STUDENT GUIDE STANDARD OPERATING PROCEDURES - 2019





INDUS MEDICAL COLLEGE

DEPARTMENT OF MEDICAL EDUCATION & EDUCATIONAL RESEARCH

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FOREWORD

In pursuance of mission statement of the Institution, we strongly believe in Quality

Education and best of standards under the Pakistan Medical & Dental Council

approved curriculum as per guidance of Liaquat University of Medical & Health

Sciences. This curriculum is in total alignment of vision of the Institution and an

effort to achieve the desired goals of our mission statement.

From the very outset at the time of admission the concepts of Basic Sciences are

inculcated and closely linked with the implication of Clinical Disciplines in form of

BCQ, Short Essay, OSPE and Clinical Scenario Based Teaching & Examination.

This is the followed by the Systematic and Organized Learnings in Clinical Sciences

with assessment in OSCE, Skill Lab, Ward Trainings and bedside Examination

Skills. Objective being to have high Quality Graduates.

Wishing you the best for the next five years.

Prof. Jan Mohammed A. Memon FRCS (UK), FCPS (PAK)

Chief Executive Indus Medical College and Hospital

Former Vice Chancellor (Founder) LUMHS Jamshoro

MBBS PROGRAMME SYLLABUS

1ST & 2ND YEAR	3 RD YEAR	4 TH YEAR	FINAL YEAR		
1. Anatomy General & Gross Anatomy Histology Embryology	1. General Pathology Bacteriology Parasitology	1. Special Pathology Hematology and Clinical Chemistry	1. Medicine & Allied Specialties 2. Surgery and		
2. Physiology	2. Pharmacology and Therapeutics	2. Community Medicine	Allied Specialties 3. Obstetrics &		
3. Biochemistry4. Behavioural	3. Forensic Medicine and Toxicology	3. Ophthalmology	Gynaecology 4. Paediatrics		
Sciences Communication Skills and Research Methodology 5. Islamic Pakistan	4. Behavioural Sciences Communication Skills and Research Methodology	4. E.N.T	Instructional, Interactive teaching, practical training, bedside learning and teaching in the subjects of		
6. Laboratory Instruction Dissection on cadavers Histology Physiology Biochemistry	Instructional, Interactive teaching, practical training, bedside learning and teaching in the subjects of	Instructional, Interactive teaching, practical training, bedside learning and teaching in the subjects of	 Internal Medicine General Surgery Obstetrics & Gynaecology Paediatrics Psychiatry Dermatology Pulmonology 		
7. Clinical / Hospital Visits/	 Surgery and allied specialties Medicine and allied specialties 	Ophthalmology E.N.T • Surgery and allied specialties • Medicine and allied specialties	 Anaesthesia Orthopedics Urology Neurosurgery Trauma and Emergency Care Radiology Other Subspecialties like Oncology, Cardiology, Nephrology etc 		

SUBJECTS TO BE EXAMINED

	1 st	2	ND		3 RD		4 TH		Final
Professional		Professional		Professional		Professional		Professional	
1.	Anatomy + Bio Medical Ethics	Bio : Ethi	tomy + Medical cs siology +	1.	General Pathology including Microbiology Parasitology	 2. 	Special Pathology Community Medicine	 2. 	Medicine and Allied Surgery and Allied
2.	Physiology + Informatio n Technolog y	Info Tech 3. Bioco + Co	rmation nnology chemistry ommunity	 3. 4. 	Basic Pharmacology and Therapeutics Forensic Medicine and Toxicology Behavioral Sciences	3.	Ophthalmolog y E.N.T	 4. 	Obstetrics & Gynaecolog y Paediatrics
3.	Biochemis try + Communit y Medicine				including Communication Skills				

GRAND SCHEME

In the next five years your teaching schedules will primarily comprise of the Pre-clinical and Clinical Sciences. As newer techniques in medical education are evolving, we are gradually shifting to an integrated approach to medical education. In this approach you will experience exposure to clinical science subjects, simulated patients and actual community, starting from the first year so that you can understand the practical application of the knowledge that you are gaining. Medical College differs a lot from primary education as you are expected to keep up with the curricula throughout the year. It is expected from you that you will initiate self-learning and will be proactive in seeking help in topics where required from various sources including the internet.

