

No. of Printed Pages : 3

**BPVC-102**

**B. SC. (FOOD SAFETY AND  
QUALITY MANAGEMENT)  
(BSCFSQM)**

**Term-End Examination**

**June, 2026**

**BPVC-102 : FOOD CHEMISTRY AND  
NUTRITION**

*Time : 3 Hours*

*Maximum Marks : 100*

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

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1. Describe the structure and properties of water. 20
2. Explain the applications of carbohydrates in the food industry. 20

3. Describe the properties and food applications of proteins. 20
4. Write short notes on any *four* of the following :  $4 \times 5 = 20$
- (a) Safety Evaluation of Foods
  - (b) Chemical Parameters of Water Quality
  - (c) Classification of Lipids
  - (d) Occurrence of Vitamins in Plant and Animal-based food products
  - (e) Toxic metals and their uptake from canned foods
  - (f) Mechanism of Enzyme Action.
5. Describe the physical and chemical properties of lipids. 20
6. List the different pathways of Fat Metabolism. Explain any *three* in details. 20

7. Define Food Additives. Classify them.  
Explain the coding systems followed for food additives. 20
8. Write short notes on any *four* of the following : 4×5=20
- (a) Calculate the energy value of food containing 15 g carbohydrate, 10 g protein and 5 g fat.
  - (b) Nutritive value of fish
  - (c) Acidulants
  - (d) Sequestrants
  - (e) Nutritive value of Nuts and Oilseeds
  - (f) Glycolysis

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