

Total No. of printed pages = 3

FPT-301/IFPT/3rd Sem/2015/M

**INTRODUCTION TO FOOD
PROCESSING TECHNOLOGY**

Full Marks – 70

Pass Marks – 28

Time – Three hours

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

Answer any *five* questions.

1. (a) Describe the various factors effecting the growth and activities of micro-organisms.

9

- (b) Explain how spoilage occurs in bakery products. Name two micro-organisms responsible for spoilage in bakery products.

3+2=5

2. (a) What do you understand by :

2+2=4

(i) Nutrition

(ii) Hydrolytic rancidity ?

[Turn over

(b) Give two properties each for :

Starch, Pectin, Lipids, Cellulose and Proteins.

$5 \times 2 = 10$

3. (a) What are the basic principles of food preservation ? 5

(b) Give the function of each of these minerals in our body : 5

Calcium, Zinc, Sodium, Iron, Magnesium.

(c) Write a note on pasteurization and its types.

4

4. (a) What are the various functions of food packaging ? 6

(b) Describe the various types of packaging materials used for foods. 8

5. (a) Give the functions and sources of :

Vitamin A, Vitamin B₁, Vitamin B₄,

Vitamin D and Folic acid. $2 \times 5 = 10$

(b) Explain the mechanism of the action of enzymes with a suitable diagram. 4

6. Write notes on any *four* : $4 \times 3\frac{1}{2} = 14$
- (a) Three methods of freezing foods
 - (b) Preservation with the help of salt and sugar
 - (c) Properties of enzymes
 - (d) Types of foods based on perishability
 - (e) Fermentation
 - (f) Low temperature preservation.
7. (a) Describe the steps involved in in-pack sterilization of foods. 6
- (b) Write notes on any *two* : $2 \times 4 = 8$
- (i) Preservation with the help of spices
 - (ii) Preservation with the help of preservatives
 - (iii) Types of radiation treatment given to foods
 - (iv) Drying as a method of preservation
 - (v) Hygienic aspects in food handling, storage and processing.