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(Printed Pages -)

(20622)

Roll No.

B.Sc. (Bio.Tech.)-I Yr.

NS-3455(N)

B.Sc. Bio-Technology Examination,

June - 2022

BIO-CHEMISTRY

(B-101)

(New)

(B.Sc. Biotech.)

Time : Three Hours]

[Maximum Marks : 50

Note : Attempt any **five** questions. Each questions carries 10 marks.

1. Write a note on the classification and functions of carbohydrates.
2. Write notes on (any **two**): 5×2
 - (a) Starch
 - (b) Glycogen

P.T.O.

() Chitin

(1) Cellulose

3. Write notes on (any **two**) 3×2

(a) Zwitterions

(b) Essential Aminoacids

(c) Peptide bond

(d) Non protein amino acid

4. Write notes on (any one) 1×10

(a) Ramachandran plot

(b) Secondary structure of protein

5. Differentiate between (any **two**): 5×2

(a) Purines and pyrimidines

(b) Nucleotides and nucleosides

(c) Z DNA and B-DNA

6. Write a note on fat soluble vitamins. Mention their importance and the diseases caused due to their deficiency.

1×10

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7. Differentiate between:
(a) Glycolysis and Citric acid cycle
(b) Aerobic respiration and Anaerobic respiration
1×10
8. Write a note on the glyoxylate cycle.
Mention the significance of glyoxylate cycle.
1×10
9. Write notes on:
(a) Ketosis
(b) β -oxidation pathway
2×2
10. Write notes on:
(a) Cholestrol
(b) Phenylketonuria
5×2