in the most effective and efficient manner.
- Unacceptable behavior such as aggressive or abusive behavior, shouting or personal insults or spreading rumors or gossip, or insulting someone is to be avoided at all costs. All these matters, if experienced, should be reported to the vice principal or your mentor or a senior faculty member.

Punctuality:

Students are expected to arrive in class well in time. All cell phones, smartphones, and other electronic devices must be turned off and hidden from view during class time. Talking and other disruptive behaviors are not permitted while classes are in session. If the students miss a class, they are themselves responsible for the missed part of the course. It is the student's responsibility to contact a classmate or teacher to determine and cover what was missed.

At FMDC classes start immediately after holidays. There is no lag period after leave. There will be no relaxation for students who are absent. **Please inform your parents of this and make your travel arrangements accordingly**. Avoid taking leave for personal reasons like weddings during the academic year.

Conduct in library

The College campus has a well-stocked library, and time spent by the students there will meet your research requirements in a calm place. The libraries also provide electronic access through the internet to databases throughout the world.

Library also provides plagiarism detection services

While using the library, Mobile Phones/ iPods/ laptops should be kept on silent mode. Sleeping, listening/ watching drama and music etc.while staying at library is prohibited.

Rules for borrowing books

1. Students are permitted to borrow 3 books at a time for a maximum period of 14 days. Books borrowed may be re-issued on completion of the time period.
2. A valid college card is must for borrowing the Book(s) and other material
3. Textbooks will be issued for 7 working days only but may be reissued the next day of the due date
4. For the Book(s) returned after the due date, a fine of Rs.10/- per day would be charged.
5. Book Bank books will be issued for a period of whole/ one semester.
6. Writing, underling or marking any book is strictly prohibited. Library books are carefully examined on return and the borrower will be held responsible for any damage
7. Following library material will not be issued and must be consulted in the library:
    a. Reference Material.
    b. Thesis/ Project Reports.
    c. Audio/ Video cassettes/ CDs/ DVD's.
    d. Magazines and periodicals.
    e. Newspapers.

Library Timings

DAY	TIMINGS
WEEKDAYS: MON- SAT	8:30 AM to 8:30 PM
WEEKENDS	9:00 AM to 8:30 PM

Conduct in the hospital

When you are working in the hospital be quiet, avoid rowdiness and unnecessary laughter and chatter. Remember the patients need peace, quiet and their rest. You must always wear a white coat. Ladies will wear their dupattas inside the white coat and the gentlemen's ties must be tucked inside the shirt so that infection is not carried from one area to the next. Shoe covers, sterile aprons, caps and gowns must be worn where appropriate. Be polite to the patients, greet them appropriately and inquire after their health and wish them well. All nursing staff must be addressed appropriately and politely. Don't hang around once your work is done. Do not eat or drink inside the wards and treatment areas. Avoid making phone calls and put your phones on the silent mode.

Conduct in cafeteria and common rooms

Campus has a cafeteria with a variety of food items and snacks available at reasonable rates Students are expected to show care, courtesy towards the cafeteria staff as well as to others. Place garbage and recyclables in the appropriate containers.

This behavior will maintain a clean and enjoyable environment for all.

Academic misconduct and disciplinary committee

The Discipline Committee is responsible for maintaining discipline (both academic as well as conduct), and deals with all cases of indiscipline on the part of students.
It recommends award of penalties/ punishments and renders advice to the Director on administrative matters needed to maintain a peaceful environment on the campus. Intimation will be sent to BUHO for all penalties awarded to a student

Members of the committee

Chairperson	Prof.Dr.Munir Tahir, FMDC
Secretary	Mr. Arif Zaman Student section
Members	• Prof. Dr. Johar Ali Principal FMDC • Prof. Dr. Saif ur Rehman, Physiology Dept FMDC • Assistant Prof.Dr.Saadia Community Medicine, FMDC • Mr.Y.M.Khokhar Exam Dept FMDC
Co-opted member	Varies according to the case

Students are to avoid the following:

a) Unauthorized use of the college & University's name or logo which is property of university.
b) Harassment, sexual or otherwise, or intimidation of any member of university.
c) Coming late for classes. The student may be considered absent and marked accordingly.
d) Improper/inappropriate dress
e) Loud and aggressive behavior in Cafeteria or Common rooms or within the premises of FMDC or the affiliated hospitals.
f) Non clearance of bills/dues. Non-clearance of dues may prevent student from appearing in the professional examination. The student may also be refused permission to attend classes.

Use of mobile phone

a) Use of mobile phone for photography at cafeteria is restricted.
b) Library is 'NO Mobile Zone' area.
c) Use of mobile in class room is prohibited.
d) Students are not allowed to use mobile phone for photography/ video capturing during farewell parties.
e) Making videos, images, Vlogs etc. are monitored through CCTV cameras installed inside and outside building.

Smoking

Student guilty of an act of smoking in the premises of Bahria University/ Constituent Unit or while entering/ attending offsite instructions like sports, cultural tours or survey campus shall be liable to the penalties asunder:

Occasion	Penalties
1st occasion of offence on act of Smoking.	Fine of Rs.5000/- along with warning letter with copy to parents from Director Campus
2nd or onward occasion of offense(s).	Fine of Rs.10,000/- along with warning letter (s) With copy to parents from DG Campus on each offence.

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Student guilty of an act of possession/ consumption/ usage/ supplying of intoxication drugs/ Alcoholic drinks in premises of FMDC and or entering FMDC or events of FMDC being intoxicated

and or during official/ informal off-site events of the college, shall be liable to expulsion from FMDC.

Criminal conviction

a) Applicants are required to inform FMDC of any criminal conviction. Full details are to be provided.
b) The college reserves the right to refuse admission to any applicant with a criminal conviction that may jeopardize the reputation of the University.
c) Failure to declare any criminal conviction by a student already enrolled in FMDC shall result in immediate cancellation of his/her admission.
d) Where admission to the program is denied on the basis of the criminal conviction, the applicant will be notified of the decision in writing by FMDC.

Academic misconduct

Following acts shall constitute academic misconduct:

a) Cheating.
b) Fabrication.
c) Misuse
d) Forgery.
e) Plagiarism.
f) Facilitating academic misconduct.
g) Academic Dishonesty.

The student is advised to refer to their Student Handbook to become fully cognizant of these terms.

Penalties for academic misconduct

TYPE OF MISCONDUCT	PENALTY
Attempt (Successful/ unsuccessful) to know contents of question papers through unfair means prior to examination	***Minor punishment*** a Warning letter (Copy to parents) b. Fine of Rs.2,000. ***Major punishment*** a. Expulsion from the University b. Fine Rs. 5000/00. c. Letter to parents
Possession of written material, relevant to the subject/paper concerned. • Writing on palm, arm or anywhere on the candidate's body or clothes whether the written material is relevant or irrelevant to the concerned paper. • Possession of Mobile phones, Smartwatches, PDAs and other electronics devices, whether or not carrying any relevant or irrelevant material in the memory.	a. Grade 'F' in the subject. b. Fine Rs 5,000. c. Warning, copy to parents. d. Mobile phones/electronic devices to be confiscated. (will be returned after investigation
Giving/receiving assistance or allowing any other candidate to copy from his/her answer books.	***Minor Punishment*** a. Cancellation of the relevant paper. b. Fine Rs 2,000/-. c. Letter of Warning.

	Major Punishment a. Grade 'F' in the subject.(for students involved) b. Fine Rs 5,000/- c. Letter of Warning.
Removing a leaf from answer book. Taking the whole or a part of an answer book or a continuation sheet into or out of examination hall.	a. Grade "F" in the subject. (for students involved) b. Fine Rs. 5,000. c. Letter of warning
Substituting the whole or a part of an answer book or a continuation sheet not duly issued to him for the examination;	a. Grade 'F' in the subject. (For students involved) b. Fine Rs 5,000. c. Letter of Warning.
Forging, mutilating, altering, erasing or otherwise tampering with marked answer scripts	a. Grade "F" in the subject. (for students involved) b. Fine Rs 5,000. c. Letter of Warning
Impersonation	a. Grade "F" in all subjects of relevant semester studied at BU (including the impersonator/facilitator, if a student of BU). b. Expulsion from the university (including the impersonator/ facilitator, if a student of BU). c. In case the impersonator/facilitator is an ex-student of BU or not a BU student, an FIR may be lodged for the offence, asper law of the land.
Using abusive or obscene language in answer book	a. Grade 'F' in the relevant course. b. Fine Rs 5,000. c. Letter of Warning.
Refusing to obey the Invigilator or Head Invigilator in the Examination Hall and misbehaving, resorting to misconduct, or creating any kind of disturbance in or around the Examination Hall	***Minor Punishment*** a. Grade 'F' in the course. b. Fine Rs 5,000. c. Letter of Warning. ***Major Punishment*** a. Rustication for one Semester. b. Grade 'F' in the course. c. Fine Rs5,000/ d. Letter of Warning.
Communicating or attempting to communicate with Examiners with the intention of influencing Them in the award of marks.	a. Cancellation of relevant paper. b. Fine Rs 5,000. c. Letter of Warning.
Possession of firearms, knives etc. inside and in the close vicinity of Examination Hall	a. Expulsion from the University. b. Fine Rs 5,000. c. Letter of Warning.

Sexual Harassment

All students are required to educate and familiarize themselves about the act/actions categorized as "Sexual Harassment" may it be physical, verbal or while utilizing electronic media and refrain from it being a punishable offence.

Higher Education Commission has issued very strict policy guideline against "Sexual Harassment in Higher Education Institutions (HEI)".

All such policies are strictly applicable and followed at FMDC.

All students are therefore required to go through the entire policy's contents which are available with campus (concerned HODs) and University/ HEC website.

- The Protection against Harassment of Women at Workplace Act, 2010
- The Protection against Harassment of Women at Workplace (Amndt) Ac& 2022.
- HEC Policy on Protection against Sexual Harassment in HEIs effective 01 July 2020

Committee for protection against sexual harassment in FMDC

FOCAL PERSONS	
Prof. Dr. Munir Tahir Dean & Prof of Biochemistry FMDC Associate Prof.Dr.Abir Hussain Dean Dental section	Cell: 03345253446 Email:drmunirtahir355@gmail.com Cell:03339108387
Prof. Dr. Johar Ali Principal & HOD General Surgery	Cell: 03009110744
INQUIRY COMMITTEE	
Prof.Dr.Saif-ur-Rehman; Physiology Dept FMDC Associate.Prof.Dr.Irfan;Anatomy Dept	Cell:03213025911 Cell:03370438990
Prof.Dr.Safdar Malik Asst.Prof.Dr.Zeeshan Baig HOD Maxillofacial surgery	Cell:03145154748 Cell:03214669917
Mr.Arif Zaman student section FMDC Mr.Khurram Shehzad student section FMDC	03009118232 03315719810

Code of conduct for protection against harassment of woman at the work place

1. An informal approach to resolve a complaint of harassment may be though mediation between the parties involved and by providing advice and counseling on a strictly confidential basis.
2. A complainant or a staff member designated by the complainant for the purpose may report an incident of harassment informally to her supervisor, or a member of the Inquiry committee, in which case the supervisor or the committee member may address the issue at her discretion in the spirit of this Code. The request may be made orally or in writing.
3. If the incident or the case reported does constitute harassment of a higher degree and the officer or a member reviewing the case feel that its needs to be complainant, the case can be taken as a formal complaint.
4. A complainant does not necessarily have to take a complaint of harassment through the informal channel. She can launch a formal complaint at any time.
5. The harassment usually occurs between colleagues when they are alone, therefore usually, it is difficult to produce evidence. It is strongly recommended that staff should report offensive behavior immediately to someone they trust, even if they do not wish to make a formal complaint at the time.

