 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

SECOND SEMESTER – APRIL 2011

# ML 2954 - ADVANCED LAB.TECHNIQUES

Date : 12-04-2011 Dept. No. Max. : 100 Marks

Time : 1:00 - 4:00

**Answer ALL the questions PART A 2x10=20 marks**

1. What is gene cloning?
2. Define the role of restriction enzymes.
3. What is paternity test?
4. Differentiate sticky ends from blunt ends.
5. What are transgenic animals?
6. Define RFLP and RAPD.
7. What are cosmids?
8. Enumerate the solid supports used in electrophoresis.
9. Define YAC and BAC.
10. What is Immuno florescence?

**Answer any FOUR PART B 4x10=40 marks**

1. Write notes on super vectors.
2. Give an account on gel electrophortic separation.
3. Describe in short northern blotting.
4. Characterise plasmids.
5. Explain ELISA.
6. Write notes on gene mapping.

**Answer any TWO PART C 2x20=40 marks**

1. Give a detailed account on microarray.
2. Describe in detail significance of DNA in forensic science.
3. Write an essay on gene therapy.
4. Give an account of polymerase chain reaction.

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