

**M.Sc. 4th Semester Examination, 2012**

**NUTRITION AND DIETETICS**

*( Food Processing and Technology )*

**PAPER—NUD-401**

*Full Marks : 40*

*Time : 2 hours*

**Answer all questions**

*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**

- 1. Answer any five questions of the following : 1 × 5**
- (a) What do you mean by  $a_w$  ?**
  - (b) What do you mean by food texture ?**

*( Turn Over )*

- (c) Write the names of any two microbes responsible for food spoilage.
  - (d) What do you mean by pickling ?
  - (e) What do you mean by counter current airflow.
  - (f) How acid preserve food.
  - (g) Write the names of any two chemicals used in food preservation.
  - (h) Write the name of the chemical changes in food that influence its nutritive value.
2. (a) What do you mean by ionizing and nonionizing radiation ?
- (b) Describe the mechanism of food preservation by ionizing radiation.
- (c) State the importance of food preservation. 2 + 4 + 2

*Or*

- (a) What do you mean by freeze drying ?
- (b) Write the process of freeze drying of food items.

- (c) Write the advantages of freeze drying over heat drying of food preservation.
- (d) Write the limitations of freeze drying process. 2 + 2 + 2 + 2
3. (a) Write some of the pigments present in different fruits which are responsible for colour of the fruits.
- (b) How chemical nature of fruits affect colour generation ?
- (c) Give some examples of flavouring agents in food. 3 + 2 + 2

*Or*

- (a) Describe the different steps adopted for food safety during food storage.
- (b) Write the different steps adopted for food safety during food handling.
- (c) Write the different techniques of food preservation by hot air flow drying. 2 + 2 + 3

MODULE – II

4. Answer any *five* questions of the following : 1 × 5

(a) Write any two examples of fermented milk product.

(b) Why fat of marine fish is health friendly ?

(c) What do you mean by nutritive value of nonrefined cereal products ?

(d) Why egg is preferred for pre-school children ?

(e) Write any two products of yeast fermentation.

(f) Write the nutritive value of curd.

(g) What do you mean by excreta disposal ?

(h) What do you mean by biodegradable wastes ?

5. (a) What do you mean by 3 'E's' ?

(b) What is sludge ?

(c) Write the different types of wastes with their categories.

- (d) Discuss any one important and usable method of solid waste disposal with its advantages and disadvantages. 1 + 1 + 2 + 4

*Or*

- (a) Write the nutritive value of egg and small fish.
- (b) State the nutritional impact of wheat and leafy vegetables. (2 + 2) + (2 + 2)

6. (a) Write the conditions of healthy fermentation.
- (b) How the protein value of the rice product can be increased by fermentation and focus the importance of those fermentation induced amino acids in our body.
- (c) Write in brief about the fermentation system. 1 + (2 + 2) + 2

*Or*

- (a) What do you mean by quality control of processing technology of foods.
- (b) Write the linkage of yeast fermentation with community health. 4 + 3
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