

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

M.Sc (FT) (Sem.-1)

FOOD PROCESSING & PRESERVATION

Subject Code : UC-MSFT-514-19

M.Code : 77274

Date of Examination : 21-01-23

Time : 3 Hrs.

Max. Marks : 70

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A contains SEVEN questions carrying TWO marks each and students has to attempt ALL questions.**
2. **SECTION-B consists of FOUR Subsections : Units-I, II, III & IV. Each Subsection contains TWO questions each carrying FOURTEEN marks each and student has to attempt any ONE question from each Subsection.**

SECTION-A

1. Write briefly :

- a. Name any two preservatives which are commonly used in the bakery industry.
- b. List traditional and modern methods of food preservation.
- c. Explain the terminologies
 - (i) Best before date
 - (ii) Use by date
- d. What are the advantages of glass-type food containers?
- e. Give merits and demerits of sun drying.
- f. Define food irradiation.
- g. Define intermediate moisture foods.

SECTION-B

UNIT-I

2. a. What is food spoilage? Discuss various physical, biochemical, and microbiological factors that cause spoilage in food.

- b. Mention different intrinsic and extrinsic factors affecting food shelf-life.
- 3. a. Discuss the various types of containers used for canning. Also, explain the different can defects based on appearance.
- b. Explain all the steps required in the canning of any fruit or vegetable.

UNIT-II

- 4. a. Write a note on the major components of the refrigeration system.
- b. What is the difference between refrigeration and freezing?
- 5. a. Explain the freezing curve. Discuss different freezing methods used in the food industry.
- b. Differentiate between conventional and freeze-drying.

UNIT-III

- 6. What are the main objectives of food dehydration? Explain important factors affecting the rate of drying. Explain the drum dryer and spray dryer with the help of a diagram.
- 7. What are intermediate foods (IMFs)? Give a detailed explanation of the principle, characteristics, advantages, and concerns associated with IMFs. Also, enlist a few examples for the IMFs.

UNIT-IV

- 8. a. Explain the principle, working, advantages and disadvantages of the irradiation processing techniques.
- b. Discuss **any five** food preservatives used in the food industry.
- 9. a. What are food preservatives? Differentiate between Class I and Class II preservatives with their examples.
- b. Discuss the principle, working, advantages and disadvantages of microwave processing techniques.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.