

**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

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

**FIRST SEMESTER – APRIL 2010**

**ML 1809 - MOLECULAR BIOLOGY**

Date & Time: 27/04/2010 / 1:00 - 4:00

Dept. No.

Max. : 100 Marks

**PART A**

Answer **ALL** the questions

**10 x 2 = 20 marks**

1. Differentiate analytical sensitivity from analytical specificity.
2. Mention the role of sigma factor in transcription.
3. Expand: ABMS, ICD, NFSTC and ABBB
4. Define patent.
5. What are the responsibilities of lab director in molecular diagnostic testing lab?
6. What is COBAS amplicor analyzer?
7. List down practices to avoid contamination in laboratory.
8. Differentiate cilia from flagella.
9. What is wobble hypothesis?
10. Define mutagenesis.

**PART B**

Answer any **FOUR**

**4 x 10 = 40 marks**

11. Explain the four rules that govern the synthesis of bio-polymers with illustrations.
12. Draw and explain the structure of RNA.
13. Explain Prader – Willi syndrome.
14. Describe the models of plasma membrane with labelled diagrams.
15. Give an account on clinical test formats.
16. Explain cystic fibrosis in detail.

**PART C**

Answer any **TWO**

**2 x 20 = 40 marks**

17. Draw the structure of eukaryotic cell and explain endoplasmic reticulum, peroxisomes and golgi bodies.
18. Explain the mechanism of protein biosynthesis.
19. Give a detailed account on the morphology and function of eukaryotic chromosomes.
20. Describe the mechanisms of DNA repair.

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