

M.Sc. DEGREE EXAMINATION, NOVEMBER 2016.

THIRD SEMESTER

ZOOLOGY

Paper IV — ENZYMOLOGY

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — ($5 \times 3 = 15$ marks)

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page.

1. Measurement of enzyme activity.
2. Distribution of enzymes in cell.
3. Active site and Catalytic site.
4. Substrate concentration.
5. K_m and V_{max} .
6. Metabolic regulation.
7. Isozymes.
8. Immobilized enzymes.

PART B — ($4 \times 15 = 60$ marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. Define enzyme. Write about the steps involved Nomenclature and Classification of enzymes.

Or

10. Write about the enzyme specificity with suitable illustrations.
11. Define Bioenergetics. Write principles involved in Bioenergetics.

Or

12. Write about the mechanism of enzyme action with suitable examples.

13. Write about the mechanism of kinetic of Allosteric enzymes.

Or

14. Write about the patterns of inhibition of enzyme activity.

15. Write an essay on enzymes involved in chemical diagnosis with suitable examples.

Or

16. Write about the principles involved in enzyme engineering.

