

**First Year B.Sc MLT Degree Regular/Supplementary Examinations
November 2024**

Basic Medical Laboratory Sciences & Hematology - I

(2016 Scheme)

Time: 3 Hours

Total Marks: 100

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary.*

Essay**(2x10=20)**

1. What are the principles and methods of haemoglobin estimation. Mention the advantages and disadvantages of the commonly used methods (7+3)
2. Mention the components and preparation of Leishman's stain. Briefly describe about thin and thick smear preparations (5+5)

Short notes**(10x5=50)**

3. Platelet count
4. Methods of ESR estimation
5. Laboratory safety
6. Haematocrit estimation
7. Methods of blood collection
8. Red cell indices
9. Differential count
10. Reticulocyte count
11. Anticoagulants in clinical laboratory
12. Collection and indications of bone marrow.

Answer briefly**(10x3=30)**

13. Absolute eosinophil count
14. Preparation of cleaning solutions in clinical laboratory
15. Test for sickling.
16. Phase contrast microscopy
17. Bulk dilution
18. Light microscopic micrometry
19. Abnormal RBCs.
20. Quality control methods in cell counts
21. Erythropoiesis
22. Spherical aberration