HEC policy on protection against sexual harassment in higher education institutions

1. Higher Education Institutions ("HEIs") are highly consequential institutions in society that are dedicated to the pursuit and dissemination of knowledge. Members of the HEI community have several important rights and privileges, central among which is the right to pursue inquiry and search for knowledge without hindrance from unlawful or otherwise unacceptable constraints. The HEC, takes very seriously the freedom of teachers, researchers, scholars, students to live and work in a safe environment in which their dignity is protected.
2. Protection against sexual harassment is important not only because it threatens the freedom and conduciveness of the environment and the institutions of higher learning. At a more fundamental level, such conduct is unacceptable because it's violet personal dignity and shall not be tolerated at HEIs in Pakistan under any circumstance.
3. All administrators, deans, managers, faculty, department chairs, directors of schools or program and others in supervisory or leadership positions have an obligation to be familiar with and to uphold this policy and its procedures along with informing members of their staff about its existence.
4. In order to ensure protection of women against harassment complaint may be lodge by any person who has experienced sexual harassment with either the focal person or with any member of the Sexual Harassment Inquiry Committee.

Students grievances oversight committee

There shall be a Student Grievances Oversight Committee (SGOC), to address grievances of students against any teacher, instructor, or administrative staff, with respect to matters of code of conduct, grades, or any administrative matter. The committee shall comprise:

a) Head of FMDC.
b) HOD.
c) FMDC Exam-In-charge.
d) Two (2) seniors-most FMs of the department.

If grievance is about the award of a grade, the procedure shall be as follows:

a) The student must submit the grievance, in writing, within seven working days of the receipt of the grade, to the HOD who shall forward it to the SGOC.

b) The SGOC shall hear both sides and will give its decision, which shall be final and binding on all parties, within five working days or before the start of registration for the new semester, whichever is earlier.

ATTENDANCE POLICY FOR STUDENTS

Attendance policy for regular students.
PMDC rules for eligibility in annual examinations.

- Minimum attendance requirement is 85% in each subject: attendance is for lectures, demos, practical's, clinics, PBLs, PSILs, CPC, presentations etc: indoor and outdoor
- The attendance is not simply for lectures.
- No shortfall in attendance will be condoned in any case by any authority

Attendance is maintained by the Attendance Department at FMDC.

All students should try and achieve 100% attendance. Every teaching session is essential. For clinical students remember a disease being demonstrated may not be seen during the rest of your stay in the college again. You will make the mistake of a life time by missing the opportunity to attend a clinical demonstration. You must have at least 85% attendance in to be permitted to sit for the professional examination.

- Lecture Attendance is marked at the start of the class.
- Students who come more than 10 minutes late are marked absent.
- A random head count is done to ensure correct entry of attendance.
- The attendance sheet is signed by the teacher and sent to Attendance Department.
- The attendance is entered into the spreadsheet as soon as possible on that day.
- No correction will be made later than 24 hours as the system is then locked.

Attendance for clinics, demonstrations, and practical's etc.

- Student signs the attendance sheet in front of the teacher.
- The teacher countersigns it daily.
- Weekly attendance is given by the CR to the Attendance Department - every Monday.
- Attendance submitted later than Friday of the current week will not be accepted.

FMDC rules permit a 15% short fall for genuine reasons of personal ill health of a life-threatening nature or unavoidable circumstances such as death of a blood relative. This 15%relaxation is not so that you can take a holiday.

If you have less than 85% attendance even for reasons of health, you will be asked to repeat the year. Maintaining adequate attendance is your personal responsibility.

Attendance policy for students repeating a year.

Students who have been asked to repeat the year either because of poor attendance or failure in the professional examination or supplementary examination will attend the classes of the failed subject(s).

- Their previous year attendance will not be considered.
- If their attendance is less than 85% in their current class they will not be allowed to appear in the next examination.
- If a student is repeating one subject, then the attendance must be equal to or more than 85% in that subject. This includes all practical classes, demonstrations, PBL sessions, lectures and clinical classes.

Attendance policy for students appearing in supplementary exams.

1. Only students who have appeared in a professional examination are allowed to appear in the supplementary examination**.**
2. Those who were not eligible for the annual exam are not eligible for the supplementary exam.
3. Those who did not avail the chance will have to repeat the year and cannot appear in the supplementary.
4. Students will be provisionally promoted to the next class while preparing for the supplementary examination.
5. Attendance will be marked in the class to which they have been promoted.
6. The student will prepare for the supplementary exam in his/her own time.
7. In case the student fails to pass the supplementary exam he/she will revert to the previous class and the attendance in the new class will be counted in the class to which they revert.
8. Those students who do not attend classes will be marked absent and may face a shortage of attendance and will be asked to repeat the year.

RESEARCH

FMDC has a strong emphasis on research and students are not only taught research methodology as part of their curriculum, but also actively engage in research work, under the supervisor of faculty members.

FMDC has a Research Advisory Committee that has been specifically formulated to guide students in every aspect of their research, from synopsis writing through to publications in peer reviewed journals.

FRONTIER MEDICAL COLLEGE ABBOTTABAD EXCELLENCE & INNOVATION

THE MODULES

Organization of modular curriculum and teaching

Each Academic Year is divided into three Modules

First Year	**Modules**	**I,II,III**
Second Year	**Modules**	**IV,V,VI,**
Third Year	**Modules**	**VII,VIII,IX,**
Fourth Year	**Modules**	**X,XI,Xll,**
Final Year	**Modules**	**XIII,XIV,XV**

The Examining subjects are

- **FIRST AND SECOND YEAR MBBS**
  - Anatomy
  - Physiology
  - Biochemistry
- **THIRD YEAR MBBS**
  - General Pathology
  - Pharmacology
  - Forensic Medicine
- **FOURTH YEAR MBBS**
  - Special pathology
  - Community Health Sciences
  - Ophthalmology
  - Otorhinolaryngology
- **FINAL YEAR MBBS**
  - Medicine & Allied
  - Surgery & Allied
  - Pediatric medicine
  - Obstetrics and Gynecology

You will be taught clinical subjects from 3rd year as this need to be taught in great detail and the final year is not sufficient. **The attendance for the subjects of medicine, surgery, Gynae/Obs and pediatrics will be counted from third year.** You will also be taught ethics, Islamiyat, Pakistan Studies and communication skills.

A weekly schedule is placed on the notice board.

LEARNING METHODS

Following Learning Strategies encourage active learning

- PBL
- PSIL
- Journal Club
- Interactive lecture,
- Practical's,
- Demonstrations,
- Dissection Hall Teaching
- Clinical Skills learning
- Skills Lab
- Small group discussions
- Bed Side Teaching
- Field / Community field Trips
- Self-Study with feedback
- Seminars, Workshops

The program lays emphasis on

Problem Based Learning (PBL):

This is a small group activity in which the discussion revolves around a real life problem using the Seven Jump process. Students are expected to consult various learning resources to develop better understanding of the subject. PBL sessions contribute towards internal assessment. Students are expected to attend all PBL sessions.

Self-Directed Study:

Student may achieve the objectives by assuming responsibilities of their own learning. By sharing and discussing with peers, working individually, seeking information from LRC, teachers and resources persons within and outside the college. This is possible by utilizing scheduled self- study period in college, and time outside the college.

Problem Based Learning (PBL): What is it?

It is a student-centered approach encouraging deeper learning. Students learn about a problem by working in groups. In first encounter, a problem which is close to real life situation is given. The problem is generally discussed in two sessions.

Frist Session: Learners in small groups, using existing knowledge, discuss (in the presence of facilitator) and list what they do not know or are not sure of, about the problem, the list is known as learning goals objectives.

Self-Study: Learners have approximately three days, during which learners search for new information required to achieve the learning objectives listed. In this process, learners are encouraged to consult various learning resources in addition to the textbooks. This does not require a tutor.

Second Session: Students present their solution and review what they have learnt. Students engage in self, peer, and tutor review of the classes. Learners discuss learning issues and application of new knowledge to the problem and summarize by integrating prior and new knowledge in

understanding the problem.

ASSESMENT POLICY

The student at FMDC will be assessed by following strategy

1. Continuous / Formative Assessment done throughout the Year

- Practical journals, PBL sessions
- Quizzes and tests

Reflective, constructive feedback is provided

2. Internal Assessment based upon 03 end of module exams

Each year is organized in 3 modules. Each module is assessed separately. It is mandatory for students to appear in the end of module exams

End of Module Exam comprises of

- Knowledge assessment by MCQs & SAQs;
- Skills & attitude are assessed by OSPE / OSCEs

The internal evaluation will contribute 20% towards final results
Student not appearing in end of module exams will lose internal evaluation marks

3. Summative Assessment

1. The written examination comprises of three papers (paper 1, 2 & 3). Each paper has
   - MCQs section
   - SAQ section divided into 03 parts (A, B & C)

2. Practical Examination will consist of 03 OSPE sessions

Eligibility criteria for appearing in annual professional examinations

A student will be eligible to appear in the annual professional examination if he/she fulfills the following criteria:

1. **85% attendance**
2. **Must have cleared all financial dues**
3. **Must have appeared in all three end-of-module examinations**
4. **No breach of discipline should have occurred for which the Disciplinary Committee has advocated a punishment**

PASS PERCENTAGE

Passing marks in each subject shall be 65% with 55 % in theory and 55% in practical.

POLICY FOR ELECTIVES

- Electives are not mandatory nor are they a part of the curriculum. Electives are considered add on extra-curricular activities with benefits for selection for jobs or postgraduate training after MBBS.
- The Electives Rotation will be of four weeks duration.
- It will be planned at least six months in advance.
- The Elective will be planned during the **WINTER HOLIDAYS** preferably.
- The institution or department will be of the student's choice.
- During the elective the student will not get credit for attending lectures at FMDC.
- It is the student's responsibility to ensure that his/her overall attendance record is not affected adversely by the elective.
- The student will not proceed on an elective without informing the Dean.
- The student will sign a waiver to the effect that any shortfall in attendance is his /her own responsibility and will be dealt with as per rules of BU & FMDC.
- The adequacy of education during the elective is the student's own responsibility.
- Permission to attend an elective is given by the Chairperson Student Affair Department designated for this purpose at FMDC. This simply implies that the college authorities are aware that the student is away for this period so that admission is not cancelled.
- The student will ensure that the Elective Supervisor completes an evaluation report at the end of the elective.
- FMDC will not provide any financial assistance for the elective.

STUDENT AFFAIRS AND STUDENT ASSIST PROGRAM

Chairperson of student affairs is assigned to cooperate with students and parents concerning academic and non-academic matters and can be contacted according to availability or after setting an appointment.

Students' Affairs office

The Students' Affairs Office coordinates administrative co-curricular and extracurricular activities. Students are advised to approach the coordinator student affairs (CSA) for any academic or non-academic matter.

Liaison with parents

The Students Affairs Office also serves as a bridge between the College Administration and parents. Students' progress reports will be mailed to parents on request at the conclusion of every term and annual examination. Similarly, the issue of short attendance, college discipline, and violation of college rules and regulations are handled by this Office.

Within FMDC & Attached SJTH & KATH always display your Student Identity Card!





WHOM TO CONTACT?

