

B.Sc. (Sem.-5) Examination

303 - Biochemistry

(Enzymology)

August 2021

Time : 2-00 Hours]

[Max. Marks : 50

- Instruction :** (1) All questions in section-I carry equal marks.
(3) Questions-IX in section II is compulsory.

SECTION I

Attempt any three questions :

- | | | | |
|---|-------|---|---|
| 1 | (a) | Write short note on Zymogens. | 7 |
| | (b) | Explain Fischer and Koshland Models. | 7 |
| 2 | (a) | Explain any 5 differences between enzymes Vs. Chemical catalysts. | 7 |
| | (b) | Short note on Enzyme specificity. | 7 |
| 3 | (a) | Explain with examples - Metalloenzymes. | 7 |
| | (b) | Short note on Membrane Bound Enzymes. | 7 |
| 4 | (a) | Explain Iso-enzymes of LDH. | 7 |
| | (b) | Describe any one Multi-Enzyme-complex. | 7 |
| 5 | (a) | Explain with example : Enzyme Class-I, III. | 7 |
| | (b) | Explain temperature effect on Enzyme in detail. | 7 |
| 6 | (a) | Discuss effects of pH, Radiation, time on enzyme reaction. | 7 |
| | (b) | Explain Class-IV, VI of enzyme classification. | 7 |
| 7 | (a) | Write properties of allosteric enzymes. | 7 |
| | (b) | Explain Ping-Pong mechanism of enzymes reactions. | 7 |
| 8 | (a) | Explain with example : Covalent Modification of Enzyme. | 7 |
| | (b) | Short note on AT Case. | 7 |

SECTION II

- | | | |
|---|---------------------|---|
| 9 | Answers any Eight : | 8 |
| | (1) | Define co-enzyme. |
| | (2) | Define Km. |
| | (3) | Draw pH curve (label it). |
| | (4) | Name any scientist and his/her contribution Enzymology. |
| | (5) | Name any one membrane bound enzyme. |
| | (6) | Explain term <i>or</i> define Synzyme. |
| | (7) | Explain term <i>or</i> define Abzyme. |
| | (8) | Give example of any enzyme belongs to Class-III. |
| | (9) | Give example of any belongs to Class-V. |
| | (10) | Hexokinase belongs to which class? |
| | (11) | Name any one covalently modifiable enzyme. |
| | (12) | Name any one extremozyme. |
| | (13) | Name Non-proteinous enzyme. |
| | (14) | Define : "Allosteric Site". |
| | (15) | Define : "Active Site". |
-