

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 2008
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) Diluting fluid for Total RBC count is _____ , _____.
 - b) Burning of Laboratory wastes is called _____.
 - c) _____ is used to measure blood pressure.

2. **DISTINGUISH BETWEEN**
 - a) Anemia and Polycythemia
 - b) Coagulation and Agglutination
 - c) Occult blood and serum.

3. Draw neat labeled diagram of Neubauer Chamber.

4. What is a)
 a) Azoospermia
 b) Tyndallization
 c) hcG

5. Give the normal range for
 - a) Clotting Time
 - b) Fasting Blood Sugar
 - c) Blood Pressure.

6. **STATE WHETHER THE FOLLOWING STATEMENTS ARE TRUE OR FALSE:**
 - a) Pasteurization is a dry heat sterilization method.
 - b) Turk's fluid is used for Total WBC Count.
 - c) Microfilaria is the larval stage of malarial parasite.
 - d) Drabkin's reagent is not carcinogenic.
 - e) Beta cells secrete insulin.
 - f) HIV is a RNA virus.

7. **MATCH THE FOLLOWING:**

a) Bile salt	-	Rothera's mixture.
b) Anticoagulant	-	Leishmann's stain.
c) Ketone bodies	-	Non – heparinized capillary tube
d) Urine sugar	-	Potassium oxalate
e) Blood smear	-	Benedict's reagent
f) clotting time	-	Sodium glycocholate

8. Give the diagnostic significance of the following tests.
a) ESR b) SGOT c) DAM Method.
9. Give the expansion for the following.
a) Hb b) PCV c) HIV
10. Name the causative organism for
a) Elephantiasis b) TB c) AIDS

SECTION – B

ANSWER ANY FIVE QUESTIONS

(5x 6 = 30)

11. Write the procedure for the estimation of Haemoglobin. Give the normal values.
12. Summarise different types of anemia with salient features.
13. Write qualitative features of seminal fluid with abnormal types and normal value.
14. Explain briefly good laboratory practices.
15. Draw and describe the structure and functions of leucocytes.
16. Give an account on biochemistry of SGPT with the normal value.
17. Distinguish Hepatitis A from Hepatitis B. Add a note on Pathological changes and symptoms.

SECTION – C

ANSWER ANY TWO QUESTIONS

(2 x 20 = 40)

18. Describe Life history stages of malarial parasite.
19. What is Diabetes mellitus? How do you prove it through Laboratory procedure?
Give the normal value.
20. Explain with a flow chart the phenomenon of haematopoiesis.
21. Give a detailed account of chemical analysis of urine sample.
