

THE UNIVERSITY OF BURDWAN
B.Sc. (Honours) Semester-III Examination (CBCS): 2021
Subject: Nutrition
Course Code: CC - 5
Course Title: Nutritional Biochemistry

The figures in the right hand margin indicate full marks

Candidates are required to give their answers in their own words as far as practicable.

Answer all *questions* as instructed

Examinees are instructed to submit the scanned copies / photographs of their answer scripts within 30 minutes after the completion of examination

F.M.-40

Time: 2hrs

Answer any eight questions of the following:

5×8=40

1. With a suitable diagram discuss the 'Aldose-ketose isomerism' of carbohydrates.
2. Briefly explain 'Lock and Key Model' and 'Induced Fit Model' in respect to enzyme action.
3. What do you mean by essential amino acid? Write some important functions of Amino acids.
4. Elaborate your concept on K_m value of an enzyme. What are the three main assumptions used by Michaelis and Menten?
5. Briefly describe your concept on 'amphoteric nature of amino acids'.
6. How Fatty acids are classified? Write the importance of 'Iodine number' of a fatty acid?
7. What is gluconeogenesis? Write the steps involved in the process of gluconeogenesis when glycerol used as precursor molecule.
8. Briefly describe the beta-oxidation of fatty acids.
9. Write a short note on 'beta-pleated sheet' of protein molecule.
10. What do you mean by 'Protein Efficiency Ratio'? How it differs from 'Net Protein Utilisation'.
