

LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – MEDICAL LAB. TECHNOLOGY

FIRST SEMESTER – APRIL 2010

ML 1808 - CLINICAL BIOCHEMISTRY

Date & Time: 24/04/2010 / 1:00 - 4:00

Dept. No.

Max. : 100 Marks

PART-A

Answer **ALL** the questions

(10 X 2=20 Marks)

1. What is Beer's and Lambert's law?
2. Write the importance of HDL and LDL cholesterol.
3. What is buffer? Write the composition of phosphate buffer.
4. List the enzymes involved in TCA cycle.
5. Write the normal values of SGOT, SGPT, ALP and LDH.
6. What are non-protein nitrogenous substances?
7. Differentiate metabolic acidosis from metabolic alkalosis.
8. Comment on thyroxine binding globulin.
9. Draw neat labelled diagram of haemoglobin.
10. Define the term Achlorhydria and Achylia gastrica.

PART-B

Answer any **FOUR**

(4 X 10 =40 Marks)

11. Describe chemical hazards with suitable diagram.
12. Describe the role of kidney in acid-base balance.
13. Enumerate the functions and composition of electrolytes.
14. Discuss the cascade of blood clotting process.
15. What are non protein nitrogenous substances? Explain urea cycle.
16. Write about types, structure and biosynthesis of haemoglobin.

PART-C

Answer any **TWO**

(2 X 20=40 Marks)

17. Describe in detail the different types of lab hazards with suitable diagram.
18. Discuss the reaction, regulation and energy production of tricarboxylic acid cycle.
19. Write short notes on Tumor markers and Phenylketonuria.
20. What is GFR? Explain in detail the renal function test.
