

T.Y.B.SC. SEM – V (2014 Course) : WINTER - 2018
SUBJECT : MICROBIOLOGY : ENZYME KINETICS & REGULATION (MB – 56)

Day : Saturday
Date : 20/10/2018

W-2018-0851

Time : 12.00 NOON TO 02.00 PM
Max. Marks : 40

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
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Q.1 Answer **ANY TWO** of the following: **[10]**

- a) Explain chymotrypsin is not strictly a monomeric enzyme.
- b) With a suitable example explain uncompetitive inhibition.
- c) Give the plot, significance and limitations of Michaelis Menten equation.

Q.2 Attempt **ANY TWO** of the following: **[10]**

- a) Explain biological specificity as a principle in purification of enzymes.
- b) Explain the method for immobilization of whole cells.
- c) Give principle and working of spectrofluorimetry as a method of enzyme assay.

Q.3 Write short notes on **ANY TWO** of the following: **[10]**

- a) Pyruvate dehydrogenase
- b) Ion Exchange Chromatography
- c) Pyridoxine as coenzyme

Q.4 Attempt **ANY FIVE** of the following: **[10]**

- a) Give a diagrammatic representation for separation of LDH forms using electrophoresis.
- b) Differentiate between positive and negative modulator of an enzyme.
- c) Draw the symmetry model to demonstrate co-operativity.
- d) Give structure of α – Chymotrypsin.
- e) Draw WMC for allostery.
- f) Give use of Agarose gel.
- g) Give the reaction catalysed by Lactose synthase.

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