

Total No. of printed pages = 3

19/3rd Sem/DFET301

2021

**INTRODUCTION TO FOOD PROCESSING  
AND PRESERVATION TECHNOLOGY**

Full Marks – 100

Time – Three hours

The figures in the margin indicate full marks  
for the questions.

Answer any *five* questions.

1. (a) Define carbohydrates. Write two sources of carbohydrates. Classify the carbohydrates and explain each class with examples.  
1+2+6=9
- (b) What is dietary fiber ? Write a short note on digestion and absorption of carbohydrates.  
1+4=5
- (c) Write the names of any two monosaccharide, two disaccharide and two homopoly-saccharide.  
2+2+2=6

[Turn over



2. (a) Define essential amino acids. Enlist the names of essential amino acids.  $2+4.5=6.5$
- (b) Describe the principles of food preservation. 7
- (c) Differentiate between refrigeration and freezing. 2
- (d) Explain slow-freezing, quick-freezing and dehydro-freezing process of foods. 4.5
3. (a) What is pasteurisation ? Write the objectives of pasteurization. Write the time and temperature for milk pasteurization process.  $1+2+2=5$
- (b) Describe the general procedures of canning process. 7
- (c) Write about four types of spoilage in canned foods. 8
4. (a) Define preservatives. Classify preservatives as per PFA.  $1+4=5$
- (b) Name three chemical preservatives permitted in fruit and vegetable products. Explain the mode of action of benzoic acid.  $3+3=6$



- (c) How does oils, spices and condiments help in preservation ? 4
- (d) Explain the preservation principles of sodium chloride 5
5. (a) Describe preservation of foods by fermentation. 10
- (b) Describe the pickling as a method of food preservation. 10
6. Write short notes the following : 5×4=20
- (a) Food irradiation
- (b) Preparation of jam
- (c) Preparation of jelly
- (d) Preparation of marmalade.
7. (a) Define packaging. Describe the various functions of packaging. 2+10=12
- (b) What are the types of packaging ? Explain with suitable examples. 6
- (c) What are considered as the mechanical hazard for packaging ? 2

