

First Year B.Sc MLT Degree Supplementary Examinations
October 2025
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 different methods of hemoglobin estimation. Mention the advantages and disadvantages of two commonly used methods (3+7)
2. Enumerate anticoagulants. Discuss their functions, uses, advantages and disadvantages (2+8)

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

3. Dark ground microscope
4. Reticulocyte count
5. First aid in the laboratory
6. ESR estimation
7. Automated blood cell counters
8. Absolute eosinophil count
9. Preparation and staining of thick smear
10. Precautions to prevent physical hazards in the laboratory
11. Preparation and use of buffer solutions in staining
12. Universal safety precautions

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

13. Mean Corpuscular Hemoglobin Concentration (MCHC)
14. Glassware cleaning
15. Release of medical information
16. Megakaryocyte
17. Improved Neubauer counting chamber
18. Turk's fluid
19. Neutrophilia – definition and causes
20. Parameters in Complete Blood Count (CBC)
21. Stages of myelopoiesis
22. Stains for malarial parasite