Administration FMDC

Prof. Dr. Munir Tahir Dean MBBS section FMDC

Prof.Dr.Syed Abir Hussain Dean Dental section FMDC

Prof. Dr. Johar Ali Principal MBBS section FMDC

Prof.Dr.Wahid Principal Dental section

Mr.Amir Malik HR & Finance Department

Mr.Awais Finance Department

Chairperson: Madam Dr.Shahina Jamil Khan FMDC

Dental & MBBS sections

CURRICULUM GUIDELINES

Module I General Basic Sciences Cell Biology
Duration 10 Weeks

Module II A Musculoskeletal System
Duration 9 Weeks

Module II B Heme and Immune system
Duration 4 Weeks

Module III A Cardiovascular System
Duration 6 Weeks

Module III B Respiratory System
Duration 6 Weeks

Learning Objectives

Module-I
General Basic Sciences
Cell Biology

Duration 10 Weeks

Course Learning Outcomes (CLOs)

1. Relate the major systems of the human body and their structures to the common clinical conditions, recognize histological tissue types along with key developmental processes and associated disorders
2. Relate the structure, function, cycle & division of cell to the associated clinical conditions
3. Demonstrate lab safety protocols and recall the basic equipment and solutions required to perform experimental procedures.

Objectives

GENERAL BASIC SCIENCES (GBS)

1. Describe the functional organization of human body (K)
2. Discuss anatomical terms, planes and sections (K)
3. Perform the body movements in different planes (S & A)
4. Correlate the classification of bones with clinical correlates and outline the distinctive characteristics of common types of fractures (K)
5. Relate the classification of cartilage with their location in human body (K)
6. Relate the classification of joints and their movements with clinical correlates (K)
7. Classify muscles based on their location, shape, action, development and type of fibers (K)
8. Explain the structural organization of nervous system (K)
9. Explain the concepts of homeostasis and physiological control systems (K)
10. Differentiate between positive feedback and negative feedback systems, and discuss feed forward system with examples (K)
11. Describe the divisions of body fluids into intracellular, extracellular and intravascular compartments (K)
12. Discuss the concept of energy in relation with diet(K)
13. Discuss the importance of BMR and RQ with respect to clinical scenario(K)
    - SDA
    - Balance Diet
    - Nutritional requirements in pregnancy, lactation & newborn
14. Discuss the role of balance diet and caloric requirement (K)
15. Introduction to laboratory instruments and interpret the laboratory hazards with their clinical significance. (S & A)
16. Demonstrate the basic skills of history taking and general physical examination on a standardized patient. (S & A)
17. Relate osmosis, osmotic pressure, surface tension and viscosity with their importance in body fluids (K) (K)
18. Perform the preparation of different solution and its types (S & A)
19. Elaborate the role of pH and dissociation constant (K)
    - Buffering capacity
    - Ionization of water, weak acids, bases
    - Titration curve of weak acids
    - Only application of H-H equation
    - Acid base regulation in human body
    - Biochemical mechanism for control of water and electrolyte balance
20. Explain the buffers and biomedical importance with their mechanism of action (K)
21. Identify pH of different solutions in lab (S & A)

22. Operate a microscope correctly according to standard operating procedures with knowledge of its parts and their functions (S & A)
23. Relate the parts of kymograph with their functions. (S & A)
24. Analyze experimental data using major hardware and software components of power lab (S & A)
25. Relate the use and function of basic histological stains (K)
26. Demonstrate the steps of tissue processing; Fixation, Embedding, Sectioning and Staining (S & A)
27. Classify amino acids and their biomedical importance & explain the structure, physical, chemical properties and functions of amino acids with respect to clinical scenario (K)
28. Classify proteins on the basis of functions, physical & chemical properties (K)
    - Classification based on nutrition
    - Importance of proteins/ amino acids in maintenance of body pH
    - Dissociation, titration and importance of amino acids
    - Biochemical role of plasma protein with their clinical disorders
    - Immunoglobulin with their structure and biomedical importance
29. Discuss the structural levels of proteins and correlate the structural abnormalities of proteins with (K)
    a. Amyloidosis
    b. Prions
    c. Denaturation
30. Discuss the clinical importance of proteins in nutrition (covered in nutrition/ medicine)
31. Perform general tests for detection of amino acids in accordance with established protocols and standards (S & A)
32. Perform the separation of amino acids in a given solution by given protocols of paper chromatography (S & A)
33. Perform general tests for detection of proteins/individual protein in accordance with established protocols and standards (S & A)
34. Identify male and female genital organs on the given model (K)
35. Discuss gametogenesis (oogenesis and spermatogenesis) (K)
36. Discuss the uterine and ovarian cycle (K)
37. Explain the events of the first week of development (K)
38. Discuss artificial reproductive techniques (K)
39. Explain the events of second week of development (K)
40. Relate the events of 3rd week of development with its abnormalities (K)
41. Correlate the process of development of primitive streak with congenital malformations (K)
42. Relate the embryological anomalies with 4th week of development (K)
43. Relate the changes during fetal period with congenital abnormalities (K)
44. Relate the abnormalities of placenta with its normal developmental process (K)
45. Explain the types and process of formation of twins (K)
46. Explain teratogens and their effect on developing fetus (K)

CELL BIOLOGY

47. Describe the structure, function & biochemical composition of cell membrane, sub cellular organelles & cytoskeleton(K)

- Biochemistry of eukaryotic & prokaryotic cell
- Related inherited disorder
- Signaling pathways and receptors

48. Correlate the physiological and biochemical aspects of cell membrane with fluid mosaic model (K) (K)
49. Differentiate various modes of transport across the cell membrane (K) (K)
50. Perform osmotic fragility test (S & A)
51. Interpret the effect of different reagents on red cell membrane (S & A)
52. Explain the cell cycle and differentiate between the stages of mitosis and meiosis (K)
53. Relate different types of cell junctional complex with their functional importance (K)
54. Describe various cell signaling mechanisms with examples (K)
55. Relate the microscopic features of covering and glandular epithelium and their surface modifications with their functional importance (K)
56. Identify the epithelial tissues on a given slide (squamous, cuboidal, columnar and transitional tissues) (K)
57. Explain the microscopic features of connective tissues (K)
58. Differentiate between types of connective tissues: loose areolar, adipose, dense regular and irregular connective tissues on the given slide (K)
59. Describe the microscopic structure of the skin, its components (sweat and sebaceous glands, hair follicles, nails, sensory receptors, and fascia), and categorize burns by their severity. (K)
60. Identify the microscopic features of skin on a given slide (K)
61. Discuss structure and biomedical role of nucleosides and nucleotides (K)
    - Chemistry of purines and pyrimidine, their types, structure and function
    - Derivative of purines and pyrimidine and their role in health and disease with implementation in research case
62. Describe the structure, function and different types of DNA & RNA (K)
63. Perform DNA extraction of onion cell with standard protocols (S & A)

CLINICAL SCIENCES

64. Relate the various forms of edema with changes in body fluid compartments
65. Relate the abnormalities at cellular and genetic level with organelles and normal genetic makeup
66. Describe morphology of reversible and irreversible cell injury.
67. Discuss structural and functional characteristics of different types of immunoglobulin's
68. Explain the clinical manifestation of hypoproteinemia

BIOMEDICAL ETHICS

69. To introduce medical students to the discipline of Bioethics
70. To discuss various historical events which led to the evolvement of Bioethics

FAMILY MEDICINE

71. Describe the concept of family medicine and general practice
72. Identify the principles of family medicine as bio-psycho-social model as (patient – centered communication psychosocial awareness, patient education)
73. Explain about comprehensive care
74. Recognize the importance of continuity of care

75. Discuss the different clinical consultation models
76. Demonstrate various types of communication skills
77. Practice good communication skills to understand doctor-patient relationship

MODULE I

PLOs	MIT	CLOs	Anatomy	Physiology	Biochemistry	Bioethics	Assessment tools
1, 2, 4, 5, 6, 8, 9, 10	LGIS	1,2	4-8,35,37-40,53,55-60	1,9,10, 11,47,48, 49,52,53, 54	12,13,14,17,19,20,27, 28,29,30,47,48,49,61, 62		MCQs, SAQs, OSPE, Viva
	SGD	1,2	4-8,35,37-40,53,55-60	1,9,10, 11,47,48, 49,52,53, 54	12,13,14,17,19,20,27, 28,29,30,47,48,49,61, 62	69,70	MCQs, SAQS, interactive sessions grading sheet
	DEMO /DIS	1,2	2,3,34,36				MCQs, SAQs, OSPE, Viva
	PBL	1,2	45,42	9, 10, 11	61		PBL assessment sheet
	Lab Skills	3	22,25,26	16, 22 - 24,50, 51	15, 18,21,31,32,33,63		OSPE, Viva
	Assignments	1,2	22,25,26	9, 10, 11, 48 – 51, 65	61		Assignment grading sheet
	Self-study	1,2	2,3,34,36, 4-8,35,37-40,53,55-60	65	17,19,29,30,62		Assignment grading sheet
	Student Presentations	1	2,3,34,36	9,10, 11, 48 -51, 65			Presentations grading sheet
	Case studies	1,2					

MIT: Mode of information transfers
LGIS: Large group Interactive session
SGD: Small group discussion
Demo: Demonstration
DIS: Dissections
PBL: Problem based learning

Module II A

Musculoskeletal

System

Biochemistry of Carbohydrates, Minerals & Vitamins

Duration 9 weeks

Course Learning Outcomes (CLOs)

4. Analyze the anatomy of the musculoskeletal system by correlating the gross features of the upper and lower limbs with clinical conditions and interpreting the microscopic structure of bones, muscles, and cartilage for health and disease
5. Develop concepts of physiological and biochemical aspects of the musculoskeletal system.
6. Apply the biochemical knowledge of carbohydrates and vitamins along to clinical scenarios

Objectives

78. Demonstrate the general features and attachments of: (K)
    a. Clavicle
    b. Scapula
    c. Humerus
    d. Radius
    e. Ulna
    f. Bones of hand
79. Relate the microscopic features of different types of cartilage with their location (K)
80. Compare the microscopic features of different types of cartilage on the given slides (K)
81. Explain the microscopic features of compact and spongy bone (K)
82. Distinguish between the microscopic features of compact and spongy bone on the given slides (K)
83. Explain the microscopic features of skeletal and smooth muscles (K)
84. Differentiate between the microscopic features of skeletal and smooth muscles on the given slides (K)
85. Relate the anterior and posterior axio-appendicular muscles with their clinical correlates (K)
86. Discuss the muscles of the pectoral region and Clavipectoral fascia (K)
87. Correlate the clinical conditions with the articulating bones, types, ligaments and movements of: (K)
    a. Acromioclavicular and Sternoclavicular joints
    b. Shoulder joint (rotator cuff muscles and shoulder girdle)
    c. Elbow joint
    d. Superior and Inferior radioulnar joints
    e. Wrist joint
    f. Joints of hand
88. Relate the aberrations of normal development and involution of mammary gland with its structure, neurovascular supply, lymphatic drainage and clinical importance (K)
89. Explain the boundaries and contents of axilla (K)
90. Correlate the neurovascular supply of the muscular compartment of arm with clinical anatomy (K)
91. Relate the injuries at various levels of brachial plexus with its formation and branches
92. Compute the equilibrium potential of various ions that maintain the resting membrane potential of a cell membrane**. (K)**

