

M.Sc. 3rd Semester Examination, 2015

NUTRITION AND DIETETICS

PAPER – NUD-304(Module-I & II)

Full Marks : 40

Time : 2 hours

*The figures in the right hand margin indicate marks
Candidates are required to give their answers in their
own words as far as practicable*

Illustrate the answers wherever necessary

MODULE –I

(Food toxicology and Food adulteration)

1. Answer any *five* questions of the following : 1 × 5
 - (a) What is toxicological marker ?
 - (b) Write the full form of HACCP and CAC.
 - (c) What do you mean by the term "acute toxicity" ?

(Turn Over)

- (d) Write the full form of 'NOAEL' and 'LOAEL'.
- (e) What is "Ama toxin" ?
- (f) What is Muscarine ?
- (g) What do you mean by Amnesic shell-fish poisoning ?
- (h) What do you mean by Food Contaminants ?
2. (a) What does the term "food safety" refers to ?
- (b) Write the clinical symptoms of food-borne illness.
- (c) How food-borne illness can be prevented ?
- (d) Write a short note on 'food safety hazards'. 2 + 1 + 3 + 2

Or

- (a) What are LD_{50} and ED_{50} ?
- (b) Briefly describe the interaction of toxic substances.

(3)

- (c) Classify toxicants with example. $(1 + 1) + 3 + 3$
3. (a) What do you mean by 'food infection' and 'Food intoxication' ?
- (b) Write the role of bacteria, virus and fungus in connection to food contamination. $(1 + 1) + 5$

Or

- (a) Briefly describe the types of food adulteration.
- (b) Write the names of any five common food adulterant and discuss their health hazards. $2 + 5$

MODULE –II

(*Food Microbiology*)

4. Answer any *five* questions of the following : 1×5
- (a) Define selective media with example.
- (b) Write the composition of nutrient broth and nutrient agar media.

- (c) Why Ca^{+2} is required in PCR mixture ?
 - (d) What do you mean by "appam" in connection to fermented food ?
 - (e) What is Generation time ?
 - (f) What do you mean by Rapid method in connection to food microbiology ?
 - (g) What is "Exponential phase" in bacterial growth curve ?
 - (h) What do you mean by "Fermented fish" ?
5. (a) Classify culture media with example ?
- (b) Define bacteriostatic and bactericidal agent with examples.
- (c) What is disinfectant ? 2 + (2 + 2) + 2

Or

- (a) Briefly describe the different factors that affect the bacterial growth.
- (b) Write about common ingredient present in culture media. 4 + 4

(5)

6. (a) Write the importances of beer and viniger as a fermented food.

(b) What is mould fermentation? $(2\frac{1}{2}+2\frac{1}{2}) + 2$

Or

(a) Write the principle of RT-PCR.

(b) Briefly describe the immunological methods used for isolation and detection of microorganism. 2 + 5