

QP CODE: 115012

Reg. No:

First Year B.Sc MLT Degree Supplementary Examinations July 2023

Basic Medical Laboratory Sciences & Hematology

(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 methods of blood collection. Briefly describe the preparation and staining of thick and thin smears. (3+7)
2. What is ESR. What are the stages of ESR. Briefly describe the advantages, disadvantages and sources of errors in different methods of ESR estimation. (1+2+7)

Short notes

(10x5=50)

3. Packed cell volume.
4. Red cell indices and their significance.
5. Principles of light microscopy.
6. Laboratory hazards and safety measures.
7. Osmotic fragility test.
8. Reticulocyte count.
9. Bone marrow examination.
10. Total WBC count.
11. Preparation of cleaning solutions, care of laboratory wares and utensils.
12. Anticoagulants used in hematology.

Answer briefly

(10x3=30)

13. Principles of automated blood cell counters.
14. Romanowsky stains.
15. Sickling test.
16. Micrometry.
17. Glass blowing techniques.
18. Erythropoiesis.
19. Buffy coat smears.
20. Preparation and use of buffer solutions in staining.
21. Manual platelet count.
22. Different types of objectives and eyepieces.
