

35102

M.Sc. DEGREE EXAMINATION, OCTOBER/NOVEMBER 2019.

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. Watson and Crick Model of DNA
2. Mitochondrial genome
3. Models of Replication
4. Inhibitors of Replication
5. Types of RNA
6. Ribozymes
7. DNA finger printing
8. PCR

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. DNA – The Central Dogma of Molecular Biology Discuss.

Or

10. Discuss about the structure of Gene with suitable examples.

11. Enumerate the mechanism of DNA synthesis by Reverse transcription.

Or

12. Describe the DNA damage and repair mechanisms with suitable examples.

13. Enumerate the molecular mechanisms involved in transcription.

Or

14. Describe the events of Molecular mechanisms of Translation.

15. Write brief about the general principles of Gene regulation.

Or

16. Write about Britten and Davidson model for Eukaryotic regulation.

