

(R) What are the changes occur during freezing?

4

4. Explain the food preservation by high temperature. Differentiate between Pasturization and sterilization.

OR

Define the terms HTST and LTST process. Describe the complete process of 'canning' of foods. 12

5. What is irradiation of foods ? Explain the preservation by irradiation. What do you understand by 'Lethal dose'.

OR

What is class I and class II preservatives ? Explain the mode of action of addition of sugar as a preservative. 12

6. (A) What is food adulteration ? How to prevent food adulteration ? 4
(B) What are food Laws ? State their importance. 4

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Fourth Semester B. Sc. (Part - II) Examination

4S FOOD SCIENCE

(Food Preservation and Quality Control)

P. Pages . 5

Time : Three Hours]

[Max. Marks : 80

- Note :** (1) All questions are compulsory.
(2) Illustrate your answers with well labelled diagrams.

1. (A) Fill in the blanks :—

- (1) _____ is the quality factor in Food. (Flavour/Hedonic scale)
(2) Food spoilage is mainly caused by _____ . (Microorganisms/Viruses)
(3) _____ and _____ are the methods of food preservation. (drying and fermentation/Incubation and plating)
(4) High temperature short time process has following set of parameters. (63°C, 30 min / 70°C, 15 min) 2

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(B) Choose correct alternatives to complete the statement :—

- (i) The methods of drying are———
(Sun drying and hot air drying/dehydration and concentration)
- (ii) The class I preservative is ———
(Sugar/Benzoic acid)
- (iii) FPO meant for ———
(Fruit Product Order/milk and milk products)
- (iv) Microwaves are waves of radiant energy used in food for its heating properties ———.
(Electromagnetic/Infrared)
- 2

(C) Answer in **one** sentence :—

- (i) Define FPA act.
- (ii) What is preservation ?
- (iii) What is sterilization ?
- (iv) Illustrate the abbreviation "HACCP". 4

2. Explain the following :—

(A) Appearance factor. 4

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(B) Texture factor. 4

(C) What is Food Spoilage ? State the causes of food spoilage. 4

OR

(P) What is flavour ? How it contributes to food quality ? 4

(Q) Explain spoilage in milk and milk product. 4

(R) Explain spoilage in meat and meat product. 4

3. (A) Why food is preserved ? Lists the preservation techniques. 4

(B) Explain the principle of food preservation. 4

(C) Explain drying. 4

OR

(P) Explain the preservation by low Temperature. 4

(Q) Differentiate between freezing and freeze drying of foods. 4

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(C) Explain MMPO in brief. 4

OR

(P) What do you understand by 'HACCP' concept ? 4

(Q) What is food safety Act ? Explain. 4

(R) Explain BIS and CPA. 4

7. (A) State the functions of packaging materials. 4

(B) Explain flexible packaging materials for food products. 4

(C) Discuss personal hygiene. 4

OR

(P) What do you understand by biodegradable films as packaging material ? 4

(Q) What is food labeling ? Explain. 4

(R) Define cleaning with its importance. 4



