

(041230302)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2017

THIRD SEMESTER

Branch — Zoology

Paper III — ENZYMOLOGY AND METABOLISM

Time : 3 Hours

Max. Marks : 70

PART - A

Answer any FIVE of the following.

(Marks : 5×4 marks = 20 marks)

1. Kinetic theory
2. Isomerism
3. Allosteric enzymes
4. Competitive inhibition
5. Polyamines
6. ATP
7. Purines
8. Porphyrins.

PART - B

Answer FOUR of the following.

Answer ONE question from each Unit.

(Marks : 4×12.5 marks = 50 marks)

UNIT - I

9. Write an essay on isolation of enzymes and distribution of enzymes in the cell.

Or

10. Describe enzyme kinetics with the measurement of kinetic constants (K_m and V_{max}).

UNIT - II

11. Describe the mechanism of Enzyme action with suitable models.

Or

12. Describe the immobilized enzymes and their application in biology.

[P.T.O]

UNIT - III

13. Describe the Pentose phosphate pathway and its biomedical importance.

Or

14. Describe the Beta-Oxidation of palmitic acid and its biological significance.

UNIT - IV

15. How Nucleotides are degraded? Describe the pathway in detail.

Or

16. Describe the clinical disorders of Purine metabolism.
