

Time: 2:30 Hours

Marks: 70

Instructions:

1. Draw neat and labeled diagrams wherever necessary.
 2. All questions are compulsory.
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Q.1 Answer the following (any 7) (14)

1. 'Disaccharides' – Explain in brief with example.
2. What are 'Adipocytes'?
3. Explain the term 'non-saponifiable lipids'.
4. Which are the important enzymes involved in Glyoxylate cycle.
5. What is the role of carnitine in beta oxidation?
6. State the significance of amino acids.
7. Which are different types of amino acids.
8. What is EC number?
9. Explain effect of temp and pH on enzyme activity.
10. Write the contribution of Kunhe and Bersalius.

Q.2 Answer the following (any two) (14)

1. Give a detailed note on Beta oxidation.
2. Explain different properties of lipids
3. Write a note on homopolysaccharides and heteropolysaccharids.

Q.3 Answer the following

1. State the physical and chemical properties of amino acids. (05)
2. Write a note on secondary and tertiary level of proteins. (05)
3. Discuss the contribution of Briggs and Haldane in enzyme kinetics studies. (04)

OR**Q.3 Answer the following**

1. Explain in detail the laws of thermodynamics. (05)
2. Describe the mechanism of action of anabolic and catabolic enzymes. (05)
3. Describe different functions of proteins. (04)

Q.4 Answer the following (14)

1. Describe the process of Glycolysis with labeled pathway.
2. Write a detailed note on Line Weaver Burke equation and its importance.

Q.5 Answer the following (any two) (14)

1. Discuss – Ramachandran Plot
2. Explain classification and Nomenclature of enzymes
3. Write a note on different properties of lipids
4. Describe in detail 'Pentose Phosphate Pathway'.
