Roll No. Total No. of Pages: 02

Total No. of Questions: 09

M.Sc. (Food Technology) (Sem.-3)

NUTRITION & HEALTH

Subject Code: UC-MSFT-616-19

M.Code: 78562

Date of Examination: 23-12-22

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.
- 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. a. What is the Double Burden of Malnutrition and Malnutrition Infection Cycle?
  - b. Define Bioavailability and Glycemic Index.
  - c. What is an antioxidant and write an example of a vitamin considered as potent antioxidant
  - d. What is BMI and write its SI unit.
  - e. Soluble fiber, when fermented in the large intestine produces......and......
  - f. Which macronutrients are considered healthy sources of energy and which macronutrients is considered unhealthy source of energy in the human body?
  - g. What are the ingredients of pancreatic secretion which assists the digestion of proteins in the duodenum where polypeptide splits and end chain amino acids are removed?

### **SECTION-A**

#### **UNIT-I**

- 2. a. What is the concept of the Food Exchange System? Write down the advantages of FES?
  - b. Write in detail about the following indicators:
    - i. Anthropometric Indicators
    - ii. Biochemical Indicators
    - iii Clinical Indicators

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- 3. a. What are the objectives and importance of the Nutritional Status Assessment?
  - b. What might be the nutritional consequences of a diet that is entirely deficient of
    - i. Core Foods
    - ii. Secondary Foods
    - iii. Peripheral Foods.

#### **UNIT-II**

- 4. a. Using suitable examples, explain why carbohydrates are needed in the human diet.
  - b. Briefly write the relationship of dietary fibers in controlling the following in the human body:
    - i. Obesity
    - ii. Diabetes
    - iii. Gastrointestinal problems
- 5. a. Classify fats and lipids as per their role in the human body.
  - b. Discuss the role of hormones (Insulin and Noradrenaline) in the fat utilization that is stored in adipose tissue.

#### **UNIT-III**

- 6. a. Discuss the digestion & absorption of proteins in the human body.
  - b. Write in detail the various uses of proteins in the human body.
- 7. a. Write the most common classification of vitamins and differentiate between water-soluble and fat soluble vitamins.
  - b. Discuss the digestion & absorption of water-soluble and fat-soluble vitamins in the human body.

## **UNIT-IV**

- 8. Discuss in detail the drug-food interactions and the effect of drugs on food intake and nutrient absorption.
- 9. a. Food misinformation is a major setback to the health of humans in 21st century. Comment.
  - b. Give a detail account on change in diet supports in weight management.

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

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