

**CERTIFICATE PROGRAMME IN FOOD  
SAFETY**

**Term-End Examination**

**June, 2018**

**BFN-002 : HAZARDS TO FOOD SAFETY**

*Time : 3 hours*

*Maximum Marks : 100*

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

1. (a) Give one example of each of the following : 1x10  
(i) Food borne virus  
(ii) Plant toxicant  
(iii) Food contaminate  
(iv) Physical hazard  
(v) Veterinary Drug Residue  
(vi) Shell fish toxin  
(vii) Parasitic protozoan  
(viii) Food color  
(ix) Biogenic amine  
(x) Heavy metal found in fishes  
(b) What is Safe Food ? Enlist the various steps 10  
to ensure the safety of food.
2. (a) What is a hazard ? 2  
(b) Classify the various types of hazards 5  
associated with food.  
(c) Elaborate the types of Biological hazards 13  
associated with food.

3. (a) What is the relationship between water activity and rate of spoilage of food ? 10  
 (b) What are the various routes through which the food supply can be contaminated ? 10
4. What is the impact of following on food safety : 4x5  
 (a) Pesticide Residues  
 (b) Dioxins  
 (c) Packaging material  
 (d) Antinutritional factor
5. (a) List any five common adulterants found in milk. State the common methods which can be used for their detection. 10  
 (b) Define "Food Additive". State the role of any five commonly used food additives along with their examples. 10
6. (a) What are the reasons for the emergence of new pathogens ? 5  
 (b) List the emerging pathogens of concern related to Food. 5  
 (c) Explain the route, sources of contamination, symptoms and preventive measures of food borne diseases caused by the following : 10  
 (i) Salmonella  
 (ii) Bacillus cereus
7. Write short notes on **any four** of the following :  
 (a) Food Intoxication 5x4=20  
 (b) Shell Fish Poisoning  
 (c) Emulsifiers  
 (d) Pesticide Residues  
 (e) ETEC