

Seat No. : _____

ND-141
November-2021
B.Sc., Sem.-V
303 : Biochemistry
(Enzymology)

Time : 2 Hours]

[Max. Marks : 50

Section – I

Answer any **three** questions from the followings :

- | | | |
|----|---|---|
| 1. | (A) What are the types of specificity of Enzymes. | 7 |
| | (B) Discuss properties of bio-catalyst. | 7 |
| 2. | (A) Explain Koshland & Fischer model. | 7 |
| | (B) Giving examples explain (discuss) Metalloenzymes. | 7 |
| 3. | (A) Discuss with examples – “Zymogens”. | 7 |
| | (B) Explain in detail– LDH iso-enzymes. | 7 |
| 4. | (A) Short note on “Multi-Enzyme Complex”. | 7 |
| | (B) Explain – Class-II, V of enzyme classification. | 7 |
| 5. | (A) How allosteric enzymes are different than non-allosteric enzymes ? Discuss. | 7 |
| | (B) Short note on : Random mechanism of 2 substrate reaction. | 7 |
| 6. | (A) Explain why and how co-valent modification of enzyme affects reactions (process). | 7 |
| | (B) Explain effect of substrate concentration on enzymatic reactions. | 7 |
| 7. | (A) Explain – Extremozyme and Abzymes. | 7 |
| | (B) Explain – Active site and 3D structure of Enzyme. | 7 |
| 8. | (A) Explain – Class – IV and VI of Enzyme classification. | 7 |
| | (B) Explain – Thermosensitive nature of enzymes. | 7 |

Section – II

9. Answer any **eight** questions from the following :

8

- (1) Define Cofactor.
- (2) Define Synzyme.
- (3) Define V_{\max} . (explain term)
- (4) What is “Ribozyme nature” ?
- (5) Name and contribution of one enzymologist.
- (6) Name any one enzyme which is membrane bound.
- (7) Name 1 enzyme requires Mg^{++} .
- (8) Glucose-6-phosphatase belongs to which class of Enzyme classification ?
- (9) Define Holoenzyme.
- (10) Name 2 co-enzymes.
- (11) Full form of AT Case is _____.
- (12) Name any one enzyme of Class – I.
- (13) Name any one enzyme of Class – III.
- (14) Define “Allosteric site”.
- (15) Hydrolase belongs to which class ?
- (16) Name class of enzyme for PDH.
