

45121

M.Sc. DEGREE EXAMINATION, APRIL 2015.

FOURTH SEMESTER

Genetics and Genomics

Paper I — FUNCTIONAL GENOMICS

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page.

1. Hybridization.
2. Floxing.
3. Nested PCR.
4. SADE.
5. Chaperonins.
6. Phage display.
7. Aptamers.
8. SELDI - TOF

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. Discuss the salient features of site-directed mutagenesis.

Or

10. Explain the principles of Forward and Reverse genetics.

11. Write an account on RNA silencing.

Or

12. Explain the problems associated with SAGE analysis.

13. Discuss the methods used for high-through put screening of protein interactions.

Or

14. Discuss about the transcriptome of E. coli.

15. Mention the different types of protein microarrays used to study the activities of protein.

Or

16. Discuss the advances in functional protein microarray technology.

