B.Voc Even Semester Examination, 2025

FOOD PROCESSING

Course No.: BVAF-202
(Basics of Chemistry in Food)

Full Marks: 70
Pass Marks: 28

Time: 3 hours

Note: 1. Attempt any one question from each unit.
2. Begin each answer in a new page
3. Answer parts of a question at a place
4. Assume reasonable data wherever required
5. The figures in the right margin indicate full marks for the question

UNIT-I

1. Define the term Carbohydrate. Explain the classification with one example of each. What are the functions of different carbohydrates. 14

2. (a) Name five carbohydrate-rich foods and explain why they are important in our diet.

   (b) Write a short note on the application of carbohydrates in foods 5+9=14

UNIT-II

3. (a) Discuss the role of proteins in food texture, flavour, and stability. Give examples of foods where proteins play a key functional role. 10

(b) Write about the enzyme utilization in food industry. 4

4. (a) Explain the different functional properties of proteins in food systems 10

(b) Give examples of protein-enriched functional foods and their health benefits. 4

UNIT-III

5. Describe the classification of vitamins with suitable examples. 14

6. (a) Describe the classification of minerals. 6

(b) Explain the effect of food processing on vitamins and minerals 8

UNIT-IV

7. (a) What is the basis of lipid classification? Name the various types. 10

(b) List the physical and the chemical differences between fats and oils? 4

8. (a) Write about adulteration of fats and oils. 5

(b) Write short note on the nutritional applications of lipids. 9

UNIT-V

9. Describe the process of enzymatic browning in fruits and vegetables. What factors influence this reaction, and what are the common methods used to control enzymatic browning during food processing? 14

10. (a) Discuss the role of polyphenol oxidase (PPO) in enzymatic browning. 7

(b) What is single-cell protein, and how is it produced? 7

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