FPT-301/IFPT/3rd Sem/2013/N

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) What do you understand by 'Food Processing Technology'?
 - (b) Define 'food'.
 - (c) What are 'carbohydrates'? Give two properties each for sugar, starch, cellulose and pectin.

 1+8=9
- 2. (a) Give two properties of lipids. 2
 - (b) What do you understand by 'Food Spoilage'?
 What are the various types and mention the factors causing the spoilage of foods.

2+3+2=7

[Turn over

| (c) | Write one function each of these minerals in our body: |
|-----|---|
| | Iron, Calcium, Phosphorus, Potassium, Silicon. |
| (a) | Write any two properties of proteins. 2 |
| (b) | What are essential amino acids? Name them. |
| | Give the functions and sources of Vitamins A, C, D, Folic Acid and Vitamin B-12. |
| (a) | What do you mean by a 'micro-organism'? Explain how the various factors effect the growth and activities of micro-organisms. 1+5=6 |
| (b) | What are the three kinds of foods categorised on the basis of their perishability? Give examples. |
| (c) | Explain the spoilage in |
| | (i) Meats and fish |
| | (ii) Breads and bakery products Name the micro-organisms effecting such foods. 5 |

3.

4.

- 5. (a) Explain the principles of preservation of foods through: 4+4=8
 - (i) Drying
 - (ii) Freezing.
 - (b) Write two properties of enzymes. Explain the mechanism of the action of enzymes with a suitable diagram. 2+4=6
- 6. (a) Explain the preservation of foods with the help of: (any two) 4+4=8
 - (i) Salt
 - (ii) Sugar
 - (iii) Preservatives
 - (iv) Fermentation.
 - (b) Write down the important general requirements of effective food packages.

6

- 7. (a) What are the various functions of food packaging?
 - (b) Describe the various types of packaging materials used for foods.