The next five years are aimed to develop you to be responsible, caring and professional physicians. Character development occurs as you interact with your peers, faculty, college administration and most importantly general population and patients. We aim to ensure that our graduates are recognized throughout their career not only by their excellence in their field but also by the humane qualities one expects to see in a good doctor. The key element is to give respect and to receive respect.

TEACHING AND LEARNING STRATEGIES

Indus Medical College, since inception has striven to keep up to date in offering quality education. In this respect different departments are innovatively adopting new educational strategies to facilitate student knowledge in interesting ways. The example of such strategies are as follows:

CLINICAL CONFERENCES

The basic departments (Anatomy, Physiology, and Biochemistry) in an effort to infuse horizontal and vertical integration in a traditional subject based system, introduced Clinico-Basic conferences every alternate Wednesday. These conferences are conducted for first and second year students. They involve clinical

specialties according to basic content thus enhancing the student learning to improve application of knowledge.

The clinical years under the Department of Medicine conduct Clinico-Pathological Conferences for fourth and final year students, every Monday morning in the Auditorium.

EARLY CLINICAL EXPOSURE (ECE)

Exposing newly inducted medical students of first and second years to the clinical side is a stepping stone to vertically integrate the educational system with horizontal basics. Main goal is orientation of these pre-clinical students with different modalities that are encountered in clinical content.

PEER ASSISTED LEARNING (PAL)

An innovative strategy adopted by Department of Community Medicine conducted every Thursday to inculcate in students the skills of self- learning, communication, collaboration, problem solving and leadership. The students act as tutors, organizers and information seekers.

PERSONAL TUTORIAL SYSTEM (PTS)

The students are divided into groups, every group being made of a proportion of students from each class. The group tutors will comprise senior faculty members from the institution. A student once placed in a group will remain in that group until he/she graduates. The tutor in charge of the group will meet the respective group of students according to the schedule drawn by the head or the institution. The objective of the personal tutorial group meetings is to keep the faculty and students in contact with one another to promote mutual good feelings and understanding. Each tutor looks personally into all difficulties of the students in the tutorial group.

SKILLS LAB

Indus Medical College has developed state of the art clinical skills laboratory for hands on training. The college has a separate designated area for this purpose. The laboratory has purpose built equipment designed for small group teaching and learning sessions. Adequate number of manikins, models and simulators are available for interactive teaching. The students are being taught from the first to final year. At present 72 essential skills are being taught to the medical students in five years. The skills lab has also published a book on clinical skills, which is available at the college bookshop. Work is being done to provide access to all the teaching and learning material including procedural videos to the students through internet.

It is mandatory for all students to attend clinical subjects of final year as part of internal evaluation and a certificate of successful completion of the session is issued at the end of final year.

EDUCATIONAL RESEARCH

Research leading to publications has been encouraged in Indus Medical College among students, with national and international publications in renowned journals. Examples are as follows:

- Students perceptions of Skills Lab
- Role of elective training. Waste of time or real usefulness
- **♣** Evolution of Skills Lab in a medical school

TEAM BASED LEARNING (TBL)

Team Based Learning is an active learning instructional strategy for which students will have opportunities to apply concept through individual work, team work with immediate feedback. It is learner centered, engaging students with problems which they will encounter in clinical practice.

Different departments conducted TBL for appropriate content in last years as Pathology, Forensic and Urology. Near future other departments are thinking on these lines of conducting TBL.

FACILITIES

Indus Medical College offers the students various facilities which are as follows:

HOSTEL FACILITIES

Girls Hostel is situated within the College Campus consisting of 36 Rooms fully furnished for girls, internees and for House Officers. The facilities include a dining hall, gymnasium, indoor sports, common room, study room and visitor room. There are separate security guards on duty for girl's hostel blocks round the clock. Standby generator is available to ensure electricity supplied during load shedding but heavy electrical appliances are not allowed to be run on them.

