LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034



M.Sc. DEGREE EXAMINATION - ZOOLOGY

SECOND SEMESTER - APRIL 2013

ZO 2902 - MEDICAL LAB. TECHNOLOGY

Date: 08/05/2013	Dept. No.	Max.: 100 Marks
Time $\cdot 9.00 - 12.00$	- 1	

PART-A

Answer **ALL** the questions

(10 X 2=20 Marks)

- 1. What is serum and plasma?
- 2. What is amniocentesis?
- 3. Define the term Xanthochromia.
- 4. What is sickle cell trait and sickle cell anemia?
- 5. Mention any four blood coagulation factors.
- 6. Draw neat labeled diagram of different types of white blood cells.
- 7. Mention the antigen and antibody pattern of ABO blood group.
- 8. Define the term oligohydramnios.
- 9. Draw the structure of abnormal sperm cells.
- 10. List down the normal ingredients of culture media.

PART-B

Answer any **FOUR** of the following

(4 X 10 = 40 Marks)

- 11. Explain the composition and functions of blood.
- 12. Explain collection, composition and routine examination of amniotic fluid.
- 13. Write notes on haemolytic anaemia and iron deficiency anaemia.
- 14. Describe collection, screening and storage of blood in blood bank.
- 15. Elaborate the types and applications of the culture media.
- 16. Write down the principle, procedure and clinical significance of blood glucose estimation.

PART-C

Answer any **TWO** of the following

(2 X 20=40 Marks)

- 17. What is haematopoiesis? Explain the mechanism of erythrocyte formation with diagram.
- 18. Explain the mechanism of blood coagulation with suitable diagram.
- 19. Classify and explain the different methods of sterilization.
- 20. Discuss the physical, chemical and microscopical examination of urine sample.
