

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – BIOTECHNOLOGY

THIRD SEMESTER – NOVEMBER 2009

ZO 3900 - MEDICAL LABORATORY TECHNOLOGY

Date & Time: 14/11/2009 / 9:00 - 12:00 Dept. No.

Max. : 100 Marks

PART-A

Answer **ALL** the questions

(10 X 2=20 Marks)

1. What is sickle cell anaemia?
2. Mention the composition of blood plasma.
3. Write the normal values of MCH, MCV, MCHC and ESR.
4. Define the term xanthochromia.
5. What are ketone bodies?
6. Draw and label the structure of abnormal sperm cells.
7. Write the principle for blood sugar estimation.
8. Differentiate antiseptic from disinfectant.
9. What are polyhydramnios and oligohydramnios?
10. Define the terms polyuria, oliguria and anuria.

PART-B

Answer any **FOUR**

(4 X 10 =40 Marks)

11. Describe in detail the composition and functions of blood.
12. What is anaemia? Explain haemolytic and iron deficiency anaemia.
13. Write short notes on hyper and hypoglycemia.
14. Discuss the types, characteristics and functions of culture media.
15. Write short notes on ABO blood grouping system.
16. Explain in detail the collection and examination of amniotic fluid.

PART-C

Answer any **TWO**

(2 X 20=40 Marks)

17. What is haemostasis? Discuss in detail the mechanism of blood coagulation.
18. Write the principle, procedure and clinical significance of blood sugar estimation.
19. Describe the ultrastructure of a bacterium with suitable diagrams.
20. Discuss in detail the physical, chemical and microscopic examination of urine sample.
