

**CERTIFICATE PROGRAMME IN FOOD
SAFETY**

**Term-End Examination
December, 2015**

BFN-001 : INTRODUCTION TO FOOD SAFETY

Time : 3 Hours

Maximum Marks : 100

Note : Attempt any five questions in all.

1. Define the following : 2x10=20
- (a) Mycotoxin
 - (b) Lathyrism
 - (c) Ergot
 - (d) Danger zone
 - (e) Water activity
 - (f) Antioxidant
 - (g) Hygiene
 - (h) Adulterant
 - (i) BSE
 - (j) Exotoxin
2. Justify any four of the following statements : 5x4=20
- (a) Low temperature does not ensure the safety of food stored inside the refrigerator.
 - (b) Spore formers are the most resistant form of microorganisms.

- (c) Food serves as an vehicle for the spread of many gastrointestinal diseases.
- (d) All the food processing treatments are based on extension of shelf life of food.
- (e) Food safety is possible by following Good Hygienic Practises.

3. Differentiate between the following sets of terms : **4+4+4+4+4=20**

- (a) Food Infection Vs. Food Intoxication
- (b) Log Phase Vs. Lag Phase
- (c) Sanitizer Vs. Detergent
- (d) Mesophile Vs. Psychrophile
- (e) High risk food Vs. Low risk food

4. (a) What are the factors which affect the rate of bacterial growth ? Explain. **10**

(b) Give the relationship between food spoilage and : **5+5=10**

- (i) Water activity
- (ii) Temperature

5. (a) Classify the bacteria on the basis of their morphology, giving examples. Enumerate the diseases caused by each of them. **12**

(b) Explain the role of packaging in ensuring food safety. **8**

6. (a) Define a hazard. 2
- (b) List all the hazards associated with food giving examples. 8
- (c) What are the necessary precautions to be undertaken while storing : 10
- (i) Chilled foods
- (ii) Dry foods

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

- (a) Genetically Modified Food 4x5=20
- (b) Pest Control in Food Industry
- (c) Browning reactions in food
- (d) Emerging pathogens of concern
- (e) Natural Plant toxins
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