

**CERTIFICATE PROGRAMME IN FOOD  
SAFETY**

**Term-End Examination**

**June, 2010**

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

*Time : 3 hours*

*Maximum Marks : 100*

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*Note : Answer five questions in all. Question number 1 is compulsory. All questions carry equal marks.*

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1. (a) Explain the following in 2-3 sentences : **10**
- (i) Risk Assessment
  - (ii) HACCP
  - (iii) Prions
  - (iv) Pasteurization
  - (v) Bioprocessing
- (b) Give one example for each of the following : **10**
- (i) Food borne virus causing illness.
  - (ii) Unicellular fungi.
  - (iii) Shell fish toxin poisoning.
  - (iv) Method of drying for food preservation.
  - (v) Chemical insecticide.
  - (vi) Physical hazard in food.
  - (vii) Type of bacteria based on temperature for survival.

- (viii) Toxic heavy metal in food.
  - (ix) GM food crops undergoing field trial in India.
  - (x) High risk food.
2. (a) Diagrammatically explain the different phases of growth of the bacteria. 6
  - (b) What are the factors affecting bacterial growth ? 6
  - (c) You are incharge of inspecting food in an food service establishment. What points would you keep in mind on receipt of food ? 8
3. (a) Discuss the importance of maintaining food safety and quality in the entire chain of food production. 10
  - (b) What are the various intrinsic and extrinsic factors which affect food spoilage ? 10
4. (a) What are the different types of food storage areas ? Discuss the essential features that must be present in food storage areas. 12
  - (b) Describe giving examples the different ways in which cleaning agents act. 8
5. (a) What is sanitation ? List the benefits of a food sanitation programme. 8
  - (b) Discuss some of the physical and chemical methods of pest control. 12

6. (a) What are some of the facilities you must provide for employees in any food service establishment to ensure hygienic practices ? **10**
- (b) What is the need for regular waste disposal ? **10**  
What points will you keep in mind regarding design and placement of garbage and refuse containers ?
7. (a) What are the different types of chemical hazards that can be present in foods ? Explain briefly. **10**
- (b) What is the effect of processing on the nutritive value of food ? **10**
8. Write short notes on *any four* of the following : **5+5+5+5**
- (a) Organic foods
- (b) Avian Influenza
- (c) Changes in foods caused by microbial spoilage
- (d) Guidelines for refrigeration storage
- (e) Recent concerns related to food safety
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