



Avinashilingam Institute for Home Science and Higher Education for Women

(Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)

Re-accredited with 'A+' Grade by NAAC. Recognised by UGC Under Section 12B

Coimbatore - 641 043, Tamil Nadu, India

Bachelor's Degree Examination – August 2020

VI Semester

Class :III UG

Time : 2 Hours

Major :Food Science and Nutrition

Max. Marks : 50

15BFNC27 Nutraceuticals and Nutrigenomics

Part A

10 x 1 = 10

Choose the Correct Answer

1. The primary metabolite is
 - a. terpenoid
 - b. DNA
 - c. flavanoid
 - d. lycopene
2. Glycosides that exert a prominent effect on heart muscle are called
 - a. saponin glycoside
 - b. Lactomyo glycoside
 - c. cardiac glycoside
 - d. mono glycoside
3. An isoperinoid derivative is
 - a. phorphenol pyruvate
 - b. Geranyl pyrophospatate
 - c. hydroxyl pyruvate
 - d. lacto pyruvate
4. A substance that opposes oxidation or inhibits reactions
 - a. pro oxidant
 - b. oxidant
 - c. anti oxidant
 - d. peroxidant
5. Micro organisms believed to provide health benefits when consumed are
 - a. antibiotics
 - b. prebiotics
 - c. probiotics
 - d. antioxidants
6. The phytochemical present in flax seed is
 - a. lycopene
 - b. carotenoid
 - c. omega 3 fatty acid
 - d. poly phenol
7. A product that contains nutrient derivatives in concentrated form is
 - a. dietary supplement
 - b. food additives
 - c. functional food
 - d. fortification
8. Biologically important tertaterpene is
 - a. lycopene
 - b. retinol
 - c. squaline
 - d. flavinoid
9. The quality and safety norms for regulation of food supplements was given by
 - a. CFTRI
 - b. NIN
 - c. FSSAI
 - d. FDA
10. The compound used to scavenge free radicals is
 - a. xanthine nutruse
 - b. Mono di oxygenase
 - c. glutathione
 - d. Catalase

Part B

3 x 6 = 18

Answer any **Three** questions

Each answer should not exceed 400 words or two pages

11. Compare functional foods and traditional foods.
12. Give the classification of nutraceuticals.
13. Give the functions of phytochemicals.
14. What is a dietary supplement?
15. Write a note on intestinal microflora.
16. Discuss the variation between probiotic, prebiotic and symbiotics.
17. Brief out on the post translational modification.
18. Write short note on genetic variation.
19. Mention the nutrient control of gene expression.
20. Enumerate the role of amino acids and nucleic acids in gene expression.

Part C

2 x 11 = 22

Answer any **Two** questions

Each answer should not exceed 800 words or four pages

21. "Fruits act as functional foods"-Justify the statement.
22. Compare designer and pharma foods, in detail.
23. Elaborate on the concept of dietary supplement.
24. Explain FOSHU foods.
25. Discuss the applications of probiotics in human nutrition.
26. Explain the functions and concept of prebiotics.
27. Enumerate the concept of epigenetics and proteomics.
28. Discuss the importance of nutrigenomics with examples.
30. Explain the role of nutrigenomics in prevention of cancer.
31. How can obesity be treated by nutrigenomics?