Hostel Committee is responsible for the hostel affairs headed by Chief Executive Officer and comprising Administrative Officer, Director Finance and Accounts and the Warden. In girl's hostel, there is Warden, Assistant Warden and a housekeeper. Boarders from other cities should report to the Warden and Assistant Warden in the premises of hostel. The rooms will be allocated to the students on the same day. Wi-Fi connectivity is available in hostels.

Proper attendance is marked daily; absentees are immediately notified to the Warden/Chairperson hostel committee. The external boundary is fenced by barbed wire to ensure safety of campus. Visitors coming to the hostel must deposit identification at reception before entering hostel.

The college has arranged separate Boys Hostel accommodation but the same was failed as the students preferred to live in the city of Hyderabad / Tando Muhammad Khan at their own.

↓ FIRST AID

A first aid facility is maintained by Administration of Indus Medical College and Hospital. A variety of first-aid services & Medicines is available, free of cost.

ACADEMIC REGULATIONS

Mandatory compliance is expected of the rules and regulations vide: Undertaking given on admission. All fines imposed and disciplinary actions taken will be mentioned on college leaving certificate.

DISCIPLINARY REGULATIONS

The students are expected to observe the following regulations in letter and spirit. Violating these regulations will result in fine, rustication, expulsion or any other punitive measure as deemed necessary by college administration.

- 1. Ragging is strictly prohibited. Anyone found guilty will be imposed with a heavy fine and other disciplinary actions including rustication/ expulsion from college/ hostel.
- 2. The students should wear white coat and their I.D tags all the time during academic hours.
- 3. Roaming in college premises is prohibited.
- 4. The appearance and dress code must be in accordance with the accepted norms and dignity of profession. The following are not allowed:
- a. Extreme hair styles
- b. Revealing clothes
- c. Visible body parts
- d. Body and face jewelry (except small ear studs, necklace and simple ring)
- e. Untidy dress
- f. Slippers
- 5. Pasting/ hanging posters, graffiti and promotion material of any kind is prohibited
- 6. Any type of political activity, demonstration, protest and procession are strictly prohibited. Offenders/ abettors will be expelled from college.
- 7. Any damage whatsoever caused by student will be recovered/ repaired 'as per actual' from him/ her. A fine may also be imposed.
- 8. All students must provide their and parents' / guardians' correct mailing address(es), phone numbers and emails. Any falsification in this regard

- will be considered as breach of discipline and any loss to college consequently, will be recovered form student in addition to fine.
- 9. Use of Alcohol and drugs and keeping of arms of any and all types are strictly prohibited. Offender will be expelled from college.
- 10. Falsification/ abuse of college record/ data shall be considered as a serious offence, resulting in strict disciplinary action.
- 11. Any misconduct/ negligence on the part of student which endangers the life, health and safety of other students and/ or staff or brings disrepute to college shall be considered as a serious offence and will be punished accordingly.
- 12. Impersonation of any academic, financial or otherwise gain shall be considered a serious offence and will be punished accordingly.
- 13. Theft and fraud will bring severe punitive action on offender.
- 14. Any intimidation/ harassment on the reasons of age, gender, race, disability or religious belief shall result in expulsion from college.
- 15. College and Hostel premises are strictly 'NO SMOKING ZONE.' Non-compliance in this regard will result in fine of Rs.1000/- and warning. The parents will also be intimated. On next violation, rustication of students will result. Third violation will result in expulsion from college.
- 16. Any kind of press conference, interview, writing articles etc. in media (print and electronic) are strictly prohibited violation shall be seriously punished.

CODE OF CONDUCT

REGULATIONS RELATING TO DISCIPLINE, CONDUCT, WELFARE AND CODE HONOUR FOR THE STUDENTS OF THE COLLEGE.

1. SHORT TITLE

These Regulations may be called the Indus Medical College (students Discipline, Conduct, welfare and code of honour) Regulation 2016.

2. <u>DATE OF COMMENCEMENT</u>

- a) The regulations shall come into force with immediate effect.
- b) These regulations shall apply to the students of Indus Medical College,
 Tando Muhammad Khan.

