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BFTFTC 381

Choice Based Credit System VI Semester B.Sc. (FT) Degree Examination, September 2022 (2021 – 22 Batch Onwards) FOOD TECHNOLOGY Nutraceuticals and Functional Foods

Time: 3 Hours Max. Marks: 80

PART - A

1. Answer in brief on any 10 of the following.

 $(10 \times 2 = 20)$

- a) Flavonoids.
- b) Dietary fibers.
- c) Probiotics.
- d) Kwashiorkor.
- e) Uses of Vitamin C.
- f) What are free radicals?
- g) Aquaceuticals.
- h) Toxicology.
- i) Give two examples for Medicinal plants.
- j) Simple carbohydrates.
- k) Functional foods.
- I) Complex carbohydrates.

PART - B

Answer any four of the following choosing one full question from each Unit.

 $(4 \times 15 = 60)$

UNIT - 1

- 2. a) Write a note on Antioxidants.
 - b) What is food pyramid? Explain with the general dietary guidelines.
 - c) Explain the role of nutraceuticals in prevention of diseases.

(3+5+7)

OR



(4+4+7)

3. a) What is malnutrition? Classify protein energy malnutrition. b) Write a note on role of dietary fiber in reducing serum cholesterol levels. c) What are nutraceuticals? Classify based on its sources. (4+4+7)**UNIT - 2** 4. a) Write a note on chitin. b) Explain the mechanism of probiotics. c) Discuss the classifications of Terpenoids. (3+5+7)OR 5. a) Give the application of Phenolic compounds. b) Differentiate between probiotics and prebiotics. c) Explain the application of Chondroitin sulphate. (4+4+7)**UNIT - 3** 6. a) Define natural antioxidants. Mention the types with examples. b) Write a note on mineral extraction and enrichment process. c) Explain toxicology and use of clinical trials involved in animal models. (3+5+7)7. a) Briefly explain bioavailability and bioequivalence. b) Briefly explain the post-harvest technology for crop improvement. c) Define phytonutraceuticals. Explain the role of medicinal plants in nutraceutical industry. (4+4+7)**UNIT - 4** 8. a) Explain fruits and vegetables as functional foods. b) Describe the development in processing of functional foods. c) Explain role of fermented food as functional food. (3+5+7)9. a) Write a note on nuts and oil seeds as functional foods. b) Role of fermented food in diabetes.

c) Explain the scope of functional foods and nutraceuticals.