STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086
(For Candidates admitted during the academic year 2015 – 2016)

SUBJECT CODE: 15ZL/ME/LT55

B.Sc. DEGREE EXAMINATION - NOVEMBER 2017
BRANCH VI A – ADVANCED ZOOLOGY & BIOTECHNOLOGY
FIFTH SEMESTER

COURSE : MAJOR ELECTIVE
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) Culture media are sterilized by _____.
   b) EDTA in a vacutainer is a/an _____.
   c) Capillary blood in infants is collected from _____ region.
2. Distinguish between
   a) Microcytic anaemia and macrocytic anaemia
   b) Haemocytometer and Haemoglobino meter
   c) Western blot and Southern blot
3. Draw a neat labeled diagram of Neubauer Chamber.
4. What are the following:
   a) Serum
   b) Rh positive
   c) Glycosuria
5. Give the normal range of
   a) RBC in adult man
   b) Bleeding time
   c) Blood glucose (fasting)
6. State true or false:
   a) Reticulocyte count is used to know the bone marrow function.
   b) AST is otherwise known as SGPT.
   c) Anti hCG is used in card test for pregnancy.
7. Match the following:
   a) Hospital waste - i) Phyllanthus
   b) Packed cell volume - ii) Incineration
   c) Hepatitis - iii) Haematocrit
8. Give the diagnostic significance of the following tests:
   a) Platelet count
   b) Clotting time
   c) Mantoux test
9. Give the expansion for the following:
   a) ESR
   b) SGPT
   c) ELISA
10. Name the causative organism for the following diseases:
   a) Tertian malaria
   b) Cysticercosis
   c) Tuberculosis

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SECTION – B

ANSWER ANY FIVE QUESTIONS (5 x 6=30)

11. Write a short account on chemical methods of sterilization.
12. Describe Sahli's method for haemoglobin estimation.
13. Write a short note on blood transfusion.
14. Elaborate the macroscopic parameters in urinalysis and briefly explain the use of urinometer.
15. Explain the immunological tests for pregnancy.
16. Classify biomedical wastes.
17. Discuss briefly the analysis of CSF.

SECTION - C

ANSWER ANY TWO QUESTIONS (2 x20=40)

18. Explain the differential count and types of WBC.
19. Discuss the process and theory of blood coagulation.
20. Give an account of pathology and prevention of HIV.
21. Explain different methods of serum cholesterol estimation. Add a note on the clinical relevance.

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