

M.Sc. (Botany) Semester - 2 (CBCS) Examination
March/April -2019 (Old Course)
BIOCHEMISTRY (CORE)

Time: 2:30 Hours

Marks: 70

Instructions:

1. All questions are compulsory.
 2. Figures to the right indicate marks.
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Q.1 Answer the following (any 7) 14

1. What are 'Adipocytes'?
2. Which are the important enzymes involved in Glyoxylate cycle?
3. What is the importance of carnitine in beta oxidation?
4. State the significance of amino acids.
5. Which are essential types of amino acids?
6. Explain effect of temp and pH on enzyme activity.
7. Write the contribution of Kunhe and Bersalius.
8. Give the names of Sulphur containing amino acids
9. Write the names of high energy rich compounds
10. What are aromatic amino acids? Give examples

Q.2 Answer the following (any two) 14

1. Describe Beta oxidation of fatty acids.
2. What are compound lipids? Explain with suitable examples
3. Explain different properties of lipids

Q.3 Answer the following 14

1. State the physical and chemical properties of amino acids.
2. What are globular and fibrous proteins

OR

Q.3 Answer the following 14

1. Write a note on Ramachandran plot.
2. Explain in detail 'Titration curve'

Q.4 Answer the following (any two) 14

1. Distinguish between reversible and irreversible inhibition.
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. What is Thermodynamics? Describe various laws of thermodynamics
2. Write a detailed note on Glycolysis
3. Discuss the pathway of gluconeogenesis in detail
4. What are Allosteric enzymes? Explain in detail