93. Describe stages of action potential along with ionic basis using the aid of a diagram (K)
94. Classify the nerve fiber types according to myelination, diameter and conduction velocity (K)
95. Discuss the characteristic properties of a nerve fiber on the basis of: Strength duration curve, all or one law, summation, conductivity, excitability, infatiguability, refractory period, accommodation. (K)
96. Identify different types of polyneuropathies (K)
97. Describe the process of degeneration and regeneration in a nerve fiber (K)
98. Explain the anterior and posterior muscular compartments and the neurovascular supply of forearm (K)
99. Discuss the boundaries and contents of the cubital fossa (K)
100. Relate the extent, relations and branches of axillary, brachial, radial and ulnar arteries with clinical conditions (K)
101. Enumerate the arteries taking part in the anastomosis around scapula and elbow joint (K)
102. Illustrate and label neuromuscular junction (S)
103. Discuss the components of neuro muscular junction and events taking place during neuromuscular transmission. (K)
104. Explain different neuromuscular inhibitors and stimulators at different stages of neurotransmission (K)
105. Correlate different disorders of neuromuscular junction with its functions. (K)
106. Correlate the clinical anatomy of flexor and extensor retinacula with their attachments and structures passing superficial and deep to them (K)
107. Discuss the features of palmar aponeurosis and its clinical significance (K)
108. Correlate the spaces of hand with their surgical importance
109. Relate the neurovascular supply and actions of intrinsic muscles of hand with their clinical correlates (K)
110. Explain the superficial and deep palmar arches of hand (K)
111. Relate fractures and dislocation of bones and joints of upper limb with neurovascular injuries (K)
112. Explain the types of muscle on their functional basis (K)
113. Describe the events leading to contraction and relaxation on molecular basis in skeletal muscle and differentiate between isotonic and isometric muscle contraction (K)
114. Explain the properties of skeletal muscle and differentiate between fast and slow muscle fibers (K)
115. Explain the role of physical medicine
116. Distinguish between the cutaneous supply and dermatomes of upper limb
117. Perform the surface marking of following structures on a standardized subject (S&A)
    a. Brachial artery
    b. Radial artery
    c. Ulnar artery
    d. Superficial and deep palmar arches

e. Median nerve
f. Radial nerve
g. Ulnar nerve
h. Flexor and extensor retinacula

118. Interpret the radiographs of upper limb (S)
119. Explain the muscles and neurovascular supply of back (K)
120. Demonstrate the general features and attachments of hip bone, femur, tibia, fibula and bones of foot (S)
121. Correlate the boundaries of greater and lesser sciatic foramina with structures passing through them (K)
122. Explain the muscles and neurovascular supply of the gluteal region (K)
123. Correlate the muscular compartments of thigh and their neurovascular supply with clinical anatomy (K)
124. Correlate the boundaries and contents of the femoral triangle, saphenous opening and adductor canal with clinical conditions (K)
125. Correlate the formation of Lumbosacral plexus with its clinical conditions (K)
126. Correlate the clinical conditions with the articulating bones, types, ligaments and movements of: (K)
    - Hip joint
    - Knee joint
    - Superior and inferior tibiofibular joint
    - Ankle joint
    - Small joints of foot

127. Enumerate the arteries taking part in the formation of cruciate, trochanteric and anastomosis around the knee joint (K)
128. Describe the types of muscular disorders (K)
129. To record EMG during voluntary muscle contractions, and investigate how contractile force changes with increasing demand. (S)
130. To examine the activity of antagonist muscles and the phenomenon of coactivation. (S &A)
131. To stimulate the median nerve at the wrist and record muscle activity from the Abductor pollicis brevis (a thumb muscle) (S & A)
132. Relate the neurovascular supply and actions of muscles of anterior, lateral and posterior compartment of leg with their clinical correlates (K)
133. Enumerate the structures forming the boundaries of popliteal fossa and its contents (K)
134. Explain the extent, branches and tributaries of popliteal vessels (K)
135. Relate the fractures of bones and dislocations of joints of lower limb with their normal anatomy (K)
136. Describe the functional properties of smooth muscle (K)
137. Describe the hormonal and nervous control of smooth muscle contraction. (K)
138. Differentiate between the contraction of smooth, skeletal and cardiac muscle. (K)
139. Identify postmortem changes of muscles after death
140. Discuss the attachment of flexor retinaculum and superior and inferior extensor retinacula and structures passing deep to them with clinical correlates (K)
141. Explain the extent and branches of femoral, posterior & anterior tibial artery (K)
142. Relate compartment syndrome of lower limb with the fascial compartments (K)
143. Explain the course, extent and tributaries of long and short saphenous veins (K)

144. Correlate the muscle layers of foot with their functional anatomy (K)
145. Correlate the arches of foot with their clinical importance (K)
146. Distinguish between the cutaneous supply and dermatomes of lower limb (K)
147. Explain the development of limbs (K)
148. Demonstrate the surface anatomy of the following structures on a standardized patient (S & A)
    - Popliteal artery
    - Superficial and deep peroneal nerve
    - Tibial nerve
    - Superior and inferior extensor retinacula
    - Flexor retinaculum
    - Dorsalis pedis artery
    - Plantar arch
149. Interpret the radiographs of lower limb with clinical conditions(S)
150. Define carbohydrate and classify them (K)
151. Define the following terms
    a) Stereoisomer
    b) Enantiomer
    c) Epimer
    d) Anomer
    e) d& l and D & L sugars
    f) Mutarotation
    g) Chemical and physical properties of CHO (K)
152. Discuss the biomedical importance of carbohydrate with respect to clinical scenario. (K)
153. Discuss the structure and function of: Monosaccharies; Disaccharide; Oligosaccharide; Polysaccharide (K)
154. Elaborate the functions and biochemical importance of different Glycosaminoglycans (K)
155. Differentiate b/w Glycaemic index(GI) &Glycaemic load (GL) (K)
156. Perform analysis of normal and abnormal urine constituents according to established protocols (S & A)
157. Plan dietary chart for slim, overweight, obese and diabetic patient keeping in account of the GI & GL of different food items. (S & A)
158. Perform the detection of different carbohydrate in given sample in accordance to established standards. (S & A)
159. Discuss the sources, absorption, regulation, biochemical function and clinical aspect of: (K)
    a) Macro mineral: (sodium, potassium, calcium, chloride, phosphate, sulphur)
    b) Micro mineral: iron, zinc, magnesium, selenium ,iodine, copper ,manganese) Chromium, Cadmium

BIOMEDICAL ETHICS

160. To introduce the importance of confidentiality and privacy in patient physician Relationship
161. To discuss the instances when privacy and confidentiality can be breached

MODULE-II A

PLOs	CLOs	MIT	Anatomy	Physiology	Biochemistry	Bioethics	Assessment tools
1, 2, 4, 5, 6, 8, 9, 10	4,5,6	LGIS	79,81,83,85-91,98-100,107,108,110,111,116,119,121,124-127,132-135,140-143,145-147	92-97, 102-105, 112-114,128, 136-139	150,151,152, 153,154,155, 159	83-84	MCQs, SAQs, OSPE, Viva
	4,5,6	SGD	79,81,83,85-91,98-100,107,108,110,111,116,119,121,124-127,132-135,140-143,145-147	92-96, 102-105, 112-115,128-131, 136-139	150,151,152, 153,154,155, 159	83,84	MCQs, SAQS, interactive sessions grading sheet
	4,5,6	DEMO/DIS	78,85,87,90,98,106,107,109,117,118,120, 123,124,126,132,144,148,149				MCQs, SAQs, OSPE, Viva
	4,5,6	PBL	111,142		159		PBL assessment sheet
	4,5,6	Lab Skills	80,82,84,148,149	129-131, 138	156, 157, 158		OSPE, Viva
	4,5,6	Assignments	111,125	128	155		Assignment grading sheet
	4,5,6	Self-study	111,142	128	154		Assignment grading sheet

Module-II B

HEME & IMMUNE SYSTEM

Duration 04 Weeks

Course Learning Outcomes (CLOs):

7. To Recognize the gross and microscopic features of reticuloendothelial system with clinical conditions
8. To Comprehend the composition of blood and its components along with the methods of visualizing and computing them using physiological and biochemical knowledge
9. To understand the various mechanisms of defense of the body, along with its clinical correlation

Objectives

162. Describe different components of lymphoid system, (K)
163. Discuss the composition and functions of blood (K)
164. Explain hematopoiesis and its stages (K)
165. Explain the importance of stem cells, progenitor cells, reticulocyte count (K)
166. Discuss factors which regulate hematopoiesis (K)
167. Describe the morphological features of RBCs and changes in anemia with the help of red cell indices (K)
168. Discuss the structure, function and types of hemoglobin and factor affecting and regulating the oxygen binding capacity of Hb(K)
169. Discuss the chemistry and biosynthesis of porphyrins with respect to clinical scenario (K)
170. Discuss the biochemical aspect of different porphyrias with their clinical correlation(K)
171. Discuss the degradation of heme, formation of bile pigment and bile salts, transport and excretion (K)
172. Discuss the biochemical basis of mechanism of development of different types of jaundice with their implementation to research (K)
173. Discuss haemoglobinopathies and their biochemical causes (Hb-S, thalassemia) (K)
174. Discuss the iron metabolism and Hemochromatosis & Hemosiderosis (K)
175. Describe Polycythemia and its types (K)
176. Demonstrate methods of drawing a blood sample for hematological investigation on a mannequin in skills lab (S& A)
177. Determine the erythrocyte sedimentation rate and Rouleaux formation in human subject (S& A)
178. Calculate PCV (hematocrit) by micro hematocrit method (S& A)
179. Estimate haemoglobin in human blood by Sahli's haemoglobinometer (S& A)
180. Compute the RBCs with hemocytometer (S& A)
181. Explain the macroscopic and microscopic features of: (K)
    a. Thymus
    b. Lymph nodes
    c. Tonsils
    d. Spleen
182. Relate the secondary lymphoid tissues in the body with their clinical importance
183. Classify white blood cells on the basis of morphology and function (K)
184. Describe the defense mechanism of the human body against invading agents. (K)
185. Identify the functional significance of monocyte macrophage system (K)
186. Correlate immune tolerance with MHC complex and HLA typing (K)
187. Classify white blood cell disorders (leukemia and lymphoma) and compare pathologic features of each category
188. Discuss complement system and its mechanism of action (K)

189. Describe the pathophysiology of hypersensitivity reactions along with its types (K)
190. Describe the basis of autoimmunity and relate it to various autoimmune diseases. (K)
191. Define transplantation and its types. (K)
192. Compute total leukocyte count with the help of hemocytometer. (S& A)
193. Distinguish different types of leucocyte on the given slides. (S& A)
194. Understand the basis of major and minor blood groups. (K)
195. Relate the basis of Rh system with Rh incompatibility. (K)
196. Enlist the components of blood which can be separated and used in clinical practice
197. Discuss the hazards of blood transfusion. (K)
198. Describe the steps in primary and secondary hemostasis (K)
199. Describe natural and clinical anticoagulants and their differences (K)
200. Describe antiplatelet, anticoagulant and thrombolytic drugs (K)
201. Explain the fibrinolytic system of the body & factors affecting it (K)
202. Determine the relation of bleeding disorders with normal hemostasis (K)
203. Estimate bleeding time, clotting time, APTT and PT. (S& A)
204. Estimate total platelet count by using a Hemocytometer (S& A)
205. Determination of blood group in human blood (Blood typing) (S& A)
206. Describe medico legal importance of blood group (K)
207. Discuss the biochemical role and clinical aspect of following. (K)
    a. Fat soluble Vitamin: A, D, E, K
    b. Water soluble vitamin: Vitamin C, B1, folic acid, thiamine, pyridoxine, riboflavin, nicotinic acid, pantothenic acid, biotin, and B12)

