

**Third Year B.Sc MLT Degree Supplementary Examinations March 2017**

**CYTOLOGY & TRANSFUSION TECHNOLOGY**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Draw Diagrams wherever necessary.

**Essay**

**(2x10=20)**

1. Enumerate the stains used in cytology. Describe the procedure of the commonest staining method used for wet fixed smears. Explain the problems in staining and the methods of correction. (2+4+4=10)
2. What are the advantages of blood components. Describe in detail the various blood components, its preparation, storage and uses. (3+7=10)

**Short notes**

**(10x5=50)**

3. Processing of sputum samples
4. Organization of cytology lab
5. Devices for collection of gynecological smears
6. Monolayer smear
7. Inflammatory lesions of female genital tract
8. MNS blood group system
9. Factors affecting antigen-antibody reactions
10. Acquired B antigen
11. Copper sulphate method of hemoglobin estimation
12. Blood storage lesions

**Answer briefly**

**(10x3=30)**

13. Spray fixatives
14. Shorrs stain
15. Cell block-preparation and uses
16. Rapid methods in cytology
17. Cells in urine cytology
18. Hemopoietic stem cell
19. Zeta potential
20. Deoxyribonucleic acid (DNA)
21. Massive transfusion
22. Elisa test