

00691

**CERTIFICATE PROGRAMME IN FOOD
SAFETY**

Term-End Examination

June, 2012

BFN-002 : HAZARDS TO FOOD SAFETY

Time : 3 hours

Maximum Marks : 100

Note : Answer five questions in all. Question No.1 is compulsory. All questions carry equal marks.

1. Give two examples for each of the following. $2 \times 10 = 20$
- (a) Food borne viruses
 - (b) Mycotoxins
 - (c) Parasitic protozoan
 - (d) Gram negative pathogenic rods
 - (e) Spoilage Yeasts
 - (f) Antioxidants used in food
 - (g) Chemical hazards in food
 - (h) Permitted Food colours
 - (i) Anti-nutritional factors in food
 - (j) Natural Toxicants in animal foods

2. Give the importance on *any Five* of the following in food safety: 4+4+4+4+4=20
- (a) Sequestrants
 - (b) Food additives
 - (c) Water activity
 - (d) Acrylamide
 - (e) Aflatoxins
 - (f) Food viruses
3. (a) What is Food Adulteration ? Explain giving examples. 5
- (b) What are the common food adulterants ? Give a brief review. 8
- (c) What are the harmful effects of these adulterants ? 7
- 4 (a) What are the various types of food borne pathogens ? Give examples. 10
- (b) List the route of contamination disease caused along with symptoms of two gram - ve rods (bacteria) commonly related to gastro-enteritis. 10
5. (a) What are the various types of hazards associated with food ? Explain, giving examples. 10
- (b) "Biological hazards are the biggest threat to food safety". Justify this statement with appropriate examples. 10

6. (a) What is a Food Additive ? 5
(b) What is the role of Food Additives ? 8
(c) Can food additives also act as contaminants ? Explain. 7
7. (a) What are the various naturally occurring toxicants in plant and animal foods ? Briefly elaborate on their effect on human health. 10
(b) What are the various types of contaminants and residues present in foods ? Describe how they enter the food chain and harm the body. 10
8. Write short notes on *any Four* of the following :
- (a) Food Intoxications 5+5+5+5
(b) Emerging pathogens of concern
(c) PFA Act (1954)
(d) Heavy Metals in Foods
(e) Ergot Alkaloids-Role in food safety
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