

**MASTER OF SCIENCE (DIETETICS AND FOOD
SERVICE MANAGEMENT)**

02461

Term-End Examination

June, 2013

MFN-008 : PRINCIPLES OF FOOD SCIENCE

Time : 2½ hours

Maximum Marks : 75

Note : Attempt any five questions. All questions equal marks.

1. Define the following terms with examples
(any 5) : 5x3=15
 - (a) Autoxidation
 - (b) Functional Foods
 - (c) Protein Isolates
 - (d) Sensory Evaluation
 - (e) Irradiation
 - (f) Hydrocolloids
 - (g) Texture

2. What do you know about different types of food fermentation ? Enlist some fermented foods consumed in India. 15

3. (a) Explain the barrier concept in the context of preservation. 7½
 (b) How can the undesirable changes occurring in fried foods be minimized? 7½
4. (a) Briefly explain any one functional property of proteins. 7
 (b) What is atmospheric dehydration? Enlist the different dryers used in the food industry. 8
5. (a) What is pasteurization? Explain the different methods of pasteurization? 2+6
 (b) Describe the principles of food preservation. 7
6. (a) Enumerate the functions of colour in foods. 5
 (b) Describe the alterations occurring in the following foods during processing: 5+5
 (i) Fruits and Vegetables
 (ii) Meat and meat products
7. Differentiate between **any 3** of the following with suitable examples. 5+5+5
 (a) Colloids and Crystalloids
 (b) Foams and Emulsions
 (c) Monomeric and Oligomeric enzymes
 (d) Sterilization and Canning
 (e) Maillard Reaction and Caramalization
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