FAMILY MEDICINE

208. Demonstrate blood pressure monitoring in skills lab and apply on patients/simulator
209. Illustrate the sites of checking pulse and explain its practical implications
210. Examine fever by using thermometer and assess its clinical interpretation
211. Demonstrate checking of respiratory rate in adults and children with its medical significance
212. Illustrate the use of pulse oximeter for oxygen saturation and explain its importance

ABBOTTABAD
EXCELLENCE & INNOVATION

MODULE-II B

PLOs	CLOs	MIT	Anatomy	Physiology	Biochemistry	Assessment tools
1, 2, 4, 5, 6, 8, 9, 10	7,8,9	LGIS	181,182	162-168, 175, 182-192, 195--202	168, 169, 170, 171, 172, 173, 174, 207	MCQs, SAQs, OSPE, Viva
	7,8,9	SGD	181,182	162-168, 175-180, 182-202	168, 169, 170, 171, 172, 173, 174, 207	MCQs, SAQS, interactive sessions grading sheet
	7,8,9	DEMO/DIS				MCQs, SAQs, OSPE, Viva
	7,8,9	PBL		189,203	174, 207	PBL assessment sheet
	7,8,9	Lab Skills	181	176-179, 193, 194,204-206		OSPE, Viva
	7,8,9	Assignments	181,182	191, 192, 197, 207	173	Assignment grading sheet
	7,8,9	Self-study		191, 192, 197, 207	169, 171, 173	Assignment grading sheet
	7,8,9	Case studies	181,182	167,196		

Module-III A

CARDIOVASCULAR SYSTEM

Duration 06 weeks

Course Learning Outcomes (CLOs)

10. Correlate the gross & microscopic anatomical features of cardiovascular system and its functionality with clinical conditions
11. Correlate the developmental anatomy of cardiovascular system with congenital anomalies.
12. Associate the chemistry of lipids and aspects of enzymology with clinical disorder

Objectives

213. Relate the movements of thoracic cage with the bones and joints (K)
214. Correlate the outlet syndrome with the margins of thoracic inlet and outlet and the structures passing to and from them (K)
215. Analyze the divisions, boundaries and contents of mediastinum in the light of their clinical correlates (K)
216. Relate the intercostal spaces and their contents and thoracocentesis (K)
217. Correlate the gross external and internal structure of heart with cadaveric specimen (K)
218. Explain the fibrous skeleton of heart (K)
219. Correlate the neurovascular supply of heart in relation to coronary heart diseases (K)
220. Explain microscopic features of cardiac muscle (K)
221. Identify the microscopic features of cardiac muscle on a given slide (K)
222. Correlate the normal development of cardiovascular system with congenital anomalies (K)
    a. Atrial septal defect
    b. Ventricular septal defect
    c. Tetralogy of Fallot
    d. Patent ductus arteriosus
    e. Transposition of great vessel
223. Relate fetal circulation with the changes that occur at birth (K)
224. Explain the phases of action potential in a cardiac muscle (K)
225. Describe the pacemaker action potential and conduction pathway (K)
226. Perform precordial examination on a standardized patient (S & A)
227. Record the normal heartbeat of frog. (S & A)
228. Study the effect of drugs, ions and temperature on frog's heart. **(S & A)**
229. Interpret the information gained in normal electrocardiogram on a standardized patient **(S & A)**
230. Interpret ECG changes in health and angina, myocardial infarction, AV Blocks and arrhythmias (S & A)
231. Discuss enzymes, their general properties and classification Terms: co-enzymes, apoenzymes, holoenzymes, metalloenzymes, cofactor & their importance (K)
232. Described the mechanisms of enzyme catalyzed reactions and various factors affecting enzyme activity (K)
233. Describe various types of enzyme inhibition and how the enzyme activity is regulated (K)
234. Discuss the various isoenzymes with their biochemical role and clinical importance (K)
235. Perform the activity of different factors on salivary amylase (S & A)

236. Describe electrical and mechanical changes that take place during cardiac cycle along with volume and pressure changes (K)
237. Correlate normal and abnormal heart sounds with cardiac cycle (K)
238. Document the main determinants of cardiac output (K)
239. Justify the relation between venous return and cardiac output (K)
240. Describe cardiac output, preload, after load and ejection fraction in relation with Frank- Starling law. (K)
241. Record blood pressure on a standardized patient by various methods including power lab (S & A)
242. Outline the determinants of mean arterial pressure (K)
243. Calculate heart rate by examination of arterial pulse (S & A)
244. Calculate the target heart rate (S & A)
245. Describe right and left heart failure (K)
246. Relate the position, extent and branches of ascending aorta, arch of aorta and descending aorta with their clinical correlates
247. Differentiate between the gross and microscopic features of elastic arteries, muscular arteries and arterioles along with histological alterations occurring in the intima during atherosclerosis or arteriosclerosis
248. Distinguish between the gross and microscopic features of large, medium and small sized veins
249. Differentiate between the gross and microscopic features of continuous, fenestrated and sinusoidal capillaries
250. Explain the gross and microscopic features of lymph vessels
251. Distinguish between the microscopic features of artery and vein on the given slides
252. Discuss the extent and relations of pulmonary trunk, superior and inferior vena cava
253. Perform the surface marking of heart borders, heart valves, arch of aorta and superior vena cava on a standardized patient (S&A)
254. Differentiate between the normal and added heart sounds on standardized patients and mannequins in skills lab (S&A)
255. Explain hemodynamic mechanisms and correlate them with determinants of blood flow (K)
256. Define blood pressure, systolic, diastolic, pulse and mean arterial pressure. (K)
257. Describe role of vasomotor center in nervous control of blood pressure (K)
258. Explain the compensatory mechanisms (short, intermediate and long-term) of blood pressure regulation. (K)
259. Discuss the pathophysiology of Hypertension. (K)
260. Classify antihypertensive agents.
261. Describe the pulmonary, systemic circulation (K)
262. Discuss the role of Starling forces in capillary exchange and microcirculation in the tissues, alveoli and glomeruli. (K)
263. Relate the prevention of lymph edema with the role of lymphatic system. (K)
264. Discuss causes and clinical manifestation of acute and chronic arterial ischemia. (K)
265. Describe the factors which modify venous circulation. (K)
266. Classify shock and describe the stages of shock. (K)
267. Demonstrate the effect of exercise on cardiovascular system. (S & A)
268. Discuss the biomedical functions of lipids and their classifications (K)

269. Define, classify fatty acids and their biomedical importance (K)

a) Discuss the essential fatty acids and their biomedical importance

270. Discuss the sources, properties, and biomedical role of cholesterol and TG (K)
    - Ketone bodies
    - Phospholipids
    - Glycolipids
    - Sphingolipids
    - Bile acid and salt

271. Discuss the role of different lipoproteins in the development of atherosclerosis. (K)
272. Discuss the various properties of lipids such as saponification and rancidity. (K)
273. Discuss the biochemical role of eicosanoids (prostaglandins, leukotrienes, thromboxanes and prostacyclins) (K)
274. Discuss lipid per oxidation and its significance (K)
275. Perform detection of lipids and fatty acids in given sample (S & A)
276. Describe free radical formation with their clinical significance. (K)
277. Perform milk analysis by separating different components of residue and filtrate. (S& A)
278. Perform CSF analysis by separating different components according to standard protocols and techniques. (S&A)

FAMILY MEDICINE

279. Calculation of BMI and its interpretation
280. Assessment of general physical examination in adults and pediatric population
281. Explain the protocols used during a general physical examination
282. Outline the necessary steps to prepare the patient for general physical examination
283. Apply the skills for general physical examination on patients/simulator

ABBOTTABAD
EXCELLENCE & INNOVATION

MODULE III A

PLOs	CLOs	MIT	Anatomy	Physiology	Biochemistry	Assessment tools
1, 2, 4, 5, 6, 8, 9, 10	10,11,12	LGIS	213-220, 222, 223, 246 -250, 252	224,225, 229, 230, 236-240, 242,245, 255-267	231, 232, 233, 234, 268, 269, 270, 271, 272, 273, 274, 276	MCQs, SAQs, OSPE, Viva
	10,11,12	SGD	213-220, 222, 223, 246 -250, 252	224, 225, 229-230, 236-240, 255-267	231, 232, 233, 234, 268, 269, 270, 271, 272, 273, 274, 276	MCQs, SAQS, interactive sessions grading sheet
	10,11,12	DEMO/ DIS	216-218,253,254			MCQs, SAQs, OSPE, Viva
	10,11,12	PBL	219,222	233, 239, 266	234, 270	PBL assessment sheet
	10,11,12	Lab Skills	221,251	229-233, 244,246, 247,257, 270	235, 275, 277, 278	OSPE, Viva
	10,11,12	Assignments	,222,252	262, 267	234	Assignment grading sheet
	10,11,12	Self-study	222,253,254	262, 263, 267	268,270	Assignment grading sheet
	10,11,12	Case studies	219,222	233		

ABBOTTABAD
EXCELLENCE & INNOVATION

Module-III B

RESPIRATORY SYSTEM

Duration 06 weeks

Course Learning Outcomes (CLOs):

13. Relate the morphology, microscopic features, and developmental anatomy of the upper and lower respiratory tracts to respiratory disorders, and associated congenital malformations
14. To understand the functional organization, mechanics, volumes and capacities of respiratory system
15. To comprehend the diffusion and transport of gases, along with the disorders of respiration

Objectives

284. Explain the gross features of nasal cavity (K)
285. Explain the anatomical location, structure and the functions of paranasal air sinuses (K)
286. Explain the gross anatomical features of nasopharynx and laryngopharynx (K)
287. Relate the cartilage, joints, ligaments, membranes, cavity, muscles, and neurovascular supply of larynx with its clinical correlates (K)
288. Relate the respiratory muscles and accessory muscles of respiration with pump handle and bucket handle movements (K)
289. Analyze the parts, attachments, apertures and neurovascular supply of diaphragm with its clinical correlates (K)
290. Relate the gross structure and neurovascular supply of trachea and bronchial tree with clinical correlates (K)
291. Discuss the surfaces, borders, fissures, lobes, root and neurovascular supply of the lungs and bronchopulmonary segments with clinical correlates (K)
292. Relate the gross and microscopic changes that occur in respiratory system in relation to COVID – 19 (K)
293. Explain the microscopic features of upper and lower respiratory tract (K)
294. Differentiate between the microscopic features of trachea, bronchus and lungs on the given slide (K)
295. Correlate the layers, functions and neurovascular supply of pleura with clinical conditions (K)
296. Explain the development of: (K)
    - Nose
    - Paranasal sinuses
    - Larynx
    - Trachea
    - Lungs and bronchial tree
    - Pleura
    - Diaphragm
297. Explain the drainage and tributaries of azygos and hemiazygos system of veins (K)
298. Analyze the lymphatic drainage of thorax in relation to the thoracic and right lymphatic duct (K)
299. Discuss the functional organization of human respiratory tract (K)
300. Explain the mechanics of respiration (K)
301. Describe compliance of lungs and its significance (K)
302. Describe the biochemical composition of pulmonary surfactant and its roles (K)
303. Relate infant respiratory distress syndrome (IRDS) with the role of surfactant (K)
304. Discuss Ventilation perfusion ratio among different zones of lung. (K)
305. Discuss pulmonary volumes, capacities and their importance in pulmonary functional studies (K)

