

22493

23124

3 Hours / 70 Marks

Seat No.

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- Instructions* – (1) All Questions are *Compulsory*.  
(2) Answer each next main Question on a new page.  
(3) Illustrate your answer with neat sketches wherever necessary.  
(4) Figures to the right indicate full marks.  
(5) Assume suitable data, if necessary.  
(6) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

**Marks**

1. Attempt any FIVE of the following: 10
- Define Food Spoilage.
  - Define Dehydration.
  - Name foods preserved by acids.
  - Define the term chilling.
  - Define fermentation.
  - List types of vinegar.
  - Define single effect evaporators.
2. Attempt any THREE of the following: 12
- Explain the principles of food preservation.
  - Classify foods according to ease of spoilage.
  - Explain in details the microbial spoilage.
  - Explain the process of canning.

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- 3. Attempt any THREE of the following:** **12**
- a) Explain pasteurization method in detail.
  - b) List methods of non-thermal processing and explain any one.
  - c) State the example of food products preserved using sugar.
  - d) Enlist low temperature preservation methods and explain any one.
- 4. Attempt any THREE of the following:** **12**
- a) Explain the effect of freezing on constituents of food.
  - b) Explain the functions of food additives.
  - c) Give classification of food colorants.
  - d) List problems in vinegar production.
  - e) Describe the steps involved in vinegar production.
- 5. Attempt any TWO of the following:** **12**
- a) Explain in details working of ohmic heating with neat labelled sketch.
  - b) Explain food preservation by use of chemicals with suitable examples.
  - c) Explain in details the basic principles of materials and energy balance.
- 6. Attempt any TWO of the following:** **12**
- a) Enlist types of flavors and explain any two in details.
  - b) Explain in detail vapour compression system.
  - c) Explain the working principle of shell and tube heat exchange with neat sketch.
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