

**Total No. of Questions : 09**

**M.Sc (Food Technology) (2018 Batch) (Sem.-1)**

## FOOD PROCESSING & PRESERVATION

**Subject Code : MSFT-514-18**

**Paper ID : [75594]**

**Time : 3 Hrs.**

**Max. Marks : 70**

**INSTRUCTIONS TO CANDIDATES :**

1. **SECTION-A** contains **SEVEN** questions carrying **TWO** marks each and students has to attempt any **ALL** questions.
2. **SECTIONS-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

- Q1
- a) What do you understand by decimal reduction time?
  - b) Why spores are heat resistant?
  - c) Which scientist discovered Pasteurization?
  - d) What do you understand by cold sterilization?
  - e) Define water activity.
  - f) Write the names of two food borne pathogens.
  - g) What do you understand by Class I preservatives? Give example.

## SECTION-B

## UNIT-I

- Q2 Write the classification of foods. Discuss the major historical milestones in food processing & write their importance.
- Q3 Write the principle of thermal destruction of microorganisms. Discuss the factors affecting heat resistance of microorganisms.

## UNIT-II

- Q4 a) Differentiate between refrigeration and freezing.  
b) Discuss the different equipments used for the freeze drying of food products.
- Q5 Write short notes on the followings :
- a) Factors affecting freezing rate  
b) Freezing curve

## UNIT-III

- Q6 Write short notes on the followings :
- a) Solar dehydration.  
b) Methods of concentration of fruit juices.
- Q7 What are Intermediate Moisture Foods? Discuss the principle, characteristics, advantages and problems of Intermediate Moisture Foods.

## UNIT-IV

- Q8 Write the units, irradiation techniques in food and the recent applications of irradiation in food preservation along with safety issues.
- Q9 Discuss in detail about the microwave processing along with its principle and its application in food processing and preservation.