

**MASTER OF SCIENCE (DIETETICS AND
FOOD SERVICE MANAGEMENT)**

Term-End Examination

June, 2016

MFN-003 : FOOD MICROBIOLOGY AND SAFETY

Time : 2½ hours

Maximum Marks : 75

Note : (i) *Question No. 1 is compulsory.*

(ii) *Attempt five questions in all.*

(iii) *All questions carry equal marks.*

(iv) *Attempt all the parts of the question together at one place.*

- 1. Give one example of each : 15x1=15**
- (a) Anaerobic Spore Former
 - (b) Causative agent of BSE
 - (c) Biogenic amine
 - (d) Sea food toxin
 - (e) Mycotoxin
 - (f) Heavy metal found in fishes
 - (g) Sanitizing agent
 - (h) Probiotic organism
 - (i) Food adulterant
 - (j) Antioxidant
 - (k) Physical hazard in food
 - (l) Food borne virus
 - (m) Plant toxicant
 - (n) Flexible polymer
 - (o) Food color

2. State the significance of the following with respect to food safety : (any three) 3x5=15
- (a) Personal Hygiene
 - (b) VRD's
 - (c) Dioxins
 - (d) Cleaning Agents
3. Define the following : 5x3=15
- (a) ADI
 - (b) PRPs
 - (c) GMPs
 - (d) Probiotics
 - (e) Food Infection
4. (a) What are the sources of contamination of food ? 5
- (b) "Different types of hazards are associated with food". Justify the statement giving examples. 10
5. (a) Define Risk Analysis. 5
- (b) What are the components of Risk Analysis ? Explain. 10
6. (a) What is the need of HACCP in the food industry ? 7
- (b) What is the role of ISO in maintaining food safety ? 8
7. Write short notes on any three of the following : 3x5=15
- (a) Bacterial Growth Curve
 - (b) Spoilage of Canned Food
 - (c) Codex Alimentaries
 - (d) Food borne diseases and their types.