 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

FIRST SEMESTER – **APRIL 2012**

# ML 1809 - MOLECULAR BIOLOGY

Date : 27-04-2012 Dept. No. Max. : 100 Marks

Time : 9:00 - 12:00

**SECTION –A**

**Answer ALL questions: 10x2=20 marks**

1. Expand FDA, ABMS, CPT and CDC.

2. What are oncogenes?

3. Distinguish poly glutamine from non-poly glutamine disease.

4. What is the role played by catalases and oxidases of peroxisomes?

5. Define mutagenesis.

6. Mention the original Wobble predictions.

7. How do denaturation and renaturation occur in double stranded DNA molecules.

8. What are the functions of cilia and flagella?

9. Differentiate centromere and telomere

10. Define patent.

**SECTION B**

**Answer any FOUR of the following: 4x10=40 marks**

11. What are the four rules that govern the synthesis of bio-polymers? Illustrate.

12. Draw and explain the structure of DNA.

13. Explain genetic code.

14. Describe the models of plasma membrane with neat diagrams.

15. Give an account on clinical test formats.

16. Write notes on cystic fibrosis.

**SECTION-C**

**Answer any TWO of the following: 2x20=40 marks**

17. Draw the structure of eukaryotic cell and explain Golgi, Mitochondria and Nucleus.

18. Explain the mechanism of biosynthesis of protein.

19. Describe the facilities in molecular diagnostic laboratory.

20. Elaborate the mechanisms of DNA repair.

\*\*\*\*\*\*\*\*\*\*\*

\*\*\*\*\*\*\*\*