STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086
(For Candidates admitted during the academic year 2005 –06 & thereafter)
SUBJECT CODE: ZL/MC/LT54

B.Sc. DEGREE EXAMINATION NOVEMBER 2007
BRANCH VI A: – ADVANCED ZOOLOGY & BIOTECHNOLOGY
FIFTH SEMESTER

COURSE   : MAJOR CORE
PAPER   : MEDICAL LABORATORY TECHNOLOGY
TIME   : 3 HOURS   **MAX. MARKS: 100**

SECTION – A

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

1.   **FILL IN THE BLANKS**
    a) _____ tube is used to estimate ESR.
    b) Removal of microbes from the glasswares is known as _____.
    c) The p^H of urine sample of man is_____.

2.   **DISTINGUISH BETWEEN**
    a) Anemia and Polycythemia
    b) Coagulation and Agglutination
    c) Plasma and serum

3.   Draw neat labeled diagram of the magnified view of counting area of Neubauer Chamber.

4.   What is a) Prothrombin Time
                b) Oligozoospermia
                c) Occult blood

5.   Give the normal range for
    a) Clotting Time   b) PCV   c) Blood urea.

6.   **STATE WHETHER THE FOLLOWING STATEMENTS ARE TRUE OR FALSE:**
    a) Hayem's fluid is essential for estimation of Haemoglobin.
    b) Mycobacterium causes tuberculosis.
    c) Bilirubin is the bile salt.
    d) High count of leucocytes is called leucopenia.
    e) Deficiency of Insulin results in Diabetes mellitus.
    f) Sterilisation of milk is by Incineration.

7.   **MATCH THE FOLLOWING**:
    a) Bile pigment   -   Blood group
    b) Autoclave   -   HIV
    c) Clumping   -   Biliverdin
    d) Jamdice   -   Diabetes
    e) Western Blot   -   Hepatitis
    f) Polyurea   -   Sterilisation

8. Give the diagnostic significance of the following tests.
    a) Bleeding time b) Platelet count   c) Blood urea by DAM method.

9. Give the expansion for the following.
    a) DC   b) PCV   c) SGOT

10. Name the causative organism for
    a) Filariasis   b) Giardiasis   c) Cholera

SECTION – B

ANSWER ANY FIVE QUESTIONS   (5x 6 = 30)

11. Write the procedure for extimation of ESR.   Give the normal value.

12. Draw neat labeled diagram of types of leucocytes. Give the normal value of DC.

13. Write a short note on physical features (Qualitative) analysis of motion.

14. Discuss briefly the pathological changes that occur in infection of Hepatitis

15. Describe the procedure for the estimation of Blood urea.

16. Explain briefly the physiology of SGPT.

17. Explain how Erythroblastosis foetalis is caused?

SECTION – C

ANSWER ANY TWO QUESTIONS   (2 x 20 = 40)

18. Give an account of principle procedure and normal value for estimation of RBC
    Count. Give the clinical Significance.

19. Write an essay on blood clotting mechanism and the theory involving it.

20. Classify Biomedical wastes and add a note on Biomedical Waste management.

21. Describe in detail the life cycle of Plasmodium.

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