306. Classify obstructive and restrictive lung diseases and their effects on pulmonary function tests. (S & K)
307. Name the different parts of a mechanical ventilator
308. Enlist the bronchodilator drugs
309. Perform the examination of respiratory system on a standardized patient and record the normal respiratory pattern in voluntary apnea, hyperpnea, deglutition, coughing (S & A)
310. Observe, record and compute pulmonary volumes and capacities and compare the observed values with average values with the help of power lab(S & A)
311. Measure parameters of forced expiration that are used in evaluating pulmonary function (S & A)
312. Evaluate Peak Expiratory flow rate on a standardized patient (S & A)
313. Discuss the mechanism of development of pulmonary edema and its clinical manifestation
314. Discuss diffusion of gases across the respiratory membrane (K)
315. Describe effects of physiological shunts and physiologic dead space (wasted ventilation) on pulmonary gas exchange. (K)
316. Interpret oxyhemoglobin dissociation curve and discuss the factors responsible for its shift (K & S)
317. Discuss modes of transport of oxygen & carbon dioxide in lungs and peripheral tissues (K)
318. Observe the respiratory monitoring of a critically ill patient
319. Discuss nervous and chemical regulation of respiration (K)
320. Describe the mechanisms for the shift in alveolar ventilation as a result of ascent to high altitude (K)
321. Describe the significance of the feed forward control of ventilation (central command) during exercise (K)
322. Discuss different types of hypoxia (K)
323. Discuss the role of oxygen therapy in case of disturbance in ventilation perfusion ratio
324. Explain diving physiology and decompression sickness (K)
325. Demonstrate the effect of exercise on respiratory system. (S & A)
326. Perform the surface marking of pleura, lungs and trachea on a standardized patient (S&A)
327. Differentiate between normal and added breath sounds by auscultation of lung fields on a standardized patient, and mannequin in skills lab (S&A)
328. Interpret the radiological features of cardiovascular and respiratory system with normal anatomical features on given X-rays, CT scan and MRI (S&A)

MODULE-III B

PLOs	CLOs	MIT	Anatomy	Physiology	Biochemistry	Assessment tools
1, 2, 4, 5, 6, 8, 9, 10	13,14,15	LGIS	248-293,295, 298	300-306 , 315-326	302,303	MCQs, SAQs, OSPE, Viva
	13,14,15	SGD	248-293,295, 298	300-308 , 315-326	302, 303	MCQs, SAQS, interactive sessions grading sheet
	13,14,15	DEMO/ DIS	289,291, 326,327, 328			MCQs, SAQs, OSPE, Viva
	13,14,15	PBL	298	303,305,318	303	PBL assessment sheet
	13,14,15	Lab Skills	294,327, 326	310-313		OSPE, Viva
	13,14,15	Assignments	248-293	305-306		Assignment grading sheet
	13,14,15	Self-study	248-298	305-306		Assignment grading sheet
	13,14,15	Case studies	298	318		

RESEARCH & EVIDENCE BASED MEDICINE

Class	Objective	Mode of Teaching
1st year MBBS & BDS	**Students will be able to:** 1. Gain awareness regarding research committees of FMDC 2. Understand types of research and its importance For them 3. Identify the important components of original articles 4. Identify the objectives of the study 5. Understand and identify the important points of methodology like research design, setting, ethical approval, sample size , sampling technique , inclusion exclusion criteria , research tools etc	Interactive session/ workshop Assignments
2nd year MBBS & BDS	Students will be able to: 1. Make power point presentation 2. Understand the important steps of research 3. Identify the important points of methodology like research design, setting, ethical approval, sample size, sampling technique, inclusion exclusion criteria, research tools etc 4. Design research with appropriate aims an methodology 5. Understand the importance publication of research paper in medical journals 6. Understand journal ranking Recognize the databases for indexing	Journal club meetings
3rd & 4th MBBS/ BDS	Students were able to: 1. Identify research gap 2. Make research proposals 3. Take ethical approval from IRB 4. Collect data 5. Conduct data analysis under the supervision of biostatistician 6. Write a Manuscript 7. Submt a manuscript	Lectures Assignment Workshops how to write research proposals **Activity** Student will make research proposal under the supervision of mentors and RAC members. Submit proposals to research cell and present in front of Research Advisory Committee for approval and then submitted to IRB for ethical approval

GENERAL EDUCATION SUBJECTS

EXPOSITORY WRITING

OBJECTIVE	TEACHING STRATEGY
1. Describe the essentials of the writing process, integrating pre-writing, drafting, editing, and proofreading to produce well-structured essays.	LGIS/ Assignment
2. Demonstrate mastery of diverse expository types to address different purposes and audiences.	LGIS/ Assignment
3. Uphold ethical practices to maintain originality in expository writing.	LGIS/ Assignment
4. Understand expository writing including its definition, types, purpose, and applications.	LGIS/ Assignment
5. Recognize the characteristics of effective expository writing, such as clarity, coherence, and organization.	LGIS/ Assignment
6. Apply pre-writing techniques such as brainstorming, free-writing, mind-mapping, listing, questioning, and outlining.	LGIS/ Assignment
7. Execute the three-stage drafting process effectively.	LGIS/ Assignment
8. Revise and edit written work ensuring correct grammar, clarity, coherence, and conciseness.	LGIS/ Assignment
9. Proofread final drafts to fine-tune writing.	LGIS/ Assignment
10. Introduce and structure effective paragraphs in expository writing.	

PAKISTAN STUDIES

OBJECTIVES	TEACHING STRATEGY
1. Describe the following:	
i. Health houses (LHWs)	LGIS
ii. Basic health unit – its composition and function	LGIS
iii. Rural health centre – composition and function	LGIS
iv. Tehsils headquarter hospitals – composition and function	LGIS
v. District headquarters hospital – composition and function	LGIS
vi. Tertiary care hospitals – composition and functions	LGIS
vii. Medical teaching institutions	LGIS
viii. District health information systems	SGD
ix. Millennium development goals – goals and achievements	SGD
x. National surgical obstetric and anaesthetic plan – vision 2025	
xi. Sustainable development goals - universal health coverage	SGD
xii. Innovations in improving health care	LGIS

delivery – private public partnership	
xiii. Prevention of diseases - strategies – medical, surgical, trauma, obstetric	LGIS
xiv. Awareness campaigns	SGD & FIELD VISIT
xv. Role of WHO, NGOs	SGD

ISLAMIAT/ETHICS

OBJECTIVES	TEACHING STRATEGY
• Envision the concept of treatment in Islam and its theological basis.	LGIS
• Differentiate between secular medical ethics and Islamic medical ethics.	LGIS
• Compare the roles of a general doctor versus a Muslim doctor.	LGIS
• Outline the historical contributions of Muslim physicians to healthcare.	LGIS
• Demonstrate the leadership role of doctors in society (Hamdard-e Khalaiq).	LGIS
• Describe the Quranic and Hadith perspectives on the preservation of human life (foetus, suckling rights, non-Muslims).	LGIS
• Evaluate the principle of *Hifz-u-Nafs* (protection of life) in clinical practice.	LGIS
• Discuss the ethical implications of human dignity and legislative controls on life.	LGIS
• Appraise the Islamic view on maintaining non-human life and environmental balance.	SGD
• Define *Ibadah* in the context of medical practice.	LGIS
• Describe strategies to transform routine clinical work into acts of worship.	SGD
• Discuss the societal and personal impacts of viewing medicine as *Ibadah*.	LGIS
• Deconstruct the physical, emotional, and spiritual components of communication.	LGIS
• Apply Quranic principles (Surah Ar-Rahman 55:2-3) to patient interactions.	SGD
• Identify barriers to effective communication using Islamic ethical frameworks.	LGIS
• Illustrate the Islamic principles of consoling patients and gratitude for health.	LGIS
• Integrate the concept of disease as a test/blessing into patient counseling.	LGIS
• Justify the respectful use of human tissues/cadavers in education and research.	LGIS
• Discuss the ethical permissibility of animal use in biomedical studies.	SGD

COMMUNICATION, LEADERSHIP, MANAGEMENT AND PROFESSIONALISM

OBJECTIVES	TEACHING STRATEGY
• Discuss different styles of communication	LGIS
• Reflect on different methods of communication to decide when each is most suitable	LGIS
• Share the understanding about Leadership	LGIS
• Discuss research based definition of leadership	LGIS
• Describe the principles and practice of leadership in health care	LGIS
• Discuss the different types of leadership	LGIS
• Behave in an ethical manner that inspires trust amongst patients, coworkers, and the public	LGIS
• Function effectively as a team member in managing an event	EVENT MANAGEMENT- BAKE SALE
• Exhibit honesty and integrity in all interaction	SGD

COMPUTER SKILLS

OBJECTIVE	TEACHING STRATEGY
1. Use computer technology as a tool for communication and collaboration	nds-on activity
2. Use computers for problem solving	nds-on activity
3. Create productivity materials related to their profession.	nds-on activity
4. Use computer technology for personal and professional growth.	nds-on activity
5. Use computer technology for research and generating new knowledge	nds-on activity
6. Develop confidence and an attitude for the use of computer.	nds-on activity

BEHAVIORAL SCIENCES

1ST YEAR	
LEARNING OBJECTIVE	**TEACHING STRATEGY**
1. Comprehend significance of Behavioural Sciences in Medical practice.	Lectures/Presentations
2. Demonstrate understanding of holistic and biomedicine model in clinical practice along with understanding of culture and medical practice.	Lectures/Presentations
3. Comprehend understanding of psychology, sociology and anthropology as well as biological determinants of health and disease in clinical practice, along with public health approach of primary and secondary prevention of disease/disorder and promotion of health.	Lectures/Presentations
4. Analyse human behaviour and other factors affecting health and disease by enhancing doctor's own learning and clinical skill.	Small Group Discussion (SGD)
5. Understand and assess types of human personality and phases of personality development along with intelligence.	Lectures/Presentations
6. Understand the complex interplay of Brain and Behaviour.	Lectures/Presentations
7. Integrate the principles of medical ethics in professional life.	Lectures/Presentations
8. Integrate significance of medical ethics in medical practice.	Lectures/Presentations
9. Familiarize doctors with alternative medicine and ethical concerns of its practices in medical setup.	Lectures/Presentations
10. Comprehend Mental Health Acts.	Small Group Discussion (SGD)
11. Analyse critical situations/challenges in clinical practice to solve clinical problems.	Case study
12. Critique the ethical boundaries of conduct in doctor-patient relationship.	Small Group Discussion (SGD)
13. Demonstrate professional excellence of a doctor to maintain healthy doctor-patient relationship.	Small Group Discussion (SGD)
14. Demonstrate effective communication skills in clinical practice, assimilate and handle patient information in different clinical scenarios.	Lectures/Presentations
15. Cope with critical psychosocial issues in exceptional hospital settings.	Case study
16. Critically analyze the patient to provide the best care possible and help the individual obtain optimal health.	Small Group Discussion (SGD)
17. Identify sources of stress and its management towards patients, self and other staff members.	Presentations
18. Equip medical students with knowledge and skills to respond to psycho-traumatic cases in hospital settings.	Case study
2nd YEAR	
LEARNING OBJECTIVE	**TEACHING STRATEGY**
19. Prepare doctors to deal with challenges of terminal and bereavement care in clinical practice within their boundaries.	Small Group Discussion (SGD)

