

00621

**CERTIFICATE PROGRAMME IN FOOD  
SAFETY**

**Term-End Examination**

**June, 2012**

**BFN-001 : INTRODUCTION TO FOOD SAFETY**

*Time : 3 Hours*

*Maximum Marks : 100*

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

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1. (a) Comment on the relationship between the following sets of terms : 10
- (i) Globalization \_\_\_\_\_ Food safety problem
  - (ii) Phytoestrogens \_\_\_\_\_ Threat to food safety
  - (iii) Blanching \_\_\_\_\_ Preservative technique
  - (iv) Potentially Hazardous Foods (PHF) \_\_\_\_\_ Temperature Danger Zone
  - (v) Anaerobic digestion \_\_\_\_\_ waste disposal

- (b) Fill in the blanks : 5
- (i) \_\_\_\_\_ is a chemical substance which is added to the cleaning compound to prevent the salts of calcium in hard water from forming deposits on the equipment surface.
  - (ii) \_\_\_\_\_ is a treatment technology used to destroy waste by controlled burning.
  - (iii) Rodent traps are an example of \_\_\_\_\_ method of pest control.
  - (iv) A temperature of \_\_\_\_\_ should be maintained in the refrigerator.
  - (v) \_\_\_\_\_ is a parasitic food borne infection found in populations consuming undercooked pork.
- (c) List five good hygiene practices which you as a food handler should adopt to maintain food quality. 5
2. Discuss the concept of 'Integrated approach to Food safety,' highlighting the various food safety tools that should be adopted to achieve this integration. 20
3. (a) Briefly explain how does oxygen, temperature, water activity and PH influence bacterial growth. 10
- (b) What are chemical hazards ? Discuss, highlighting the natural occurring and added chemical hazards. 10

4. Explain the following statements briefly : 5+5+5+5=20
- (a) Hurdle technology is a reliable preservation technique.
  - (b) Prions are a recent concern to food safety
  - (c) Foods are classified on the basis of their stability.
  - (d) Organic foods are good for health.
5. (a) Describe the intrinsic and the extrinsic factors affecting spoilage of food. 10
- (b) How is ambient temperature processing different than processing by application of heat ? Explain giving examples. 10
6. (a) What is the time- temperature control process? Explain its relevance in food safety, giving appropriate examples. 10
- (b) What are high risk foods ? Enlist 4
- (c) What measures would you adopt while display and storage of high risk foods ? Enumerate. 6
7. (a) Differentiate between cleaning and sanitizing in the context of work surfaces in a food service unit. 4
- (b) How will you choose a cleaning agent for your unit? Explain, considering the different action of the cleaning agents available. 10
- (c) Enlist the facilities for employees you will ensure in your food service unit. 6

8. Write short notes on *any four* of the following :

5+5+5+5=20

- (a) Avian Influenza is threat to food safety.
  - (b) Changes in food caused by microorganisms.
  - (c) Food processing by removal of heat.
  - (d) Types of food storage.
  - (e) Measures for safe disposal of waste.
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