Seat No. : _____

ND-104

December-2015

B.Sc., Sem.-V

Core Course-303 : Biochemistry
(Enzymology)

Time : 3 Hours] **[Max. Marks : 70**

1. (a) Write a note on characteristics of enzyme. **(7)**

   (b) Explain multi-enzyme complex-PDH. **(7)**

   OR

   (a) Write a short note on co-factors and co-enzymes.

   (b) Explain Fischer and Koshland model.

2. Write short note on any **two** of the following : **(14)**

   (a) Role of ions in activation of enzyme with examples.

   (b) Separation of Isoenzymes.

   (c) Membrane bound enzyme-with examples.

3. Write short note on any **two** of the following : **(14)**

   (a) I, III, VI – Classes of enzymes with 2 examples each.

   (b) Factors affecting enzyme : Substrate concentration, Time and Inhibitors.

   (c) Factors affecting enzyme: Radiation, pH and Oxidizing Agents.

4. Write any **two** of the following : **(14)**

(a) Explain – ATCase as Allosteric enzyme.

(b) Discuss regulatory role of any one allosteric enzyme.

(c) Explain covalently modulated enzymes with example.

5. (a) Define any four – Enzyme, apoenzyme, ribozyme, allosteric site and extrimozyme. **(5)**

(b) Explain ordered **or** Ping Pong mechanism of enzymatic reactions. **(4)**

(c) Draw well labelled curve of pH and substrate concentration. **(2)**

(d) Brief note on Enzyme specificity. **(3)**