



DBW-003-1142001

Seat No. _____

M. Sc. (Botany) (Sem. II) (CBCS) Examination

July - 2022

BOT-207 : Biochemistry

Faculty Code : 003

Subject Code : 1142001

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- 1 Answer the following (Any Seven) 14
- (a) Define epimeric sugars with suitable example.
 - (b) Give example of sugar alcohol with structure.
 - (c) Show the polymeric structure of cellulose.
 - (d) What are torsion angles ?
 - (e) What are zwitter ions ?
 - (f) Give difference between globular and fibrous proteins.
 - (g) Give salient features of competitive inhibition.
 - (h) Give difference between coenzyme and holoenzyme.
 - (i) Define gluconeogenesis.
 - (j) What are two phases of glycolysis ?
- 2 Answer the following (Any Two) 14
- (a) Give classification of lipids with examples.
 - (b) Describe Beta-oxidation of fatty acids with even number of carbon atoms.
 - (c) Describe Cellulose as structural polysaccharide.
- 3 Answer the following (Compulsory questions) 14
- (a) Explain Ramchandran plot in detail.
 - (b) What is titration curve ? Explain in detail.

OR

- (a) What is quaternary structure of protein ? Explain in detail.
- (b) Explain formation of primary structure of protein in detail.

- 4 Answer the following (Any Two) 14
- (a) Distinguish between reversible and irreversible inhibition.
 - (b) Discuss briefly the International classification of enzymes with suitable examples.
- 5 Answer the following (Any Two) 14
- (a) What is significance of TCA cycle.
 - (b) Explain the homotropic effects.
 - (c) Write note on Bioenergetics concept.
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