3. **DEFINITIONS**

- a) "Chairman" means chairman of the teaching department of the University.
- b) "Dean of faculty" means Dean of the relevant faculty of the university.
- c) "Director Academics" means an officer appointed by the university/
 Vice chancellor as a director Academics.
- d) "Disciplinary Committee" means the Committee established under statutes 11 of the 1st Statutes of the Indus medical College, Tando Muhammad Khan.
- e) "Director Student Affairs" means an officer appointed by the University/ Vice Chancellor as a director Students Affairs.
- f) "Incharge sports" means an officer appointed by the university/ Vice chancellor as a incharge sports.
- g) "provost" means an officer appointed by the university/ Vice chancellor as a provost.
- h) "College" means the Indus Medical College, Tando Muhammad Khan.
- i) "Principal and Chief Executive" means Principal and Chief Executive of the Indus Medical College, Tando Muhammad Khan.

4. GENERAL DISCIPLINE AND CODE OF HONOUR

Every student including student residing in hostel shall the following Code of Honour.

- a) Respect for order, morality, personal honour and rights of others.
- b) He/ she must be faithful in his religion, duties and respect the convictions of other in matters of religion and custom.
- c) He/ she must be loyal to his country and refrain from doing anything which tends to lower its honour and prestige.
- d) He/ she shall be truthful and honest in his dealing with all people.
- e) He/ she must respect the elders and be polite to all, especially to women, children, old people, the weak and the helpless.
- f) He/ she must respect his/ her teachers, officers and authorities of the university.
- g) He/ she must keep clean in body and mind, standing for clean speech, clean sports and clean habits.
- h) He/ she shall help his/ her fellow beings especially those in distress.
- i) He/ she must devote himself faithfully to his/ her studies.
- j) He/ she must observe austerity and protect public property.

5. ACTS OF INDISCIPLINE

The following among others, shall constitute acts of indiscipline, for which action may be taken against a students or students concerned by the officers mentioned in Regulations 2008.

a) Breach of public morals, such as:

Use of indecent or filthy language;

Use of immodest dress:

Use of undesirable remarks of gestures;

Disorderly behavior, such as shouting, abusing, quarrelling, fighting and insolence.

- a) Defiance of any university authority.
- b) False personification or giving false information or willful suppression of facts, information, cheating or deceiving.
- c) Visiting places declared 'out of bounds' for students.
- d) Visiting without a pass, places which are not to be visited without a pass issued by an officer or authority of the university entrusted for the purpose
- e) Inciting or staging a walkout, strike or an unauthorized procession in the university campus/hostels/examination hall (s).
- f) Shouting of slogans derogatory to the prestige of the university or the reputation of its officers or teachers.
- g) Consumption of alcoholic liquor, drugs or other intoxicants within or outside the university Campus.
- h) Violation of known standards of immorality.
- i) Actions/comments defamatory of or derogatory Islam.
- j) Smoking in a class room, laboratory, workshop, library, examination hall, convocation hall or during academic functions.
- k) Organize or take part in any function within the university Campus or a hall of residence or organize any club or society of students except in accordance with the prescribed rules and regulations.
- Collect money or receive donation(s) or pecuniary assistance for or on behalf of the university or any university organization except with the written permission of the Vice-chancellor.
- m) Neglect his work habitually or absents from class without reasonable cause or permission or the relevant officer of the university.
- n) Damage university property or the property of a fellow students or teacher or employee of the university.
- o) Do not pay fees, fines or other dues levied, within due time, under the university statutes and Regulation.
- p) Do not comply with the regulations relating to residence in the hostels or hall of residence or the Regulations relating to the wearing of prescribed uniform or academic dress.

q) Commit criminal, immoral or dishonorable act within or outside the university Campus prejudicial to the interest and reputation of the university.

6. OFFICIALS RESPONSIBLE FOR THE MAINTENANCE OF DISCIPLINE

Members of the teaching staff, Director Academic & Director Students Affairs in general and provost, warden and the incharge of sports of the university shall be responsible for the maintenance of order among the students, while under their charge, and disorderly behavior must be dealt with promptly.

