

35081

M.Sc. DEGREE EXAMINATION, OCTOBER/NOVEMBER 2018.

THIRD SEMESTER

Biotechnology

PAPER-I: – GENETIC ENGINEERING

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. Bacteriophages
2. YACs
3. Western blot
4. Plasmid
5. Ti-plasmid
6. Genome library
7. Restriction Endonucleases
8. Vir-genes

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. Describe the different molecular vectors used for the cloning in E.coli?

Or

10. Give outlines and tools of cloning?

11. Describe Agrobacterium mediated transformation of DNA in plants?

Or

12. Write about direct methods of DNA transformation?

13. Describe about nucleic acid sequencing methods?

Or

14. Discuss different blotting techniques?

15. Describe biotechnological methods to develop insect, pest resistant plants?

Or

16. Write an essay on applications of genetic engineering in Medicine and its social and moral implications?

