B.Sc.(M.L.T.) [3rd Year]

BF/2009/07

Special Histology & Histochemical methods

M.M. : 100 Time : 3 Hours

Note: *Attempt any* **TEN** *questions.*

1. Discuss the essential features of a Cryostat. What are the important tissues of frozen section. [10]

2. Discuss hormonal assessment with Cervical cytologic techniques. [10]

3. **Write notes on**:
   a. Structure of amyloid and its staining reactions. [5]
   b. Methods employed for demonstration of M. Tuberculosis in tissue sections. [5]

4. Discuss the principles and working of Electron microscope. [10]

5. Discuss the various investigations done in a case of Rheumatoid arthritis. [10]

6. Mention the various Immunoglobulins? Discuss the structure of one of these with the help of a diagram. [10]

7. Discuss the various stains used in the interpretation of a Liver biopsy. [10]

8. Laboratory precautions in handling of HIV infected specimens. [10]

9. **Write short notes on**:
   a. Immunology of Cancer. [5]
   b. Dendritic cells. [5]

10. Laboratory diagnosis of SLE. [10]

11. Classify Mucins and their staining character. [10]

12. Principles of aspiration cytology, indications and utility of the technique. [10]

B.Sc.(M.L.T.) [3rd Year]

BF/2009/07

Clinical Biochemistry methods

M.M. : 100 Time : 3 Hours

Note: Attempt all questions.

1. What is Jaundice. Write principles of estimation of Bilirubin. What is normal range of Bilirubin. [20]

2. **Write short notes on**:
   a. Electrolytes estimation. [10]
   b. Serum Calcium estimation. [10]

3. Write about analysis of CSF and its significance. [20]

4. **Write briefly on**:
   a. Insulin tolerance test. [10]
   b. Acid phosphatase enzyme. [10]

5. a. What is External quality control. [10]
   b. How records should be maintained in an ideal laboratory. [10]

B.Sc.(M.L.T.) [3rd Year]

BF/2009/07

Applied Haemtology

M.M. : 100 Time : 3 Hours

Note: Attempt any **10(TEN)** questions**.**

1. Discuss laboratory diagnosis of Megaloblastic anaemia. [10]

2. How will you diagnose DIC in the laboratory. [10]

3. Classify Leukemias. [10]

4. Discuss briefly the procedure for Chromosomal analysis from the bone marrow. [10]

5. How is Hemophilia diagnosed. [10]

6. What are the functions of Platelets and how do you study them. [10]

7. How is Plasma volume determined using I^{125}. [10]

8. What are Screening tests in Coagulation? Describe any 2 in detail. [10]

9. How do you diagnose immune hemolytic anemia? [10]

10. What is the procedure and scoring system for Leucocyte Alkaline Phosphatase staining. [10]

11. Describe the Euglobulin Clotlysis test. [10]

12. How is RBC mass determined. [10]

B.Sc.(M.L.T.) [3rd Year]

BF/2009/07

Applied Microbiology

M.M. : 100 **Time : 3 Hours**

Note: ***Attempt all questions*.**

1. Discuss various methods to determine total and viable counts of bacteria. [20]

2. Discuss laboratory diagnosis of Cholera. [10]

3. **Write short notes on**:
   a. Cold agglutination. [5]
   b. Fluorescent treponemal antibody test. [5]

4. **Write briefly on**:
   a. Dermatophytes. [10]
   b. Rapid diagnostic methods in microbiology. [10]

5. **Write briefly on**:
   a. ELISA test. [10]
   b. Hepatitis B vaccination. [10]

6. **Write short notes on**:
   a. Blood flukes. [10]
   b. Uses of animals in parasitology. [10]
