STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086
(For Candidates admitted during the academic year 2010 –11)
SUBJECT CODE: ZL/MC/LT34

B.Sc. DEGREE EXAMINATION NOVEMBER 2011
BRANCH VI A: – ADVANCED ZOOLOGY & BIOTECHNOLOGY
THIRD 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) Glasswares are sterilized in _____.
   b) _____ is a natural anticoagulant.
   c) Ideal drug for Tuberculosis is_____.

2. **DISTINGUISH BETWEEN**
   a) Leukemia and Leucopenia
   b) Plasma and serum
   c) Western blot and Southern blot

3. Draw neat labeled diagrams of Polymorpho-nuclear leucocytes.

4. **WHAT IS**
   a) Normal saline
   b) Necrozoospermia
   c) Haemopoiesis

5. Give the normal range for
   a) Fasting Glucose
   b) Platelet count
   c) Packed cell volume for women

6. **STATE WHETHER THE FOLLOWING STATEMENTS ARE TRUE OR FALSE :**
   a) Truck's fluid is prepared from acetic acid.
   b) Na^+ ion is essential for blood coagulation.
   c) Cerebrospinal fluid is usually collected by spinal puncture.
   d) If cholesterol level is elevated a triglyceride test is called for.
   e) Hepatitis B virus is a RNA virus.
   f) AST is otherwise known as SGPT.

7. **MATCH THE FOLLOWING :**

a) Milk	- i) Du test
b) Rh	- ii) Fuchs-Rosenthal counting chamber
c) CSF	- iii) Jaundice
d) Hepatitis	- iv) Pasteurization
e) Pregnancy	- v) Liver function test
f) ALT	- vi) Gravindex test

..2

8. Give the diagnostic significance of the following tests:
    a) RBC count
    b) DAM method
    c) Bleeding time
9. Give the expansion for the following:
    a) ESR
    b) TC
    c) ELISA
10. Name the causative organism for:
    a) Amoebiasis
    b) Filariasis
    c) Cysticercosis

SECTION – B (5 X6 = 30 Marks)

ANSWER ANY FIVE QUESTIONS

11. Give a short note on autoclave and its uses.
12. Explain Sahli's method for haemoglobin estimation.
13. Write a short account on blood transfusion.
14. Briefly explain the microscopic examination of urine.
15. Discuss the significance of Alanine Transaminase estimation.
16. Give an account on sandwich ELISA.
17. How will you identify different stages of *Plasmodium* in blood smear?

SECTION – C (2X20 = 40 Marks)

ANSWER ANY TWO QUESTIONS

18. Explain the total and differential counts of WBC.
19. Give an account of pathology and prevention of HIV.
20. Describe various methods of serum cholesterol estimation. Add a note on the clinical relevance of this estimation.
21. Write an essay on biomedical wastes and its management.

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