

00365

CERTIFICATE PROGRAMME IN FOOD SAFETY

Term-End Examination

December, 2015

BFN-002 : HAZARDS TO FOOD SAFETY

Time : 3 hours

Maximum Marks : 100

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

1. (a) Define/ Explain briefly the following in 2 - 3 sentences each : 2x7=14
- (i) Epidemic dropsy
 - (ii) Giardiasis
 - (iii) Oxidation - Reduction potential of food
 - (iv) OPV
 - (v) Mad Cow Disease
 - (vi) GRAS substances
 - (vii) Arsenic poisoning
- (b) Fill in the blanks : 6
- (i) _____ is the bacteria which causes cholera.
 - (ii) _____ is the fungal toxin found in apple juice produced by some Penicillium species.
 - (iii) Bacteria which are able to grow at low temperatures are called _____.
 - (iv) _____ is the bacterium implicated in causation of gastric ulcers.

(v) _____ is a synthetic non - calorie sweetener which should not be consumed by Phenylketonuria patients.

(vi) _____ is the ability of a substance to cause birth defects.

2. (a) Describe the mode of transmission, foods implicated and symptoms of poisoning due to any four pathogenic bacteria. 12
- (b) List some general guidelines for prevention of food - borne illnesses. 8
3. (a) What are the different types of chemical hazards that can be found in food ? Explain giving examples. 10
- (b) What is gastroenteritis ? Describe the symptoms, mode of transmission and prevention. 10
4. (a) What is a food additive ? Discuss giving examples the functional role of any four types of food additives. 2+8
- (b) Describe simple chemical tests which can be used to detect adulteration in any five foods. 10
5. (a) Describe giving examples the different kinds of toxicants that may be naturally present in foods of animal origin. 12
- (b) What is Ergotism ? How will you reduce your exposure to ergot alkaloids 8

6. (a) What are protozoa ? Describe the modes of transmission, foods involved and symptoms of diseases caused by any three parasitic protozoa. 10
- (b) How does Hepatitis A spread ? Describe the symptoms and explain how this disease can be prevented. 5+2+3
7. (a) Explain briefly the factors which affect multiplication and survival of micro-organisms ? 8
- (b) Give the classification of bacteria based on their requirement for oxygen for growth. 5
- (c) List some general measures for reducing exposure to mycotoxins. 7
8. Write short notes on **any four** of the following :
- (a) Lathyrism 5+5+5+5
- (b) Aflatoxicosis
- (c) Lead poisoning
- (d) Anti-nutritional factors in food
- (e) Veterinary drug residues
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