

## **EXAMINABLE AREAS FOR BSC MEDICAL LABORATORY SCIENCE**

### **MICROBIOLOGY**

1. Specimen Reception/ Documentation/ Management for Bacteriological tests.
2. Parasitology tests:-Specimen reception, Stool & urine specimens for routine analysis, filarial test
3. Urine specimen: Routine examination, pregnancy test
4. Blood specimen for Filarial test
5. Use and care of various equipment
6. Preparation of bacterial and fungal culture media used in routine microbiology laboratory e.g., CLED agar, SS agar, TCBS agar, Selenite F broth, alkaline peptone water, Sabouraud's dextrose agar, MacConkey agar, Mueller-Hinton agar, Agar slant tubes, etc.
7. B- Common reagents used in microbiology
8. Sample Collection (for microbiological analysis)
9. Sample reception/documentation
10. Sample processing for routine and special microbiological tests & stains: Perform & Interpret these procedures

11. Processing of specimens on appropriate culture media for isolation and identification of pathogenic organism. Use of standard streaking techniques - Incubation of inoculated plates at appropriate temperature and atmospheric condition (aerobic, anaerobic, CO<sub>2</sub>)
12. Microbial identification - Selection of single colony of possible pathogen and streaking purity plates.-Special Techniques, Procedures & biochemical tests- Use of 0.5 McFarland standard
13. Special Microbiology tests
14. Antibiotic susceptibility testing
15. Serology: Molecular Infectious Disease Diagnostic testing \*Perform and Interpret routine serological and immunological techniques. (serodiagnostics)
16. Reporting and verification
17. Basic Mycology
18. Quality control (QC) applications in microbiology Laboratory: -Application of knowledge of infection prevention & control (IPC) measures

#### **HAEMATOLOGY & TRANSFUSION SCIENCE**

1. Perform phlebotomy: Use of good communication skills.
2. Reagents preparation
3. Sample reception and processing
4. Sample analysis /verification of results
5. Blood Bank Laboratory
6. Ability to interpret routine blood tests (validation of results)

#### **CLINICAL CHEMISTRY (CHEMICAL PATHOLOGY)**

1. Sample Reception & Accessioning
2. Instruments for Biochemical tests
3. Important biochemical profiles & interpretations of results
4. Writing of biochemical tests results
5. Other special clinical chemistry tests
6. Quality control

#### **HISTOPATHOLOGY**

1. Use and care of various equipment
2. Specimens reception
3. Techniques and procedures:
4. Chemical staining