7. **PENALTIES**

Punishment or penalty for any of the offence mentioned under the preceding Regulations shall be awarded according to gravity of the case, and may be any one or more of the following.

- a) Record an adverse remark in the black book maintained by the chairman/provost.
- b) Fine which may amount to a maximum of Rs. 1000/-
- c) Expulsion from class, hall or hostel for a specified period not exceeding six months.
- d) Detention from examination.
- e) Cancellation of examination results or with-drawal of a certificate granted.
- f) Withdrawal of the concession of free or half free-ship and or cancellation of scholarship granted by university; and;
- g) Expulsion or rustication from the university for a specified period or permanently.

Provided that no punishment shall be imposed without giving an opportunity to the student concerned to show Cause and a chance to hear and defend him/her, if he/she, so desires.

8. AUTHORITIES COMPETENT TO IMPOSE PENALTIES

The authority to impose punishment or penalty shall be exercised by the officers to the extent given below and shall be recorded in the enrollment register maintained by the registrar of the university.

9. THE PRINCIPAL & CHIEF EXECUTIVE MAY

- a) Fine a student upto Rs. 5000/- for each offence and deprive him of privileges and positions open to students;
- b) Detain a student from appearing in a university examination.
- c) Cancel the admission of a student or refuse to admit a student without giving any reason.
- d) Direct a principal to cancel the admission or not to admit a student.
- e) Cancellation of university scholarship; and
- f) Expel or rusticate a student for a specified period or for good.

10. THE DEAN OF A FACULTY MAY

- a) Fine a student upto Rs. 3000/- for each/ single offence; and;
- b) Expel a student from the faculty for 15 days.

11. THE CHAIRMAN/CHAIRPERSON OF UNIVERSITY TEACHING DEPARTMENT MAY

- a) Fine a student upto Rs. 1000/- for each/single offence; and
- b) Expel a student from the department for a week.

12. THE PROVOST MAY

- a) Fine a student upto Rs. 1000/- for each/single offence; and
- b) Expel a student from a hall or hostel for a specific period or for good.

13. FUNCTIONS OF THE DISCIPLINE COMMITTEE

The discipline Committee of the university shall deal with such serious cases of indiscipline as may be referred to it by the Vice-Chancellor and

punishment in such cases shall be imposed on consideration of the recommendation of the committee.

Provided that no punishment shall be imposed without giving an opportunity to the student concerned to show Cause and a chance to hear and defend him/her, if he/she so desires.

14. WELFARE COMMITTEE FOR STUDENTS

Each department of the university shall setup a welfare Committee to keep in touch with the students and to deal with their problems and look after their welfare in general. The members of the committee shall be nominated by chairman of the university teaching department.

IMPORTANT

Any candidate who fails the subject(s) of 1st/2nd Semester examination of MBBS/ Maximum in four chances of semester-I and four chances of semester-II) both semesters within two continue academic years) availed or un-availed being eligible for each examination shall not be eligible fresh medical education as a fresh candidate in MBBS. He or she shall cease to pursue further medical education in Pakistan in pursuance of rules framed by Pakistan Medical & Dental Council Islamabad. Their names shall be struck off from role of the university/ Medical colleges.

IMPORTANT

Any candidate who fails the subject(s) of 3rd/ 4th Semester examination of MBBS Maximum in four chances of semester-III and four chances of semester-IV) both semesters within two continous academic years) availed or un-availed being eligible for each examination shall not be eligible for fresh medical education as a fresh candidate in MBBS. He or she shall cease to pursue further medical education in Pakistan in pursuance of rules framed by Pakistan Medical & Dental Council Islamabad. Their names shall be struck off from role of the university/ Medical colleges.

LEARNING AND RESOURCE CENTER

The college has a spacious air-conditioned learning and resource center with covered area of 6950 sqft (at College and Hospital) consisting of a fully equipped library and reference books. The library is fully equipped to cater to the needs of faculty with more than 2824 books, including reference and lending and more than 600 journals on different subjects. There is facility of online journals national and internationally approximately 2894 online journals and other medical literature.

The lending section can accommodate 60 and reference section has a seating capacity of 100 users.

Digital library access facility is also available with 35 stations and 75,000 online journals.

