



MBZ-003-1182001 Seat No. _____

**M. Sc. (Zoology) (Sem. II) (CBCS)
(W.E.F. 2016) Examination**

April / May - 2018

Zool-207 : Biochemistry

Faculty Code : 003

Subject Code : 1182001

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

1 Answer the following very briefly : (Any **Seven**) **2×7=14**

- (a) Define Km value.
- (b) What is protein? Give its types.
- (c) What are the types of specificity shown by enzymes ?
- (d) Name the factors influencing enzyme reaction.
- (e) What are aliphatic amino acids? Give examples.
- (f) Write the classification of coenzymes.
- (g) Define gluconeogenesis.
- (h) Define word Homotropic regulation.
- (i) Write the products of the Pentose Phosphate Pathway.
- (j) Define holoenzyme.

2 Answer of the following : (Any **Two**) **7×2=14**

- (a) Describe the classification of lipids
- (b) Describe the chemical properties of monosaccharides
- (c) Write the sequential reaction steps of glycolysis pathway and its regulation.

3 Answer the following : **7×2=14**

- (a) Explain β -sheet structure
- (b) Write a note on the TCA cycle.

OR

- 3** Answer the following : **7×2=14**
- (a) Explain the tertiary structure of Protein
 - (b) Distinguish between reversible and irreversible inhibition.
- 4** Answer the following : **7×2=14**
- (a) Write a short note on the water soluble vitamins
 - (b) Write short notes on Glyoxylate cycle.
- 5** Answer the following : (Any **Two**) **7×2=14**
- (a) Write a short note on the control mechanisms of allosteric enzymes
 - (b) Define Km and Line weaver Burk plot. Add a note on their importance
 - (c) Write short notes on ED pathway
 - (d) Describe the energetic level of citric acid cycle.
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