[35/A-10] SEAT No._____ No. of Printed Pages : 02

SARDAR PATEL UNIVERSITY

T.Y.BSc V SEMESTER EXAMINATION NOVEMBER 2019

BIOCHEMISTRY: USO5CBCH02

TITLE: ENZYMOLOGY

Date: 13/11/19; Wednesday Time: 10:00 AM TO 01:00 PM TOTAL MARKS: 70

Q.1 Select proper option from following MCQ. [10]

1) D- amino oxidase acts only on D amino acid is the example of _____ specificity.
   a) stereo chemical b) dual c) linkage d) group
2) Regulation of enzyme by _____
   a) transcription b) translation c) feedback mechanism d) all of these
3) Vit B_6 transfer _____ entity as a co-enzyme.
   a) Acyl group b) Amino group c) Hydrogen d) Aldehyde
4) _____ enzyme bound to cell membrane.
   a) Protein kinase b) Acid phosphatase c) Ribonuclease d) RNA polymerase
5) Protein disulphide isomerase is present in _____.
   a) SER b) RER c) Golgi complex d) Nucleolus
6) _____ of the method based on polarity.
   a) Ion exchange b) Electrophoresis
   c) Hydrophobic interaction chromatography d) All of the above
7) _____ represents the strength of binding.
   a) V_o b) S_o c) V_{max} d) km
8) High km value indicate _____ affinity.
   a) High b) Low c) No change d) None of these
9) CPK found in _____.
   a) Skeletal muscle b) Myocardium c) Brain d) All of these
10) _____ increased in both infectious hepatitis and post hepatic jaundice.
   a) ALP b) Acid phosphatase c) LDH d) CPK

Q2. Answer in Short. (Any ten) [20]

1. Define Holoenzyme.
2. Write role of Flavin nucleotide.
3. What is dual specificity?
4. List the enzyme present in the soluble space of cell.
5. List the method that based on changes in solubility.
6. Write principle of moving boundary electrophoresis.
7. What is km and V_{max}.

(P.T.O)

8. Define IU and Katal.
9. What is Turn over number.
10. Write equation for blood glucose estimation by hexokinase method.
11. Write use of measurement of TG.
12. Write normal range of SGOT and SGPT.

Q3. Short note on: (a) TPP **[5]**

(b) THF **[5]**

OR

Q3. Write Short note on:

(a) How different factor affect the enzyme activity? **[5]**

(b) Explain two properties of enzyme. **[5]**

Q4. Write short note on :

a) Ion exchange chromatography. **[5]**
b) Centrifugation. **[5]**

OR

Q4. Write short note on:

a) Dialysis **[5]**

b) Gel filteration **[5]**

Q5. Explain in detail: M. M. Equation. **[10]**

OR

Q5. Write short note on: Non-competitive inhibition. **[10]**

Q6. Explain in detail:

a) Uses of lactose in dairy industries. [5]
b) Uses of protease. [5]

OR

Q6. Write short note on: a) ALP [5]

b) LDH [5]