

NS-3465 (CV-II)
B.Sc. (Biotechnology)
Examination, June-2021
Bioenergetics and Biomembranes
(B-202)

B.Sc. (Bio-Tech.)

Time : 1½ Hours] [Maximum Marks : 50

Note : Attempt any **two** questions. **All** questions carry equal marks.

1. Explain the pathway of Glycolysis and also describe its regulation.
2. Give a detail account on Electron transport chain and Oxidative phosphorylation.

P.T.O.

3. Write short notes on the following:
 - (i) Entropy
 - (ii) Redox potential
4. Define the following terms:
 - (i) Deamination
 - (ii) Alcoholic fermentation
 - (iii) Transamination
 - (iv) Ionophores
5. Differentiate the following:
 - (i) Endergonic and Exergonic Processes.
 - (ii) Active and Passive transport.
6. What are Fatty acid? Explain major and minor fatty acid pathway of oxidation.

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7. Explain the structure and function of Plant cell membrane with suitable diagrams.
8. Write short notes on the following:
 - (i) Glycogen breakdown
 - (ii) Urea cycle
9. Write an essay on High energy compounds.
10. Write short notes on the following:
 - (i) Equilibrium thermodynamics
 - (ii) Erythrocyte membrane