

35102

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

THIRD SEMESTER

Zoology

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. Chromosomal organization
2. Watson and Crick model
3. Recombination
4. SOS Repair
5. Role of antibiotics in protein synthesis
6. Ribozymes
7. cDNA Library
8. Britten and Davidson model

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. Write about the structure of gene.
- Or
10. Write about the Nuclear and Mitochondria genomic organization.

11. Describe the mechanisms of DNA damage and repair with suitable illustrations.

Or

12. Write about the Replication phenomenon in Eukaryotes.

13. Describe the mechanism of Translation with suitable examples.

Or

14. Write about the molecular mechanisms involved in gene regulation.

15. Write about the general principles involved in gene regulation.

Or

16. Write mechanisms involved in DNA sequencing and DNA Finger printing.

