

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086
(For Candidates admitted during the academic year 2008 –09 & thereafter)
SUBJECT CODE: ZL/MC/LT34

B.Sc. DEGREE EXAMINATION NOVEMBER 2010
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) _____ is the preferred method for sterilizing glassware.
 - b) Sterilization of milk is called _____.
 - c) _____ is called normal saline.

2. **DISTINGUISH BETWEEN**
 - a) Leukemia & Leucopenia
 - b) TC & DC
 - c) Turk's & Hayem's Fluid

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

4. **WHAT DO YOU MEAN BY**
 - a) Formed elements of blood
 - b) Micro-haematocrit
 - c) Thrombus

5. Give the normal range for
 - a) Total serum cholesterol
 - b) Basophils
 - c) ESR

6. **STATE WHETHER THE FOLLOWING STATEMENTS ARE TRUE OR FALSE :**
 - a) The albumin found in the urine is called Bence Jones Protein.
 - b) Latex Particle Agglutination Inhibition Test is called Gravindex – 90.
 - c) Counting of sperms is done with the help of RBC Pipette & Counting Chamber.
 - d) Excess fat in faeces is called Steatorrhea.
 - e) Normal CSF is crystal clear and colourless.
 - f) Reverse Transcriptase enzyme is present in HIV.

7. **MATCH THE FOLLOWING :**

a) Tuberculosis	-	Microfilaria
b) HTLV III / LAV	-	ELISA
c) Jaundice	-	Test for Acetone in urine
d) Rothera's Test	-	Mantoux test
e) Wuchereria	-	Hepatitis
f) Pregnancy	-	HIV

8. Give the diagnostic significance of the following tests:
a) Test for Proteinuria b) Test for Glycosuria c) Test for Bilirubinuria
9. Give the expansion for the following:
a) ELISA b) HCG c) RIA
10. Name the causative organism for
a) Trichuriasis b) Tuberculosis c) Homologous Serum Jaundice

SECTION – B**(5X6 = 30 Marks)****ANSWER ANY FIVE QUESTIONS**

11. How will you prepare RBC & WBC diluting fluids?
12. Describe the various anticoagulants with their mode of action and uses.
13. How will you estimate Haemoglobin in the blood?
14. Write an account on Microscopic Examination of Urine.
15. Enumerate the helminthic parasites found in the Stool samples.
16. How will you estimate blood glucose?
17. Describe any Two immunologic methods to confirm pregnancy.

SECTION – C**(2X20 = 40 Marks)****ANSWER ANY TWO QUESTIONS**

18. Write a detailed account on differential count of WBC.
19. Describe the procedure involved in sperm count, sperm motility & sperm morphology.
20. Explain the different types of blood groups & Rh types in man.
21. How will you examine the blood smear for malarial parasite and microfilaria.
