



বিদ্যাসাগর বিশ্ববিদ্যালয়

VIDYASAGAR UNIVERSITY

2nd Semester Examination 2022

B.F.Sc.

PAPER—BFSC-208

FOOD CHEMISTRY

Full Marks : 50

Time : 2 Hours

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.

Illustrate the answers wherever necessary.

1. Answer any ten questions. 10×2

- (a) What is flavour intensifier? Give name of two such synthetic components.
- (b) State on VLDL and HDL value and state its significance in respect to human health.
- (c) Name four antimicrobial additives used in food preparation.
- (d) What is NPU value? State its significance in human nutrition.

- (e) What do you mean by essential amino acids? Name two of them for human nutrition.
- (f) State on biological oxidation.
- (g) Define oxidative phosphorylation.
- (h) What do you mean by BV digestibility coefficient?
- (i) State on the synthetic colour additive used in human food.
- (j) How to examine the quality food?
- (k) What is Browning reactions?
- (l) How many ATP is formed when 1 molecule of glucose used through Glycolytic pathway?
- (m) State the causes of rancidity of fat.
- (n) What is polysaccharide? Name such two poly saccharides available from seaweed.
- (o) State on non-nutritive sweeteners and its impact on human nutrition.

2. Answer any six questions.

6×5

- (a) Write the impact of heat on denaturation of protein.
- (b) State the impact of moisture content in food materials.
- (c) Give an account on energy partitioning in the nutrition of any animal.
- (d) Write a note on the chemistry of taste in nutrition.

- (e) Give an account on the role of different enzymes and their function in the digestion process.
 - (f) Discuss the sources and role of fibre in nutrition.
 - (g) State on the mechanism of oxidation process of fatty acid.
 - (h) Give an account on the importance of fish protein in human nutrition.
 - (i) Describe Vitamin C and its role in metabolism.
 - (j) Discuss the mechanism of protein metabolism.
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