

**STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI - 600 086**  
**(For candidates admitted from the academic year 2019 – 2020 & thereafter)**

**B. Sc. DEGREE EXAMINATION, APRIL 2024**  
**BRANCH VI.A. – ADVANCED ZOOLOGY AND BIOTECHNOLOGY**  
**FOURTH SEMESTER**

**COURSE : MAJOR – ELECTIVE**  
**PAPER : MEDICAL LABORATORY TECHNOLOGY**  
**SUBJECT CODE : 19ZL/ME/LT45**  
**TIME : 3 HOURS** **MAX. MARKS: 100**

**SECTION A**

**ANSWER ALL THE QUESTIONS.** **(10 x 3 = 30)**

1. Comment on Turk's fluid.
2. Tabulate any three differences between normal and abnormal RBCs.
3. What is meant by GLP?
4. Enumerate the symptoms of Tuberculosis.
5. Differentiate between absolute and relative polycythemia.
6. Highlight the potential health hazards of Biomedical Wastes.
7. What is the normal range of RBC (in females), WBC and Platelets?
8. Mention any three transfusion reactions.
9. Comment on the clinical significance of fructose in seminal fluid.
10. Highlight the clinical significance of PAP smear.

**SECTION B**

**ANSWER ANY FIVE QUESTIONS** **(5 x 6 = 30)**

11. Give a brief account on sterilization of laboratory items by heat.
12. Discuss in detail about the blood collection techniques.
13. Describe the estimation of Haemoglobin by Sahli's method.
14. Outline the methodology for estimating bleeding time and clotting time.
15. Write a note on the principle, procedure and clinical relevance of AST estimation.
16. Enumerate the procedure of blood smear preparation for differential count of WBC and add a note on its significance.
17. Give a detailed account on AIDS.

**SECTION C**

**ANSWER ANY TWO QUESTIONS** **(2 x 20 = 40)**

18. Give a detailed account on the estimation of Packed Cell Volume and Erythrocyte Sedimentation Rate.
19. Explain ABO blood grouping and Rh typing.
20. Discuss in detail about the macroscopic and chemical analysis of urine.
21. Write the principle, procedure and clinical relevance of Blood cholesterol estimation.

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