

**CERTIFICATE PROGRAMME IN FOOD
SAFETY**

Term-End Examination

June, 2016

BFN-002 : HAZARDS TO FOOD SAFETY

Time : 3 hours

Maximum Marks : 100

- Note :** (i) *Question No. 1 is compulsory.*
(ii) *Attempt five questions in all.*
(iii) *All questions carry equal marks.*

-
1. Define the following : 2x10=20
- (a) Food Safety
 - (b) Mycotoxin
 - (c) Adulteration
 - (d) Intoxication
 - (e) ADI
 - (f) GRAS
 - (g) Hazard
 - (h) Additive
 - (i) Contaminant
 - (j) Alkaloids
2. (a) What is the impact of following on safety of foods ? 5+5=10
- (i) Veterinary Drug Residues
 - (ii) Shell Fish Poisoning
- (b) Enlist the various steps you would adopt 10 ensuring safe food.
3. (a) Classify the type of hazards associated with food and emphasize the role of biological hazards in food safety. 2+8=10

- (b) Explain the relationship between OR potential temperature and water activity with microbial growth. 10
4. (a) What are Food Additives ? Explain their functions in the food industry. 10
- (b) List any five common adulterants found in foods. State the common methods which can be used for detecting these adulterants. 10
5. Justify **any four** of the following statements : 5+5+5+5=20
- (a) Chemicals are a threat to food safety if not used judiciously.
- (b) Emulsifiers have a functional role in processed foods.
- (c) Certain strains of *E. coli* are very harmful to human beings.
- (d) Emergence of new food borne pathogens is always a concern.
- (e) Antioxidants are used for extending the shelf life of foods.
6. (a) Differentiate between Food Infection and Food Intoxification giving examples. 6
- (b) Explain the route, sources of contamination, symptoms and preventive measures of common food infections caused by gram negative rods. 14
7. Write short notes on **any four** of the following : 20
- (a) Physical hazards
- (b) Food borne viruses
- (c) Plant toxicants
- (d) Antinutritional factor
- (e) Source of contamination
-