A separate library is functioning in Indus Medical College Hospital within the campus with availability of more than 700 books on different subjects.

ADMINISTRATIVE SECTION

The Administrative Section of Indus Medical College is located in the main college building. This section is headed by Director Administration who works under the guidance of Principal, Indus Medical College. This section comprises of *Establishment Section* and *Students Section*. The Establishment Section is supervised by Senior Faculty and deals with administrative affairs, disciplinary matters of faculty and also building maintenance. Students Section is supervised by a separate committee which facilities the students in solving their problems relating to college and deals with all academic and disciplinary matters.

ACCOUNTS SECTION

The Accounts Department is located in the main college building. This department is headed by Director Finance & Accounts who work under the guidance of Principal, Indus Medical College. The Accounts Department deals with all financial

matters (college dues and hostel charges etc.) relating to the faculty and the students.

All the college and hospital accounts are internally audited.

All the accounts of college and hospital are being audited by a Registered Chartered Firm a prescribed by law.

BANKING FACILITY

All the MCB Bank Limited Branches are providing monetary transactions of students and staff salary.

INFORMATION AND TECHNOLOGY SECTION

The college has an excellent IT Department with a state of art Research & Resource lab. It provides digital library facility for students, staff and faculty members. IT Department compiles and preserves academic record of students including class attendance & internal assessment. IT Department provides high speed internet facility for downloading journals, articles & research material. Wi-Fi facility is available in all departments of the College and Indus Medical College Hospital. Students can avail internet facility in hostel through Wi-Fi.

Printing and scanning facility is available in IT Department and students get It assistance while making their presentations. We are managing SMS based communication system for intimating students about their academic activities. IT Department is also maintaining latest IP Surveillance system for theft control in hostel. Students may contact IT Department if they seek help for:

- Presentation preparation
- Assignment preparation / printing
- ♣ Study material search on web
- Wi-Fi Account for hostelized students
- Online Examination form filling for UUHS
- Online student portal access
- Student ID card preparation

SECURITY

Thirty Security Guards and two Security Supervisor under the control of a Retired Pakistan Army Personnel who have been appointed for round the clock security of the college. It is expected by faculty to show respect and empathy to these security guards who guard them at the risk of their lives.

♣ MOCK DRILLS

Mock drills for fire and terrorist attack are carried out and faculty is designated in different roles which requires serious and professional attitude.

STANDBY GENERATORS

Five standby generators are available in college for an uninterrupted electricity supply during load shedding.

PLAYGROUNDS

Fully developed playgrounds, for cricket, football, and hockey are available along with a Volleyball court and other facilities for indoor games.

TRANSPORT SYSTEM

In addition to excellent academic environment, the college transport system has eleven air conditioned, 18 seated HIACE Vans and two Suzuki Bolan Hi-Roofs which cater the needs of the commuters. The arrangement is contractual. All the vehicles are driven by experienced drivers providing door to door pick and drop for faculty and students. One way travelling time is less than 45 minutes for any route. In general, vehicles reach college at about 8:30 AM in morning.

Moreover, there is an Ambulance own by the college. Other transport facilities include excursion trips and shopping trips from hostels to city, sports events and Liaquat University of Medical & Health Sciences examination and many others.

LIST OF RECOMMENDED BOOKS

Anatomy:

- 1. Snell's Clinical Anatomy
- 2. Snell's Neuroanatomy
- 3. Langman's Medical Embryology
- 4. Laique Hussain Histology
- 5. Disector Vol. I. II. III Anatomy
- 6. The Developing Human KLM 8th Edt.
- 7. Junqueira's Basic Histology 12th Edt.
- 8. Clinical Oriented Anatomy. Keith Moore; 6th Edt.

