

(i) Printed Pages : 2

Roll No.

(ii) Questions : 9

Sub. Code :

0	9	7	2
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Exam. Code :

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B.Sc. (Hons.) Biotechnology 3rd Semester
(2122)

BIOCHEMISTRY

Paper : BIOT-301-T

Time Allowed : Three Hours]

[Maximum Marks : 67

Note :— Attempt FIVE questions in all. Q. 1 is compulsory. Select ONE question from each unit.

1. (a) What is end product inhibition ? 3
- (b) What is glycogenolysis ? 3
- (c) What is ATPase ? 2
- (d) What is the role of ketone bodies ? 3
- (e) Name the amino acid precursor for dopamine. 2
- (f) What is the role of transaminase enzyme ? 2

UNIT—I

2. (a) Discuss the role of activated carriers in metabolism. 6
- (b) Discuss the role of ATP as a preferred energy carrier. 7
3. (a) Discuss the evolution of metabolic pathways. 7
- (b) Discuss different types of metabolic pathways. 6

UNIT—II

4. Discuss the reactions in Kreb's cycle. Discuss their regulation. 13
5. (a) Discuss the feeder pathway for mannose. 5
(b) Discuss mechanism of oxidative phosphorylation. 8

UNIT—III

6. (a) Describe the beta oxidation pathway for unsaturated fatty acids. 7
(b) Discuss the synthesis and significance of ketone bodies. 6
7. Discuss the steps in synthesis of fatty acids and regulation of the same. 13

UNIT—IV

8. (a) Discuss the synthesis of asparagine. 5
(b) Discuss the formation of porphyrin ring from amino acids. 8
9. (a) Discuss the reactions in salvage pathway. 7
(b) Discuss the breakdown pathway for CMP. 6