

M.Sc. (Botany) Semester - 2 (CBCS) Examination
August/September -2020 [NEW COURSE]
Biochemistry (CORE)

Time: 2:00 Hours**Marks: 56****Instructions:**

1. Figure to the right indicate marks.
 2. There are five questions in the question paper.
 3. Answer any four of the following questions.
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Q.1 Answer the following (any 7) 14

1. 'Polysaccharides' – Clarify in brief with example.
2. What are non-essential types of amino acids.
3. Which is the smallest type of aldose sugar
4. Which are the two phases of glycolysis?
5. Write the names of high energy rich compounds
6. State some of the important enzymes involved in Glyoxylate cycle.
7. Write the contribution of Kunhe and Bersalius.
8. State the basics of proteins structure
9. Explain the term 'saponifiable lipids.'
10. Give names of any two examples of aromatic amino acids

Q.2 Answer the following (any two) 14

1. Define the term 'Disaccharides'. Explain different properties of disaccharides.
2. What is fatty acid metabolism ? Explain Beta oxidation in detail.
3. State different properties of lipids.

Q.3 Answer the following 14

1. Explain Ramachandran plot in detail.
2. Write a note on primary and secondary level of proteins.

OR

Q.3 Answer the following

1. Write a note on classification of amino acids
2. Explain in detail 'Titration curve'
3. Explain - Globular and fibrous proteins

Q.4 Answer the following (any two) 14

1. Discuss the contribution of Briggs and Haldane in enzyme kinetics studies.
2. Describe the mechanism of action of anabolic and catabolic enzymes.
3. Explain classification and Nomenclature of enzymes

Q.5 Answer the following (any two) 14

1. Elaborate the cycle of Glycolysis in detail
2. Explain different laws of thermodynamics
3. Write a note on 'Pentose Phosphate Pathway'.