20. Understand the impact of terrorism on mental health and its management for mental well-being.	Lectures/Presentations
21. Identify the correlation of aging with life span, psychological factors and sociological factors.	Lectures/Presentations
22. Illustrate human thought, behaviour and interactions by health and disease situations influenced by psychological factors.	Lectures/Presentations
23. Recognize the factors contributing towards a state of psychological and social well-being of human in clinical practice.	Small Group Discussion (SGD)
24. Understand the complex interplay of Brain and Behaviour.	Lectures/Presentations
25. Integrate knowledge and skills of coping and treatment of pain in various situations.	Small Group discussion
26. Identify the bio-psycho-social factors contributing to sexual health and impact physical and mental health of human being.	Lectures/Presentations
27. Understand the cultural and social aspects of medical practice by getting holistic view of health.	Small Group Discussion (SGD)
28. Understand common psychiatric disorders in general health settings.	Lectures/Presentations
29. Interview and perform psychosocial assessment.	Small Group Discussion (SGD)
30. Understand child rearing practices.	Lectures/Presentations
31. Understand emotions.	Lectures/Presentations
32. Understand motivation.	Lectures/Presentations
33. Understand learning, assess types of learning, theories of learning, different methods and styles of learning, identify and differentiate different type of learners.	Lectures/Presentations
34. Define learning.	Lectures/Presentations
35. Identify types of learners.	Lectures/Presentations
36. Understand strategies to improve learning skills.	Small Group Discussion (SGD)

ARTS & HUMANITIES

Learning Objective	Teaching Strategy
Describe the role of arts and humanities in understanding the human experience.	LGIS
Summarize historical developments in medicine and healing practices across cultures.	LGIS
Analyze patient narratives and literary texts to explore themes of illness and healing.	SGD
Interpret ethical dilemmas in healthcare as portrayed in films and visual media.	SGD
Discuss the influence of cultural beliefs on health, illness, and healing.	LGIS
Identify the use of visual arts in understanding anatomy and patient experience.	LGIS
Compose reflective journal entries demonstrating empathy and insight.	SGD
Evaluate philosophical concepts such as suffering and mortality in healthcare.	LGIS

Learning Objective	Teaching Strategy
Appraise the use of poetry in expressing the patient's journey.	SGD
Explain the therapeutic role of music in emotional wellbeing.	LGIS
Observe the design of healthcare spaces and relate it to patient healing.	Field Visit
Critique selected artworks for their relevance to health and the human condition.	Field Visit + SGD
Demonstrate storytelling techniques to build empathy and rapport with patients	SGD

FEHM QURAN 1

COURSE OUTCOMES:

- Students will be able to understand the true message of Quran
- They will be able to implement the lessons derived from these paaras in their daily lives.

1. Introduction
2. Para Number 01 (Rukooh 01-07)
3. Para Number 01 (Rukooh 08-14)
4. Para Number 01 (Rukooh 15-16) Para Number 02 (Rukooh 01-04)
5. Para Number 02 (Rukooh 05-10)
6. Para Number 02 (Rukooh 11-16)
7. Para Number 03 (Rukooh 01-07)
8. Para Number 03 (Rukooh 08-14)
9. Para Number 03 (Rukooh 15-17) Para Number 04 (Rukooh 01-03)
10. Para Number 04 (Rukooh 04-08)
11. Para Number 04 (Rukooh 09-14)
12. Para Number 05 (Rukooh 01-07)
13. Para Number 05 (Rukooh 08-14)
14. Para Number 05 (Rukooh 15-17) Para Number 06 (Rukooh 01-02)
15. Para Number 06 (Rukooh 03-08)
16. Para Number 06 (Rukooh 09-14)

SEERAH

1. ARABS BEFORE PROPHETHOOD حالات کے عرب پہلے سے نبوت
2. Religions in Arabs مذاہب کے عرب
3. History of Kaaba; Ancestors of Holy Prophet (PBUH) سلسلہء کا وسلم علیہ اللہ صلی رحمت ،نبی کعبہ تاریخ نسب
4. PROPHET'S LIFE BEFORE THE DECLARATION OF PROPHETHOOD نبوت مبارکہ حیات کی رحمت نبی پہلے سے
5. Trade Missions/ Expeditions of Holy Prophet (PBUH) سفر تجارتی کے رحمت نبی
6. Young Age of Holy Prophet (PBUH) ایام کے جوانی کی رحمت نبی
7. Marriage of Holy Prophet (Peace Be Upon Him) نکاح کے رحمت نبی
8. Reconstruction of Holy Kaaba نو تعمیر کی کعبہ
9. PROPHET'S LIFE AFTER THE DECLARATION OF PROPHETHOOD اعلان مبارکہ حیات کی رحمت نبی بعد کے نبوت
10. Secret and Open Preaching دور اعلانیہ اور خفیہ کا دعوت کی اسلام
11. Migration towards Abyssinia حبشہ ہجرت
12. Shab e Abi Talib and Year of Sorrow سال کا غم اور طالب ابی شعب

13. Travelling towards Taif, Isra and Mairaj ومعراج اسراء اور طائف سفر
13. Bait Uqbaah Oolaah and Sania ثانیہ اور اولی عقبہ بیعت
14. Migration toward Madina مدینہ ہجرت
15. Construction of Masjid Nabawi تعمیر کی نبوی مسجد
16. Revision دہرائی

TAJWEED-1

1. Introduction and Importance of Tajweed اہمیت اور تعارف تجوید
2. Alphabets تہجی حروف
3. Teeth Chart
Name of Teeth نقشہ اور نام کے دانتوں
4. Point of Pronunciation الحروف مخارج
5. Point of Pronunciation الحروف مخارج
6. Principles of Tajweed
i. Tanween اصول کے تجوید :
i. تنوین
7. Principles of Tajweed
ii. Noon e Tanween اصول کے تجوید
ii. ِتنوین نون
8. Principles of Tajweed
iii. Huroof Maddah اصول کے تجوید
iii. مدہ حروف ، مدات
9. Principles of Tajweed
iv. Huroof Leen اصول کے تجوید
iv. لین حروف
10. Principles of Tajweed
v. Huroof Qalqalah اصول کے تجوید
قلقلہ حرف
11. Principles of Tajweed
vi. Huroof Mustaliyah اصول کے تجوید
v. مستعلیہ حروف
12. Principles of Tajweed
vii. Principles of Raah اصول کے تجوید
vi. اصول کے را
13. Principles of Tajweed
viii. Differentiation between similar sounds of alphabets اصول کے تجوید
vii. تہجہی حروف والے آوازوں اور حروف جلتے ملتے
14. Principles of Tajweed
ix. Idghaam & Iqlaaab اصول کے تجوید
viii. اوراقلاب ادغام
15. Principles of Tajweed
x. Ramooz e Auqaf اصول کے تجوید
ix. اوقاف رموز
16. Revision/Summary of the Course دہرائی

PAPERWISE DISTRIBUTION OF TOPICS FOR INTEGRATED ASSESSMENT

MODULE I

PAPER	TOPICS	LEARNING OBJECTIVE NUMBER
PAPER - I	Microscope, Tissue processing & staining, Cell, Cell, junctional complex, Epithelium, Connective tissue, microscopic features of integumentary system Cell membrane, cell organelles and cytoskeleton Nutrition, laboratory instruments and laboratory hazards, osmosis, osmotic pressure, surface tension and viscosity with their importance in body fluids, solution preparation, role of pH and dissociation constant, Buffering capacity, Ionization of water, weak acids, bases, Titration curve of weak acids, Only application of H-H equation, Acid base regulation in human body, Biochemical mechanism for control of water and electrolyte balance, buffers and biomedical importance with their mechanism of action, Identification of pH, structure, function & biochemical composition of cell membrane, sub cellular organelles, Biochemistry of eukaryotic & prokaryotic cell, Related inherited disorder Signaling pathways and receptors, fluid mosaic model, various modes of transport across the cell membrane.	22,25,26,53,55-60 47, 48, 52 12,13 14, 17, 19, 20, 47, 48, 49, 15, 18, 21
PAPER- II	Anatomical terms, planes, sections and movements Classification of cartilage, bones, muscles, joints structural organization of cardio vascular, respiratory urinary and nervous system Functional organization of human body, homeostasis, Feedback & feed forward mechanism, Body fluid compartments Genetics Genetics structure and biomedical role of nucleosides and nucleotides, Chemistry of purines and pyrimidine, their types, structure and function, Derivative of purines and pyrimidine and their role in health and disease, structure, function and different types of DNA & RNA, DNA extraction of onion cell, paper chromatography	2-8 1,9,10,11 61, 62 32, 63
PAPER- III	• Identification of male and female genital organs, gametogenesis, uterine and ovarian cycle	34-38

	• Events of the first, second, third and fourth week of development with associated congenital malformations • Artificial reproductive techniques • Embryonic and fetal period, placenta, twins, and teratogenesis Cell signaling mechanism Cell junctional complex Modes of transport across cell membrane Classification of amino acids and proteins, their biomedical importance, structure, physical, chemical properties and functions Importance of proteins/ amino acids in maintenance of body pH, Dissociation, titration and importance of amino acids, Biochemical role of plasma protein with their clinical disorders, Immunoglobulin with their structure and biomedical importance, structural levels of proteins and abnormalities of proteins with Amyloidosis, Prions, Denaturation, Perform general tests for detection of amino acids and proteins	49,53,54 27, 28, 29, 30 31,33

MODULE II

PAPER	TOPICS	LEARNING OBJECTIVE NUMBER
PAPER- I	• Anterior and posterior axio-appendicular muscles, muscles of the pectoral region and Clavipectoral fascia • Acromioclavicular, sternoclavicular, shoulder, elbow, superior & Inferior radioulnar, wrist , and joints of hand • Axilla • Compartment of arm and forearm with clinical anatomy • Injuries at various levels of brachial plexus with its formation and branches • Cubital fossa • Branches of axillary, brachial, radial and ulnar arteries , anastomosis around scapula and elbow joint • Flexor and extensor retinacula • Palmar aponeurosis, Spaces of hand, intrinsic muscles of hand	85-87,89-91,98-101,106-111,116-118,119

	• Superficial and deep palmar arches of hand • Fractures and dislocation of bones and joints of upper limb • Cutaneous supply and dermatomes of upper limb • Surface marking and radiographs of the structures of upper limb • Muscles of the back • Resting membrane potential • Action potential • Nerve fiber & its properties • Neuromuscular junction • Properties of various types of muscle fibers • Contraction of skeletal muscles • Different types of skeletal muscles • Functional properties of smooth muscles • Contraction of smooth muscles & its regulation • Post mortem changes of skeletal muscles Carbohydrate and Classification terms, Stereoisomer, Enantiomer, Epimer, Anomer, d& l and D & L sugars, Mutarotation, Chemical and physical properties of CHO Biomedical importance of carbohydrates, Structure and function of Monosaccharies; Disaccharide; Oligosaccharide; Polysaccharides, Functions and Biochemical importance of different Glycosaminoglycans, Differentiate b/w Glycaemic index(GI) & Glycaemic load (GL), Detection of carbohydrates	(II-A) 92-97,102- 105,112-115,128,136-139 II-A 150, 151, 152, 153, 154, 155, 158
PAPER- II	• Greater and lesser sciatic foramina, muscles and neurovascular supply of the gluteal region, muscular compartments of thigh • Boundaries and contents of the femoral triangle, saphenous opening and adductor canal • Lumbosacral plexus • joints of lower limb • Cruciate, trochanteric and anastomosis • Muscles of anterior, lateral and posterior compartment of leg , popliteal fossa • Extent, branches and tributaries of popliteal vessels • Fractures of bones and dislocations of joints of lower limb	121-127,132-135,140-146,148, 149

