

**QP CODE: 105012**

**Reg No:.....**

**First Year B.Sc MLT Degree Examinations, September 2015**

**BASIC MEDICAL LABORATORY SCIENCE & HAEMATOLOGY**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Draw Diagrams wherever necessary.

**Essay**

**(2x10=20)**

1. Classify microscopes . Describe the principles of working of a compound microscope and explain the functions of the various components of this microscope.
2. Classify the glass wares used in the laboratory. Describe its composition, properties and grades of glass used in the glass wares.

**Short notes**

**(10x5=50)**

3. Venepuncture
4. Buffer solutions for staining
5. Differential leukocyte count
6. RBC count
7. Bulk dilution methods for total count of WBC's
8. Errors in manual TC
9. ESR
10. Identification of abnormal hemoglobins
11. Reticulocyte count
12. Morphology of cells in myelopoiesis.

**Answer briefly**

**(10x3=30)**

13. Lancet
14. Types of injection needles and its uses
15. Citrate based anticoagulants
16. Preparation of bone marrow smears
17. Fuchs rosenthal counting chamber
18. Sickling phenomenon in RBC's
19. Normal parameters of red cells
20. Cyanmethaemoglobin method.
21. Sources of error in Leishman's staining
22. Lymphocytosis-definition and causes

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