

**CERTIFICATE PROGRAMME IN FOOD
SAFETY**

Term-End Examination

December, 2012

BFN-001 : INTRODUCTION TO FOOD SAFETY

Time : 3 Hours

Maximum Marks : 100

Note : Attempt five questions in all. Question No - 1 is compulsory. All questions carry equal marks.

1. (a) List any five hazardous microorganisms and/or parasites along with their commonly implicated foods. 10
- (b) Explain the following in 2-3 sentences only. 10
 - (i) Risk Analysis
 - (ii) Avian Influenza
 - (iii) Aseptic Packaging
 - (iv) Danger Zone
 - (v) Minimal Processing
2. (a) Differentiate between food risk, food toxicity and food hazard. 5
- (b) Briefly discuss the need and role of food safety and sanitation in the food industry. 6
- (c) What is safe food ? Explain the importance of safe food. 2+7

00589

3. (a) List the hazards associated with food, giving appropriate examples. 10
- (b) Discuss prions and viruses as the emerging pathogens of concerns. 5
- (c) Enlist the features of organic and genetically modified foods. 5
4. (a) Enlist the causes of food spoilage illustrating the causes diagrammatically. 6
- (b) Mention the type of spoilage and the microorganism involved with the following food : 8
- Bread
 - Fresh meat
 - Eggs
 - Evaporated milk
- (c) Explain the effect of processing on the nutritive quality of food. 6
5. What is food preservation ? Highlight the importance, basic principles and the various methods available for food preservation. 2+2+2+14
6. (a) What tips would you give for the storage of the following food items ? 10
- (i) Meats
 - (ii) Dairy products
 - (iii) Fruits and vegetables
 - (iv) Poultry and Eggs

- (b) How would you limit bacterial growth by adopting a time - temperature control process, while preparing, cooking and holding food ? 10
7. (a) List the cleaning agents and the sanitizers you can use in the food industry. 5
- (b) What protocol would you use as a food service manager to ensure employees hygiene practices. 5
- (c) Differentiate between the physical and chemical methods of pest control, giving appropriate examples ? 5
- (d) Enlist the modern methods of waste disposal . Explain any one method briefly. 5
8. Write short notes on *any four* of the following : 5+5+5+5
- (a) Sources of microbial contamination within the human body
- (b) Types of cleaning agents
- (c) Effects of temperature on bacteria
- (d) Different types of storage
- (e) Concept of minimal processing
-