



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 – June 2021

VI Semester

Class : III UG

Major : Food Science and Nutrition

Time : 3 Hours

Max. Marks: 100

18BFNC27 Nutraceuticals and Nutrigenomics

Part A

10 X1=10

Choose the Correct Answer

1. Locate the reason, why dietary fibre is considered to be an active Non- Nutrient? CO1 K1
 - a. It has anti – inflammatory properties but is not stored as fat
 - b. It is broken down in the body to provide energy
 - c. It acts to stop low density lipoproteins breaking apart
 - d. It is not absorbed but is beneficial to the digestive system
2. Name the person who coined the term “Nutraceutical”. CO1 K1
 - a. Casimir Funk
 - b. William Rose
 - c. Stephen DeFelice
 - d. C.Gopalan
3. _____ is the Herbal medicine of Japan. CO2 K3
 - a. Kampo
 - b. Jamu
 - c. Foshu
 - d. Toshu
4. Trace Salmon can be classified what type of food from the following based on high in omega -3- fatty acids CO2 K2
 - a. Fortified foods
 - b. Functional foods
 - c. Dietary supplements
 - d. Nutraceutical
5. Assess the Prebiotic food from the following. CO3 K5
 - a. Chicory Root
 - b. Tomato
 - c. Banana
 - d. All the above
6. Cite the Probiotic food from the following. CO3 K2
 - a. Fructo - oligosaccharides
 - b. Galacto - oligosaccharides
 - c. Xylo - oligosaccharides
 - d. All the above
7. Point out the component of antioxidant enzyme: CO4 K4
 - a. selenium
 - b. Vitamin E
 - c. Inulin
 - d. Vitamin D
8. Select an example of Nutritionally modified food CO4 K5
 - a. Low fat milk
 - b. Organic Yogurt
 - c. Parmesan cheese
 - d. Chocolate flavour milk
9. Give an example of Herbomineral drug. CO5 K1
 - a. Melatonin
 - b. Glutathione
 - c. Shilajit
 - d. Carnitine
10. Hypoglycaemia is associated with _____ condition. CO5 K4
 - a. Obesity
 - b. Diabetes
 - c. Food Allergies
 - d. Cardiovascular diseases

Part B
Answer the following
Answer should not exceed 400 words Or Two Pages

5X 6= 30

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|---|--------|
| 11.a. Define Nutraceuticals and Describe what are Designer foods
(or) | CO1 K1 |
| 11.b. Interpret how are Nutraceuticals equivalent to functional foods | CO1 K2 |
| 12.a. Explain the Phytochemical with examples.
(or) | CO2 K3 |
| 12.b. Evaluate the clinically important ingredients of Nutraceuticals. | CO2 K4 |
| 13.a. Defend can Probiotic grow inside of synbiotic micro beads by consuming the prebiotic?
(or) | CO3 K5 |
| 13.b. Enlist the functions of Probiotics and Prebiotics. | CO3 K3 |
| 14.a. Discuss the concepts of Nutritional genomics.
(or) | CO4 K2 |
| 14.b. Distinguish between Nutrigenetics and Nutrigenomics. | CO4 K4 |
| 15.a. Brief the three stages of Gene expression.
(or) | CO5 K2 |
| 15.b Judge the nutritional genomics being used to improve health | CO5 K3 |

Part C
Answer the following
Answer should not exceed 400 words or Two Pages

5x 12= 60

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|---|--------|
| 16.a. What are functional foods? And Describe it by its Merits and Demerits.
(or) | CO1 K2 |
| 16.b. Identify an active Non- Nutrient and outline its role in the promotion of good health. | CO1 K2 |
| 17.a.What are Dietary supplements? Justify Nutraceuticals - Food as Medicine.
(or) | CO2 K3 |
| 17.b. Expand FOSHU and Evaluate its role for healthier life. | CO2 K5 |
| 18.a. Correlate the Probiotics and Prebiotics.
(or) | CO3 K3 |
| 18.b. Compare the role of Probiotics and Dietary Fibre in the body. | CO3 K4 |
| 19.a. What is meant by Post – translational modification? And Organize the different types of it
(or) | CO4 K4 |
| 19.b Enumerate the benefits, factors and stages that contribute to genetic variation | CO4 K5 |
| 20.a. Determine the factors that impact gene expression in nutrition.
(or) | CO5 K3 |
| 20.b. State the role of Nutrition and diet in the clinical management of Mood Disorders and complex diseases. | CO5 K4 |