Reference Books

- 1. Grant's Atlas of Anatomy
- 2. Netter Atlas of Anatomy 5th Edition
- 3. Difore Atlas of Histology
- 4. Gray's Anatomy
- 5. General Anatomy by Prof. Dr. Ghulam Ahmad

Physiology:

- 1. Textbook of Physiology By. Guyton & Hall.
- 2. Mushtaq Physiology Vol. I & II

Reference Book

1. Medical Physiology. Ganong

Biochemistry:

- 1. Harper's Biochemistry
- 2. Lippincott Biochemistry Vol. I,II

Reference Book

1. Devlin's Biochemistry

FOR 3RD YEAR MBBS

Forensic Medicine:

- 1. Principles and Practical of Forensic By. Nasib R. Awan
- Parkh's Textbook of Medical Jurisprudence, Forensic Medicine &
 Toxicology.
 By C.K Paik
- 3. Siddique Hussain's Forensic Medicine.
- 4. Simpson & Knight

Pathology:

- 1. Robbins & Cotran Pathological Basis of Disease 8th Edition.
- 2. Review of Medical Microbiology & Immunology By. Warren Levinson.
- 3. Essentials of human Parasitology By. Judith –S- Heelan, Frances. W. Ingersell.
- 4. Laboratory Diagnosis

By. Monica Chessbrough Vol. I & II

Reference Books

- 1. Walter & Israel General Pathology By. J.B Walter, Ic Talbot
- 2. Giovana Illustered Pathology
- 3. Curran's Atlas of Histopathology
- 4. Medical Microbiology & Immunology By. Jawetz

Pharmacology

- 1. Katzang Pharmacology
- 2. Lawerence Pharmacology
- 3. Lippincott Pharmacology
- 4. Goodman Gilman Pharmacology

FOR 4TH YEAR MBBS

Community Medicine

- Park's Textbook of Preventive & Social Medicine. K. Park 20th Edition.
 Bhanot Publisher
- 2. Public Health & Community Medicine. Mohamed Ilyas. 7th Edition. Time Medicine Division Publisher
- 3. Handbook of Biostatics, Daud S.NA Printers, 1st Edition

Pathology

1. Robbin's & Cotran Pathological Basis of Disease 8th Edition

Reference Books

- 1. Walter & Israel General Pathology By. J.B Walter, Ic Talbot
- 2. Giovana Illustered Pathology
- 3. Curran's Atlas of Histopathology

ENT

- 1. Diseases of EAR, Nose & THROAT by PL. Dhingra 5th Edition
- 2. ENT Ear Nose & Throat, Head & Neck by Muhammad Masud ul Haq
- 3. Logan Turner's Disease of Ear, Nose & Throat 11th Edition

Reference Books

- 1. Ballenger's Otorhinolaryngology, Head & Neck Surgery 16th Edition
- 2. Scott Brown's Otorhinolaryngology, Head & Neck Surgery 7th Edition

Ophthalmology

- 1. Parson's Disease of Eye
- 2. Clinical Textbook of Ophthalmology by Saleem Akhtar 3rd Edition
- 3. Book of Ophthalmology by Dr. Shafi M. Jatoi
- 4. Kanski's Ophthalmology

FOR FINAL YEAR MBBS

Medicine

- 1. Davidson Principles & Practice of Medicine
- 2. Macleod's Clinical Examination
- 3. Hutchinson Clinical Methods
- 4. Kumar & Clark Clinical Medicine
- 5. CMDT Clinical Diagnosis & Treatment

Reference Books

- 1. Harrison's Text Book of Internal Medicine
- 2. Cecil's Text Book of Internal Medicine

Surgery

- 1. Bailey's Love. Short Practice of Surgery
- 2. Hamilton Bailey's Surgery

Obstetrics & Gynaecology

- 1. Ten Teachers Gynae & Obs.
- 2. Hacker's & Moore's Essential of Obstetrics & Gynaecology

Reference Books

- 1. Jeffecoate's Test Book of Gynaecology
- 2. Dewhurst's Text Book of Obstetrics & Gynaecology
- 3. Turnbull's Obstetrics
- 4. William's Obstetrics
- 5. High Risk for Obstetrics
- 6. Shaw's Text Book of Gynaecology
- 7. Novak's Text Book of Gynaecology

Paediatrics

- 1. Pakistan Paediatrics Association's Text Book of Paediatrics
- 2. Nelson's Text Book of Paediatrics
- 3. Paediatrics by Perviaz Akbar