

First Year B.Sc MLT Degree Examinations September 2018**Basic Medical Laboratory Sciences & Hematology****(2016 Scheme)****Time: 3 Hours****Total Marks: 100**

- Answer all questions.
- Draw diagrams wherever necessary.

Essay**(2x10=20)**

1. Explain the preparation of blood smear and staining .How will you perform differential Leukocyte count (5+5=10)
2. Define ESR. Describe the three phases, four methods of estimation of ESR. (2+8) note on the factors affecting ESR. (1+3+4+2)

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

3. Numerical aperture
4. Care of a compound microscope
5. Cleaning of pipettes
6. Physical hazards in the lab
7. Quality control in hemoglobin estimation
8. Electron microscopy
9. Venous blood collection
10. Absolute eosinophil count
11. Sickling tests
12. Heparin

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

13. HGF - haemopoietic growth factors
14. Preparation of anticoagulant bottles
15. Calculation of TLC (total leukocyte count)
16. Morphology of a normal monocyte
17. Neubauer counting chamber
18. Kleihauer's test
19. Errors in manual platelet count
20. Buffer solutions for staining
21. Use of polycarbonate in the lab
22. "Micrometry
