

**Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University) Coimbatore-641043.**

**Master's Degree Examination – November 2018
III-Semester**

Class :II PG
Major :Food Science and Nutrition

Time: 3 hours
Max. Marks: 60

17MFNC18 Functional foods and Nutraceuticals

Part A

10 x 1/2 = 5

Choose the correct answer

1. The first food designated as a food for specified health use in Japan was
 - a. An oat bran enriched breakfast cereal
 - b. A plant sterol enriched margarine
 - c. an isotonic sports drink
 - d. A hypo allergenic rice grain
2. Lignans are part of which family of compounds
 - a. carotenoids
 - b. polyphenols
 - c. phytosterols
 - d. none of the above
3. Black tea is rich in -----
 - a. theoflavins
 - b. catechins
 - c. genestein
 - d. daidzein
4. Which of the flavonoids are known as phytoestrogens?
 - a. flavanols
 - b. flavones
 - c. isoflavones
 - d. anthocyanidins
5. Genestein and diadzein are found in -----
 - a. green tea
 - b. fish oil
 - c. soya bean
 - d. spirulina
6. Which of the following food is a probiotic
 - a. inulin
 - b. dietary fibre
 - c. yoghurt
 - d. oats and rye
7. --- is a rich source of thiols
 - a. broccoli
 - b. soyabean
 - c. genestein
 - d. cherry tomatoes
8. Lutein is a ----- that reduce the risk of lung and breast cancer
 - a. mineral
 - b. carotenoid
 - c. pseudovitamin
 - d. vitamin
9. Which of the following enhances gut functioning?
 - a. probiotics
 - b. antioxidant
 - c. oestrogen
 - d. omega 3 fattyacid
10. How many categories of food are listed under FOGSHU
 - a. 8
 - b. 9
 - c. 11
 - d. 13

Part B

5 x 4 = 20

Answer ALL questions

Each answer should not exceed 200 words or one page

- 11.a. Explain the terms nutraceuticals and functional foods
(Or)
- 11.b. Brief on the history of functional foods
- 12.a. Write short notes on terpenes
(Or)
- 12.b. Discuss the benefits of phenolic compounds
- 13.a. Highlight the common properties of probiotics
(Or)
- 13.b. Outline the therapeutic effects of probiotics
- 14.a. Discuss the role of fibre in obesity
(Or)
- 14.b. Discuss the benefits of omega 3 fatty acids
- 15.a. Write about the functional ingredients of FOSHU foods
(Or)
- 15.b. Brief on the criteria needed to satisfy the regulatory aspects of functional foods

Part C

5 x 7 = 35

Answer ALL questions

Each answer should not exceed 600 words or three pages

- 16.a. Illustrate the stages involved in the development of functional foods
(Or)
- 16.b. Discuss in detail about the components of functional foods
- 17.a. Classify nutraceuticals based on the food source
(Or)
- 17.b. Give the classification of nutraceuticals based on the chemical nature
- 18.a. Discuss the prophylactic role of *Lactobacillus* and *Bifidobacterium*
(Or)
- 18.b. Explain the concept of probiotics and their role in human health
- 19.a. Elaborate the role of fibre in diabetes and cancer
(Or)
- 19.b. Give the source of phytosterols and their nutraceutical properties
- 20.a. Write the ICMR guidelines for probiotics
(Or)
- 20.b. Discuss about the International regulatory aspects of functional foods