

**CERTIFICATE PROGRAMME IN FOOD
SAFETY**

Term-End Examination

December, 2017

00433

BFN-002 : HAZARDS TO FOOD SAFETY

Time : 3 hours

Maximum Marks : 100

- Note :** (i) *Attempt five questions in all.*
(ii) *Q No. 1 is compulsory.*
(iii) *All parts of a question must be attempted together.*

1. (a) Give one example for each of the following : 15
- (i) Spore former
 - (ii) Mycotoxin
 - (iii) Biogenic amine
 - (iv) Pesticide Residue
 - (v) Causative organism of Mad Cow Disease
 - (vi) Osmophilic Yeast
 - (vii) Food borne virus
 - (viii) Gram negative rod
 - (ix) Physical hazard
 - (x) Sea food toxin
 - (xi) Pathogenic protozoan
 - (xii) Plant toxicant
 - (xiii) Antinutritional factor
 - (xiv) Food color
 - (xv) Antioxidant
- (b) List the various chemical hazards associated with food. 5

2. (a) What are the factors responsible for the emergence of new food borne pathogens ? 10
- (b) List the names of ten emerging pathogens of concern. 10
3. (a) Differentiate between Food Infection and Food Intoxication giving suitable examples. 10
- (b) Explain how water acts as a source of contamination and leads to a food borne disease outbreak. 10
4. Give the significance of **any four** of the following in relation to food safety : 5+5+5+5
- (a) Shell Fish Poisoning
- (b) Heavy metals
- (c) VDR's
- (d) HACCP
- (e) Enterotoxins
5. (a) What is Food Adulteration ? 5
- (b) List the common adulterants associated with food. 8
- (c) What are the methods to detect common adulterants in milk ? 7
6. (a) What are virus and food associated viruses ? 8
- (b) Describe the various factors affecting the bacterial growth. 12

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

- (a) Mycotoxins 5+5+5+5
 - (b) Sources of food contamination
 - (c) Salmonellosis
 - (d) Parasites in food
 - (e) Dioxins
 - (f) Intentional Food Additives
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