	• Flexor retinaculum, superior and inferior extensor retinacula • femoral, posterior & anterior tibial artery , compartment syndrome of lower limb • long and short saphenous vein • Muscle layers of foot , arches of foot • cutaneous supply and dermatomes of lower limb • surface anatomy and radiology of the structures of lower limb • Composition & functions of blood • Hemopoiesis/erythropoiesis • RBCs & red cell indices • Anemia & polycythemia • Blood grouping (ABO & Rh system) • Mismatch of blood grouping Structure, function and types of hemoglobin and factor affecting and regulating the oxygen binding capacity of Hb, chemistry and biosynthesis of porphyrins biochemical aspect of different porphyrias degradation of heme, formation of bile pigment and bile salts, transport and excretion, biochemical basis of mechanism of development of different types of jaundice, haemoglobinopathies and their biochemical causes (Hb-S, thalassemia) Dietary plan	II- B (163-167, 175, 194- 198) II-B 168, 169, 170, 171, 172, 173, 174, 157
PAPER-III	• General features and attachments of bones of upper limb, microscopic features of different types of cartilage, compact and spongy bone, skeletal and smooth muscles, • Aberrations of normal development and involution of mammary • General features and attachments of hip bone, femur, tibia, fibula and bones of foot • Development of limbs • Macroscopic and microscopic features of Thymus, Lymph node, Tonsils, Spleen • Secondary lymphoid tissues • WBC classification & their functions • Defense mechanism (inflammation) • Function of neutrophils & free radicals • Monocyte-macrophage system • Immune tolerance & MHC complex • Complement system • Hypersensitivity • Autoimmunity & transplantation • Hemostasis • Natural and artificial anticoagulants	78-84,88,147,181,182 II- B (183-191) II A 156, 159 II B 207

	• Bleeding disorders Sources, absorption, regulation, biochemical function and clinical aspect of Macro mineral: (sodium, potassium, calcium, chloride, phosphate, Sulphur), Micro mineral: (iron, zinc, magnesium, selenium, iodine, copper ,manganese, Chromium, Cadmium) Biochemical role and clinical aspect of Fat soluble Vitamin: A,D,E,K, water soluble vitamin: Vitamin C, B1, folic acid, thiamine, pyridoxine, riboflavin, nicotinic acid, pantothenic acid, biotin, and B12), Urine analysis	

MODULE III

PAPER	TOPICS	LEARNING OBJECTIVE NUMBER
PAPER- I	• Movements of thoracic cage with the bones and joints, thoracic outlet syndrome, margins of thoracic inlet and outlet • Mediastinum, intercostal spaces and their contents • Gross external and internal structure of heart, fibrous skeleton of heart • Neurovascular supply of heart • Ascending aorta, arch of aorta and descending aorta • Pulmonary trunk, superior and inferior vena cava • Surface marking of heart, heart valves, aorta and superior vena cava on a standardized patient • Auscultation the normal heart sounds on a standardized patient • Drainage and tributaries of azygos and hemiazygos system of veins • Lymphatic drainage of thorax • Properties of cardiac muscle • Cardiac muscle action potential	213-219,252-254,297,298 III-A (224, 225, 230,236-240,242,245)

	• Conductive pathway & pacemaker action potential • ECG • Cardiac cycle • Heart sounds & murmurs • Cardiac output & its determinants Biomedical functions of lipids and their classifications, Define, classify fatty acids and their biomedical importance, essential fatty acids and their biomedical importance, cholesterol, Ketone bodies, Bile acid and salts, role of different lipoproteins in the development of atherosclerosis, detection of lipids and fatty acids	III-A 268, 269, 270,271,275
PAPER- II	• Microscopic features of cardiac muscle (K) • Correlate the normal development of cardiovascular system with congenital anomalies • Fetal circulation • Gross and microscopic features of elastic arteries, muscular arteries and arterioles, large, medium and small sized veins, continuous, fenestrated and sinusoidal capillaries • Gross and microscopic features of lymph vessels • Gross and microscopic changes that occur in respiratory system in relation to COVID – 19 • Microscopic features of upper and lower respiratory tract • Pleura with clinical correlates • Describe the development of respiratory system • Mean arterial pressure & its determinants • Blood pressure and its regulation • Hypertension, right & left heart failure • Hemodynamics/ local control of blood flow • Microcirculation/ Pulmonary, splanchnic & systemic circulation • Lymphatic system • Shock • Functional organization of respiratory system • Mechanics of respiration • Pulmonary ventilation • Ventilation perfusion ratio Physical and chemical properties of lipids, identification of fats biochemical role of eicosanoids (prostaglandins, leukotrienes, thromboxanes and prostacyclins), lipid per oxidation and its significance, free radical formation, Phospholipids, Glycolipids, Sphingolipids, Milk analysis, CSF analysis	220-223 247-251, 292-296 III-A 270,272, 273, 274, 276, 277, 278 III-B 302, 303 III-A (255- 267) III-B (299-301,304-308,311)

PAPER-III	• Gross features of nasal cavity, paranasal air sinuses, nasopharynx and laryngopharynx, larynx, Diaphragm • respiratory muscles and accessory muscles of respiration • Gross structure of trachea and bronchial tree, lungs and bronchopulmonary • Surface marking, auscultation and radiographs of structures of respiratory system • Pulmonary volumes & capacities & clinical significance • Diffusion of gases • Transport of gases • Regulation of respiration • Effect of exercise on CVS & respiration • Respiratory changes at high altitude & deep sea • Hypoxia Enzymes, properties and classification, Terms: co-enzymes, apoenzymes, holoenzymes, metalloenzymes, cofactor, mechanisms of enzyme catalyzed reactions and various factors affecting enzyme activity, various types of enzyme inhibition and regulation, various isoenzymes with their biochemical role and clinical importance, Enzyme analysis	284-291 326-328 III-B (314-325) III-A 231, 232, 233, 234, 235

LEARNING RESOURCES

RECOMMENDED BOOKS

Anatomy

1. K.L. Moore, Clinically Oriented Anatomy
2. B. Young, J.W. Heath Wheather's Functional Histology
3. Keith L. Moore. The Developing Human
4. Medical Histology by Laiq Hussain
5. Langman's Medical Embryology
6. Junqueira's Basic Histology
7. Clinical Anatomy by Regions - Richard S. Snell

Physiology

8. Arthur C. Guyton, John E. Hall., Textbook of Medical Physiology
9. Sherwood, Lauralee. Human Physiology: from cells to systems

Biochemistry

10. Robber K. Murray, Daryl K. Granner, Peter A. Mayes, Victor W. Rodwell. Harper's Biochemistry
11. Pamela C. Champe, Richard A. Harvey. Lippincott's Illustrated Review of Biochemistry

CHS

12. K. Park, Parks Textbook of Preventive & Social Medicine
13. Muhammad Ilyasetal, Community Medicine and Public Health
14. Kumza JW, Bohnenblust SE. Basic Statistics for the Health Sciences

Family Medicine

15. Oxford Handbook of Family Practice.

ABBOTTABAD
EXCELLENCE & INNOVATION

Frontier Medical and Dental College Abbottabad

Academic Calender 2026-2027

MONTHS, WEEK DAYS & DATES								SCHEDULED ACADEMIC & CO CURRICULAR EVENTS	PUBLIC HOLIDAYS/ HEALTH & AWARENESS DAYS
	SUN	MON	TUE	WED	THU	FRI	SAT	MBBS	
Jan-26					1	2	3	WINTER BREAK	
	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		World Leprosy Day 26th Jan
Feb-26	1	2	3	4	5	6	7		World Cancer Day 4th Feb
	8	9	10	11	12	13	14	Commencement of Modules IV, VII, X, XIII	Kashmir Solidarity Day 5th Feb
	15	16	17	18	19	20	21		
	22	23	24	25	26	27	28		Intl's Women's Day 8th Mar
Mar-26	1	2	3	4	5	6	7	Commencement of Module I Orientation Week	World Kidney Day 12th Mar
	8	9	10	11	12	13	14		World Disabled Day 15th Mar
	15	16	17	18	19	20	21		Eid ul Fitr 21st - 23rd March
	22	23	24	25	26	27	28		Pakistan Day 23rd March
	29	30	31						World Tuberculosis Day 24th Mar
Apr-26				1	2	3	4		Oral Cancer Awareness 1st April
	5	6	7	8	9	10	11		World Health Day 7th Apr
	12	13	14	15	16	17	18		Hemophilia Day 17th Apr
	19	20	21	22	23	24	25		World Liver Day 19th Apr
	26	27	28	29	30			End of Module IV, VII, X, XIII Exams	
May-26						1	2		Labour Day 1st May
	3	4	5	6	7	8	9	Commencement of Modules V, VIII, XI, XIV	Thalassemia Day 8th May
	10	11	12	13	14	15	16		
	17	18	19	20	21	22	23	End of Module I	Eid ul Azha 26th-28th May
	24	25	26	27	28	29	30	Commencement of Module II	Youme Takbeer 28th May
	31								World Tobacco Day 31st May
		1	2	3	4	5	6	Summer Break	
Jun-26	7	8	9	10	11	12	13		World Brain Tumor Day 8th Jun
	14	15	16	17	18	19	20		World Blood Donation Day 14th June
	21	22	23	24	25	26	27		Ashura Days 25th-26th June
	28	29	30					Extracurricural Activities/ Sports Week	
Jul-26				1	2	3	4		National Doctor's Day 1st July
	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			World Hepatitis Day 28th July
Aug-26							1		1st August Oral Hygiene Day
	2	3	4	5	6	7	8	End Moodular Exam V, VIII, XI,IV Exams	
	9	10	11	12	13	14	15	Commencement of Modules VI, IX, XII, XV	Independence day 14th Aug
	16	17	18	19	20	21	22		
	23	24	25	26	27	28	29	End Moodular Exam II	Eid Milad un-Nabi 25th August
	30	31						Commencement of Module III	
Sep-26			1	2	3	4	5		Defence Day 6th Sep
	6	7	8	9	10	11	12		Research Competition Sep
	13	14	15	16	17	18	19		World Patient Safety Day 17th sept
	20	21	22	23	24	25	26		World Alzeheimer's Day 21st Sep
	27	28	29	30					World Heart Day 28th Sep
Oct-26					1	2	3		Breast Cancer Month-October
	4	5	6	7	8	9	10		Intl Teacher's Day 5th Oct
	11	12	13	14	15	16	17		World Mental Health Day 10th Oct
	18	19	20	21	22	23	24		World Food Day 16th Oct
	25	26	27	28	29	30	31	End of Modules VI, IX, XII, XV Exams	World Osteoporosis Day 20th Oct
									World Polio Day 24th Oct
Nov-26	1	2	3	4	5	6	7		
	8	9	10	11	12	13	14		Iqbal Day 9th Nov
	15	16	17	18	19	20	21	Tentaive Date of MBBS Professional Exam End of Module III	World Immunization Day 10th Nov
	22	23	24	25	26	27	28		World Diabetes Day 14th Nov
	29	30							
									World AIDS Day 1st Dec
Dec-26			1	2	3	4	5		National Pollution Day 2nd Dec
	6	7	8	9	10	11	12	Tentaive Date of MBBS 1ST Professional Exam	Intl Universal Health Coverage Day 12
	13	14	15	16	17	18	19		

	20	21	22	23	24	25	26	Quaid's Day / Christmas Day 25 Dec
	27	28	29	30	31			
		Public Holidays						
		Health & Awareness Days						
		Modules & College Vocations						

Prepared By: DME

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