



DBW-003-1192001

Seat No. _____

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

July - 2022

MICRO-207 : Biochemistry

Faculty Code : 003

Subject Code : 1192001

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

[Total Marks : 70

1 Answer the following (any Seven, each of 02 marks) **14**

- (1) Write down physiological importance of carbohydrates.
- (2) Enlist properties of fatty acids.
- (3) What is pronas ?
- (4) What is multimeric protein ?
- (5) Write properties of amino acids.
- (6) For the enzyme which follows Michaelis Menton kinetic, what happens when $V_o = 1/2 V_{max}$?
- (7) Define Activation energy.
- (8) Enlist enzymes involved in glycolysis.
- (9) How is glycolysis is different from gluconeogenesis ?
- (10) Enlist the enzymes involved in citric acid cycle.

2 Answer the following (Any Two, each of 07 marks) **14**

- (a) Write a note on disaccarides and its type.
- (b) Write an essay on polysaccharides.
- (c) Discuss in detail, compound lipid.

3 Answer the following (Each of 07 marks) **14**

- (a) Write a note on primary structure of protein.
- (b) Write a note on Ramachandran plots.

OR

Answer the following (each of 07 marks) **14**

- (a) Explain secondary structure of protein.
- (b) Write note on fibrous protein.

- 4 Answer the following (each of 07 marks) 14
- (a) Write a note on nomenclature and classification of enzyme.
 - (b) Explain in detail principle and mechanisms of enzyme catalysis.
- 5 Answer the following (any Two, each of 07 marks) 14
- (a) Explain in the detail, Glycolysis.
 - (b) Discuss in detail citric acid cycle.
 - (c) Explain in detail ED pathways.
 - (d) Describe in detail, pentose phosphate pathways.
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