

Exam. Code : 107404

Subject Code : 2248

B.Sc. Bio-Technology Semester—IV

ENZYMOLGY

Paper—BT-8

Time Allowed—3 Hours]

[Maximum Marks—40

Section A : Attempt ALL questions from this Section.

1. Define the following in not more than five lines :

- (a) Specific activity
- (b) Hydrolase
- (c) International unit of enzyme activity
- (d) Holoenzyme
- (e) Zymogen
- (f) Isozyme
- (g) Activation energy
- (h) Km. 1×8=8

Section B : Attempt any FIVE questions from this Section.

2. What is the difference between co-enzyme and co-factor ? Explain using example.
3. Explain multi enzyme complexes with example.
4. Explain the importance of temperature and pH in enzyme activity.
5. Discuss briefly allosteric enzymes.

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6. What are the different factors that affect velocity of enzyme catalyzed reactions ?
7. What is Lineweaver Burk plot.
8. What is Inhibitor ? Explain with suitable example.
9. What is activation energy ? How does the activation energy changes in the presence and absence of enzymes ? 4×5=20

Section C : Attempt any **TWO** questions.

10. Explain feedback inhibition.
11. Derive Michaelis Menten equation and draw Hanes plot for this.
12. What are enzymes and how are they classified ? Explain with suitable examples.
13. Explain the enzyme-substrate complex reaction. Justify your answer giving one suitable example. 6×2=12