**2316**        **55**

## Class –B.Sc. BT (II)yr

## Subject – Enzymology.

## Paper – BT-8

Time Allowed : 3 hrs.       Maximum Marks : 40

### SECTION- A

All questions are compulsory. Each question will carry one mark. Maximum length of answer can be about 1/3 of a page.        (1×8)

1.   (i)   Ligase

    (ii)   Activation Energy

    (iii)   Holoenzyme

    (iv)   Catalytic Efficiency

    (v)   Vmax

    (vi)   Allosteric site

    (vii)   Law of thermodynamics

    (viii)   Catalysis

### SECTION- B

5 questions to be attempted and maximum length of answer can be upto two pages. Each question carries 4 marks.       (5×4=20)

2. Discuss nomenclature and classification of enzymes.

3. Write notes on covalent catalysis and acid base catalysis.

4. Briefly write about enzyme characteristics.

5. What are co-enzymes? Write about three co-enzymes to explain their functions.

6. Explain Strain distortion theory of enzymes.

7. Describe LineWeaver-Burk plot and its use.

8. Write about active site and functional groups identifying be same.

9. Briefly explain about the principles of Bio-energetics.

## SECTION- C

Two questions to be attempted. Each question carries 6 marks. Maximum length of 5 pages to be written.

$$(6×2=12)$$

10. Derive Michaelis Menton Equation. Explain its modification also.

11. Describe in detail Enzyme-substrate complex.

12. (a) Explain Enzyme Specificity.

    (b) What are co-factors?

    (c) Importance of co-enzymes and prosthetic group.

13. What are factors affecting enzyme activity? Give detailed account of any three of these factors.

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