

This question paper contains 2 printed pages.

Roll No.

B.Sc. (Part.-II)

8005-I

S.No.

**B.Sc. (Part-II) Examination, 2021
(Faculty of Science)**

(Common to Three and Five Year Integrated Course)

BIO-TECHNOLOGY

(Biochemistry-II)

Paper : BT-501

Time Allowed : Three Hours

Maximum Marks : 50

No supplementary answer book will be given to any candidate. Hence the candidates should write the answers precisely in the main answer book only.

All the parts of one question should be answered at one place in the answer book. One complete question should not be answered at different places in the answer book.

Note: (i) Question paper will be divided into two Parts A and B. Part-A of question paper shall be compulsory and contain 10 (Ten) very short answer type questions of 20 words covering entire syllabus. Each carrying 1 (One) mark, with a total of 10 marks.

(ii) Part- B of question paper will have 4 questions one question with internal choice from each Unit/section. Students are required to attempt four questions in all from Part-B, selecting not more than one question from each section. Each question will carry 10 marks, with a total of 40 marks.

Write your roll number on question paper before start writing answers of questions.

PART-A

1. (a) Define the Anabolism.
- (b) Explain Gluconeogenesis.
- (c) What do you know by Redox Potential?
- (d) What are Constituents of Lipids?
- (e) What are Triacylglycerol's?
- (f) Write about ketone bodies.
- (g) Write the definition of photosynthesis.

K-0545/8005-I

P.T.O.

- i) Define Photorespiration.
- l) What is Decarboxylation?
- j) Define Nucleotide metabolism. 1×10=10

PART-B
SECTION-A

2. Describe oxidative phosphorylation and Electron transport chain. Write in brief on its significance. 10

Or

Write short notes on the following :

5+5=10

- (a) Exothermic and endothermic reaction.
- (b) Oxidation and reduction reactions.

SECTION-B

3. Describe β- oxidation of fatty acids with its significance. 8+2

Or

Write short notes on the following :

5+5=10

- (a) Biosynthesis of Membrane phospholipids.
- (b) Biosynthesis of Cholesterol.

SECTION-C

4. Write in brief about dark reaction of photosynthesis and differences in photosynthesis process of C₃, C₄ and CAM plants. 7+3=10

Or

Write short notes on the following :

5+5=10

- (a) Transamination and deamination.
- (b) Nitrogen excretion and Urea Cycle.

SECTION-D

5. Write an essay on Phosphorus and Sulphur regulation. 10

Or

Write an account on biosynthesis of purine nucleotides by de novo and salvage pathway.

□□□