

SCHEME OF STUDIES

8 SEMESTERS (4-YEAR) BS MEDICAL LABORATORY TECHNOLOGY

SEMESTER-I		
Code	Title	Credit Hours
MLT 00101	Biochemistry-I	4(3+1)
MLT 00102	Human Physiology	4(3+1)
MLT 00103	Human Anatomy	4(3+1)
MLT 00104	Fundamentals of Clinical Lab	2(1+1)
FIA 00291	Islamic Studies/ Ethics	2(2+0)
FAL 00281	Functional English	3(3+0)
FMS 00192	Life and Academic Skills	2(2+0)
Total Credit Hours		21
SEMESTER II		
MLT 00201	Biochemistry-II	4(3+1)
MLT 00202	General Pathology	3(2+1)
MLT 00203	General Microbiology	3(2+1)
FAL 00351	Ideology and Constitution of Pakistan	2(2+0)
FAL 00282	Expository writing	3(3+0)
FOC 00301	Applications of Information and Communication Technologies (ICT)	3(2+1)
FSS 00154	Civics and Community Engagement	2(2+0)
Total Credit Hours		20
SEMESTER III		
MLT 00301	General Pharmacology	2(2+0)
MLT 00302	Clinical Bacteriology	3(2+1)
MLT 00303	Medical Laboratory Instrumentation	2(1+1)
MLT 00304	Basic Hematology	3(2+1)
FPM 00321	Quantitative Reasoning I	3(3+0)
FPM 00081	Geography	3(2+1)
FIA 00293	Arabic (as language)	2(2+0)
Total Credit Hours		18
SEMESTER IV		
MLT 00401	Advance Hematology	3(2+1)
MLT 00402	Chemical Pathology	3(2+1)
MLT 00403	Systemic Diagnostic Bacteriology	3(2+1)
MLT 00404	Biotechnology	3(2+1)
FPM 00322	Quantitative Reasoning II	3(3+0)
FMS 00193	Entrepreneurship (Education)	2(2+0)
FIA 00292	Arabic for Understanding the Quran	---
Total Credit Hours		17
SEMESTER V		
MLT 00501	Histopathology & Histotechnology	3(2+1)

MLT 00502	Clinical Immunology	3(3+0)
MLT 00503	Bioinformatics	3(2+1)
MLT 00504	Medical Virology	3(2+1)
MLT 00505	Clinical Lab Practice-I	3(1+2)
MLT 00506	Biosafety and Biosecurity: Principles and Practices	2(2+0)
Total Credit Hours		17
SEMESTER VI		
MLT 00601	Medical Parasitology	3(2+1)
MLT 00602	Molecular Biology	3(2+1)
MLT 00603	Blood Banking and Transfusion	3(2+1)
MLT 00604	Medical Mycology	3(2+1)
MLT 00605	Serology	3(2+1)
MLT 00606	Epidemiology	2(2+0)
Total Credit Hours		17
SEMESTER VII		
MLT 00701	Advanced Diagnostics and Biomedical Techniques	3(2+1)
MLT 00702	Forensic Medicine	2(2+0)
MLT 00703	Cytology and Cytogenetics	3(2+1)
MLT 00704	Clinical Pathology	3(2+1)
MLT 00705	Research Methodology	3(3+0)
MLT 00706	Clinical Lab Practice-II	3(1+2)
Total Credit Hours		17
SEMESTER VIII		
MLT 00802	Clinical Lab Management and Quality Control	3(3+0)
MLT 00803	Clinical Endocrinology	3(3+0)
MLT 00804	Research Project	6(6+0)
MLT 00805	Elective Course	3(3+0)
Total Credit Hours		15
TOTAL DEGREE CREDIT HOURS		142

Note: 1 Credit hour of practical is equal to two contact hours as per HEC rules.

Note: Presently in place of an Elective course any one of the following subjects will be taught:

1. Advance Hematology
2. Advance Chemical Pathology
3. Advance Clinical Immunology
4. Advance Clinical Microbiology
5. Immunohistochemistry
6. Immunohematology

7. Advance serology
8. Advance Histopathology & cytogenetics
9. Molecular Biology
10. Advance Blood Banking
11. Medical Genetics

Note:

1. The recommended credit hours for the completion of BS should not be less than 120 credit hours as required by HEC.
2. Internship is recommended in Public/Private sector organizations during/after the last four semesters, whenever possible. The allocation of thesis topic and acquisition of data with the consultation of concerned supervisor shall start from the beginning of VII semester.
3. Elective courses will be offered subject to availability of resources and resource person