

25062

M.Sc. DEGREE EXAMINATION, MARCH/APRIL 2019.

SECOND SEMESTER

Microbiology

Paper II — MOLECULAR BIOLOGY

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. Inhibitors of DNA replication.
2. Excision repair.
3. Promoters.
4. Trimming of r RNA.
5. Wobble concept.
6. Protein folding.
7. Catabolite repression.
8. cAMP.

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 DNA damage.

Or

10. Explain in detail about chromosome organization in eukaryotes.
11. Discuss about post transcriptional modifications of mRNA and rRNA.

Or

12. Give an elaborate account on structural features of different RNA types.

13. Comment on *in vitro* transcription and *in vitro* translation.

Or

14. Write an essay on genetic code.

15. Narrate a concise account on structure, function and regulation of tryptophan operon.

Or

16. Discuss about antisense RNA technology.

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