

35061

M.Sc. DEGREE EXAMINATION, OCTOBER/NOVEMBER 2019

THIRD SEMESTER

Microbiology

Paper I — RECOMBINANT DNA TECHNOLOGY

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. Bal 31 nuclease.
2. Alkaline phosphatase.
3. SV₄₀.
4. Linkers.
5. RT-PCR.
6. Maxam – gilbert sequencing.
7. IPTG.
8. Interferon.

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. Write an essay on restriction enzymes.

Or

10. Give a detailed account on isolation of desired genes
11. Write an essay on natural and artificial plasmids in E.coil and add a note on their importance.

Or

12. Narrate an elaborate account on "Microarray".

13. Give a detailed account on "Agrobacterium mediated gene transfer".

Or

14. Write an essay on DNA fingerprinting technology.

15. Discuss about transgenic microorganisms.

Or

16. Give a concise account on "Inducible expression systems".

