

**First Year B.Sc MLT Degree Regular/Supplementary Examinations
August 2019**

Basic Medical Laboratory Sciences & Hematology

(2016 Scheme)

Time: 3 Hours

Total Marks: 100

- Answer all questions.
- Draw diagrams wherever necessary.

Essay

(2x10=20)

1. Define anemia. Discuss the different methods of estimation of hemoglobin. (2+8)
2. Describe the procedure of blood counts (RBC, WBC and platelets) by manual method. What is bulk dilution technique. Discuss briefly about quality control methods in cell count. (4+3+3)

Short notes

(10x5=50)

3. Principles and working of light microscope.
4. Anticoagulants in hematology.
5. Automated blood cell counters.
6. Supravital stains.
7. Bone Marrow examination.
8. Abnormal blood cells.
9. Hemocytometers.
10. Reticulocyte Count
11. Micrometry.
12. Blood collection methods.

Answer briefly

(10x3=30)

13. Megakaryocytes.
14. Sickling test
15. Micropipettes.
16. Factors affecting ESR
17. Cleaning of laboratory wares.
18. Thick smear preparation.
19. Hb F demonstration
20. Red cell indices
21. Role of laboratory in health care delivery.
22. Absolute eosinophil count.