 LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

SECOND SEMESTER – **NOVEMBER 2012**

# ML 2954 - ADVANCED LAB.TECHNIQUES

 Date : 10/11/2012 Dept. No. Max. : 100 Marks

 Time : 1:00 - 4:00

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

1. Enumerate the solid supports used in electrophoresis.
2. What is gene cloning?
3. What is DNA finger printing?
4. Define the role of restriction endonucleases.
5. Define FISH and FICTION.
6. What is paternity test?
7. Define fluorescent detection procedure.
8. Differentiate sticky ends from blunt ends.
9. What are transgenic animals?
10. Enumerate blocking buffers of western blotting technique.

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

1. Write notes on DNA polymorphism.
2. Give an account on PAGE.
3. Describe northern blotting.
4. Give an account on Human Genome Project.
5. Explain clinical importance of ELISA.
6. Write notes on gene mapping.

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

1. Write a detailed account on microarray. Add note on clinical applications.
2. Discuss polymerase chain reaction.
3. Describe in detail the significance of DNA over traditional serology.
4. Write an essay on hybridization.

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