Total No. of Pages : 02

Total No. of Questions : 09

## Master of Science (Food Technology) (Sem.-1) NUTRACEUTICALS & FUNCTIONAL FOODS Subject Code : UC-MSFT-517-19 M.Code : 77277 Date of Examination : 23-01-23

Time: 3 Hrs.

Max. Marks: 70

## **INSTRUCTIONS TO CANDIDATES :**

- 1. SECTION-A contains SEVEN questions carrying TWO marks each and students has to attempt ALL questions.
- 2. SECTIONS-B consists of FOUR Subsections : Units-I, II, III & IV. Each Subsection contains TWO questions each carrying FOURTEEN marks each and student has to attempt any ONE question from each Subsection.

#### **SECTION-A**

- 1. Write briefly :
  - a. Define functional foods with suitable examples.
  - b. What are the limitations of nutraceutical products in the Indian market?
  - c. What do you understand by carotenoids?
  - d. The active component of soybean and its health benefits. Explain.
  - e. Write about the functional ingredients present in oats.
  - f. Discuss about the health claims.
  - g. What do you understand by the term anti-nutritional factors?

#### **SECTION-B**

#### UNIT-I

- 2. a. Classify nutraceuticals based on the chemical constituents.
  - b. Elaborate on how nutraceutical is related to medicine?
- 3. a. What is the relation between free radicals and diseases?

b. Write the role of antioxidants as nutraceuticals in detail.

#### UNIT-II

- 4. a. What is cancer, is it common among the population and how do you get cancer? Discuss the food that has anti-cancer properties.
  - b. Describe cereal products as a functional food.

## 5. Write short notes on :

- a. Fruits as a functional food
- b. Nutraceuticals and Functional food used in stress
- c. Milk as a functional food ingredient.

## UNIT-III

- 6. a. Describe legumes as a functional food and the impact of bioactive compounds present in legumes on human health.
  - b. Briefly describe the functional properties of nuts.
- 7. a. Elaborate on various herbs and their potential application as functional foods.
  - b. Write short notes on functional beverages.

#### **UNIT-IV**

- 8. a. Write a note on the recent developments in the preparation of functional food.
  - b. Describe the type of anti-nutritional factors present in foods and also write the methods for its inactivation.
- 9. a. Describe the methods used to assess the nutritional status of the community.
  - b. Give the clinical signs used to find out the nutritional status of an individual.

# 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.