

M.Sc. (Botany) Semester - 2 (CBCS) Examination
May/June-2021 (OLD COURSE)
BIOCHEMISTRY(CORE)

Time: 1:30 Hours**Marks: 42****Instructions:**

1. Figure to the right indicate marks.
2. There are five questions in the question paper.
3. Answer any three of the following questions.

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- Que-1 **Answer The Following Questions. (Any Seven Out of Ten)** (14)
- A. 'Monosaccharides' – Explain in brief with example.
 - B. What are 'Adipocytes'?
 - C. Explain the term 'saponifiable lipids'.
 - D. Which is the first enzyme to get involved in Glycolysis pathway?
 - E. What is the role of carnitine in beta oxidation?
 - F. State the significance of amino acids.
 - G. Give the names of any 2 aliphatic types of amino acids.
 - H. What is EC number?
 - I. Explain effect of temp and pH on enzyme activity.
 - J. Explain the importance of Michaelis-Menton theory
- Que-2 **Answer The Following Questions. (Any Two Out of Three)** (14)
- A. What are compound lipids? Explain with suitable examples
 - B. State the chemical properties of Disaccharides
 - C. Write a note on homopolysaccharides and heteropolysaccharids.
- Que-3 **Answer The Following Questions. (Any Two Out of Three)** (14)
- A. State the physical and chemical properties of amino acids.
 - B. What are globular and fibrous proteins
 - C. Discuss – Ramachandran Plot
- Que-4 **Answer The Following Questions. (Any Two Out of Three)** (14)
- A. Distinguish between reversible and irreversible inhibition.
 - B. Discuss the contribution of Briggs and Haldane in enzyme kinetics studies.
 - C. Write a detailed note on Line Weaver Burke equation and it's importance.
- Que-5 **Answer The Following Questions. (Any Two Out of Three)** (14)
- A. Explain 'Gluconeogenesis' pathway
 - B. Write a note on Entropy and Enthalpy
 - C. Describe in detail 'Pentose Phosphate Pathway'.
