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Total No. of Pages : 02

Total No. of Questions : 09

B.Sc.Hons. (Nutrition and Dietics) (Sem.–1)

INTRODUCTION TO FOOD SCIENCE

Subject Code : BSND-112-18

M.Code : 77209

Date of Examination : 14-01-2023

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

SECTION-A

1. Write briefly :

- a) Write about classification of food.
- b) Why food is cooked? Name methods.
- c) What constitutes carbohydrates and protein?
- d) Name six water soluble and three fat soluble vitamins.
- e) Draw tetrahedral; structure of water showing bonding pattern.
- f) Write about storage requirements of rough and brown rice.
- g) Write about nutritional significance of oil seeds and nuts.
- h) How egg is graded?
- i) How fish act as source of nutrients?
- j) Give classification of meat and its composition.

SECTION-B

2. Write functions of food. What are different food groups and their role as nutrients.
3.
 - a) Explain chemical nature of water. What are water activity and its role in food spoilage?
 - b) How germination changes the composition of the cereals, elaborate?
4.
 - a) Write the beneficial effect of ripening of fruits. How over-ripening effect on quality/composition of fruits?
 - b) Differentiate and name climacteric and non-climacteric fruits.
5.
 - a) Draw a schematic diagram of an egg. Write about its nutritional significance.
 - b) What is fish? Write about its nutritional significance.
6. Draw structure of meat/muscle. Write about its composition and nutritive value.

SECTION-C

7.
 - a) Define milk. Write about nutritional value of fresh and fermented milk. How milk is stored.
 - b) Write about merits and demerits of solar cooking.
8.
 - a) What are food emulsion and food dispersions? Elaborate role of dispersions in food structure, stability and food product development.
 - b) Define spices and herbs. Classify spices based on use and composition.
9.
 - a) Define health foods, functional foods, prebiotics, probiotic, nutraceuticals, organic foods and GM foods. Write about function requirements of any three.
 - b) Write role of nutraceuticals as functional foods.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.