

Table of Specification (BS MLT Admission 2018-19)

(* Basic Level of Higher Secondary School Certificate)

Total Marks: 180 Marks

Total Time: 03 Hours

a.	HAEMATOLOGY& BLOOD BANKING	-	25%
b.	CHEMICAL PATHOLOGY & CLINICAL PATHOLOGY	-	25%
c.	MICROBIOLOGY & SEROLOGY	-	20%
d.	ELECTIVE ANATOMY & MICRO TECHNIQUES	-	20%
e.	ENGLISH	-	10%

HAEMATOLOGY& BLOOD BANKING
Composition and Function of Blood
Collection of Blood
Anticoagulants
Hematopoiesis
White Blood Cells
Total Leucocytes Count (T.L.C)/ Leucocytosis/ Leucopenia
Differential Leucocyte Count (DLC)
Platelets Count/Thrombocytosis/ Thrombocytopenia
Development of Red Blood Cells
Normal Values of RBCs
Poly cythemia
Abnormalities of RBCs
Malarial Parasites (MP)
Haemoglobin
Absolute Values
Anaemia/ Classification of Anaemia
Laboratory Diagnosis of Anaemia
Erythrocytes Sedimentation Rate (ESR)/Packed Cell Volume (PCV) or Haematocrit
Preparation of Blood Smears

Staining of Blood Smears or Blood Film
Blood Coagulation Factors
Blood Clotting Time
Prothrombin Time (PT)
Activated Partial Thromboplastin Time (APTT)
Bleeding Time
Bone Marrow
Acute Myeloblastic Leukaemia (AML/ALL)
Chronic Leukaemia (CML/CLL)
Blood Banking
Selection of Blood Donor
Blood Grouping, ABO and RH
ABO Grouping Techniques
Coomb Test of Anti globulin Test
Major Cross Match
Blood Transfusion Reaction
CHEMICAL PATHOLOGY & CLINICAL PATHOLOGY
Units of measurement
Basic laboratory equipment <ul style="list-style-type: none"> • Spectrophotometers • Flame Photometer/ Electrolytes analyzer • Water bath • Laboratory Centrifuge

<ul style="list-style-type: none"> • Balance • PH Meter • Mixers • Incubators
Urine examination
Examination of faeces
Examination of cerebrospinal fluid (CSF)
Plasma glucose estimation
Routine liver function tests <ul style="list-style-type: none"> • Serum bilirubin • Serum alanine aminotransferase (ALT) • Serum alanine phosphatase (ALP) • Serum total protein & albumin
Renal function tests <ul style="list-style-type: none"> • Serum creatinine • Creatinine clearance • Urea • Uric Acid
Plasma electrolytes <ul style="list-style-type: none"> • Plasma sodium • Plasma potassium • Plasma bicarbonate • Plasma Calcium
Cardiac Markers <ul style="list-style-type: none"> • Cardiac Enzymes • Cardiac Troponins (c Tn)
MICROBIOLOGY & SEROLOGY
Bacterial Cell Structure
Classification of Bacteria
Gram-Positive Cocci
Gram-Negative Cocci
Gram-Positive Bacilli

Gram-Negative Bacilli
Spirochetes and Serology of Syphilis
Mycobacteria
Collection of Samples
Methods of Sterilization
Microscope
Procedures for Examining Clinical Specimens
Staining Procedures used in Bacteriology
Preparation of Culture Media
Biochemical Tests for Identifying Bacteria
Testing the Sensitivity of Anti-microbials
Basic Virology
Lab Diagnosis of Viral infection
Common Viral Diseases (Measles, Rabies, Polio and Hepatitis)
Protozoa <ul style="list-style-type: none"> • Entamoeba histolytica • Trichomonas • Leishmania tropica
Sporozoa <ul style="list-style-type: none"> • Plasmodium vivax • Plasmodium ovale • Plasmodium malariae • Plasodium falciparum
Helminths <ul style="list-style-type: none"> • Ascaris lumbricoides • Ancylostoma duodenale • Enterobius vermicularis
Detection of Occult Blood in Faeces
ELECTIVE ANATOMY & MICRO TECHNIQUES
Introduction

- Anatomy
- Histology
- Histopathology
- Microtechnique

Tissues

- Epithelial
- Muscle
- Nervous
- Connective

Basic Knowledge of Human Body System

- Cardio Vascular System
- Digestive System (G.I.T)
- Nervous System
- Respiratory System
- Urinary System
- Reproductive System
- Endocrine System

Microtechnique (Basic Knowledge)

- Histopathology Samples
- Biopsy
- Cytology/ Cytopathology
- Fixation of Tissue
- Tissue Processing
- Embedding of Tissue
- Tissue Sectioning
- Parts of Microtoma
- Frozen Sections
- Cryostate
- Classification of stains
- Hematoxylin and Eosin Staining

ENGLISH

Same level as for MBBS/BDS entry test