 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

**M.Sc.** DEGREE EXAMINATION - **MEDICAL LAB. TECHNOLOGY**

FIRST SEMESTER – **NOVEMBER 2012**

# ML 1813 - MOLECULAR BIOLOGY AND CLINICAL BIOCHEMISTRY

Date : 07/11/2012 Dept. No. Max. : 100 Marks

Time : 1:00 - 4:00

**PART-AS**

Answer **ALL** the questions:  **(10 X 2=20 Marks)**

1. What is galactosemia?

2. Define the term achyliagastrica.

3. Write down the principle of van den Bergh reaction.

4. What is standard and maximum urea clearance?

5. Comment on phenylketonuria.

6. Write the importance of enzyme Tag polymerase.

7. What are codon and anticodon?

8. What is Okazaki fragment?

9. Comment on missense and non - sense mutation.

10. What is Cushing’s syndrome?

**PART-B**

Answer any **FOUR** of the following:  **(4 X 10 =40 Marks**)

11. Explain the structure and functions of DNA with suitable diagram.

12. Discuss different laboratory investigations to evaluate gastric function.

13. Explain the formation and function of Bilirubin and add a note on jaundice.

14. Describe the mechanism of post transcription modification process.

15. Write notes on DNA finger printing and chromosomal walking.

16. Describe the clinical importance of tumor markers with suitable example.

**PART-C**

Answer any **TWO** of the following:  **(2 X 20=40 Marks)**

17. Describe the mechanism of DNA replication with suitable diagram.

18. Write about the genetic disorders of metabolism in detail.

19. Discuss different laboratory investigations to evaluate renal function.

20. Explain the formation, function and clinical importance of thyroid hormones.

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