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VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN
 [AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY, CHENNAI]
 Elayampalayam – 637 205, Tiruchengode, Namakkal Dt., Tamil Nadu.

Question Paper Code: 90024

B.E. / B. Tech. END-SEMESTER EXAMINATIONS – NOV. / DEC. 2024

Fifth Semester

Biotechnology

U19BTV44 – FOOD NUTRITION & HEALTH SCIENCES

(Regulation 2019)

Time: Three Hours

Maximum: 100 Marks

Answer ALL the questions

Knowledge Levels (KL)	K1 – Remembering	K3 – Applying	K5 - Evaluating
	K2 – Understanding	K4 – Analyzing	K6 - Creating

PART – A

(10 x 2 = 20 Marks)

Q. No.	Questions	Marks	KL	CO
1.	What do you mean by micronutrients? Give examples.	2	K1	CO1
2.	Enlist any four negative impacts of malnutrition on human. What is the cause of vitamin A deficiency?	2	K2	CO1
3.	Differentiate between monosaccharides and disaccharides.	2	K2	CO2
4.	List out the different types of techniques for measuring basal metabolic rate (BMR).	2	K2	CO2
5.	What could save as an alternative for feeding an infant, when mother decides not to breastfeed?	2	K3	CO3
6.	Define lactation efficiency.	2	K1	CO3
7.	What are the rationales behind food adulteration?	2	K1	CO4
8.	Enumerate at least four traditional methods of food preservation.	2	K2	CO4
9.	Bring out the role of fibers in gut health.	2	K2	CO5
10.	How Yoghurt finds application in weight management?	2	K3	CO5

PART – B

(5 x 13 = 65 Marks)

Q.No.	Questions	Marks	KL	CO
11. a)	Discuss the approaches used to assess the nutritional requirement.	13	K1	CO1
	(OR)			
b)	Differentiate between digestion proper, autolytic digestion and symbiotic digestion. Elucidate the composition and properties of intestinal juice.	13	K2	CO1
12. a)	Describe the major cations and anions present in body fluids? What are the factors, which influence the amount of body fluid in an individual?	13	K3	CO2
	(OR)			
b)	Explain the mechanism of controlling electrolyte movement in an individual.	13	K3	CO2
13. a)	Give an account on specific nutrient requirements for weight gain during pregnancy.	13	K2	CO3
	(OR)			
b)	Discuss the importance of nutrients in a lactating mothers diet and then impact on breast milk composition.	13	K3	CO3
14. a)	Classify the different types of food allergies and discuss their testing methods.	13	K4	CO4
	(OR)			
b)	Discuss the various causes of food spoilage and their symptoms.	13	K3	CO4
15. a)	Discuss the diet management strategies recommended by IDA for anemia and diabetes.	13	K2	CO5
	(OR)			
b)	Elaborate the IDA'S recommendations for chronic disorders.	13	K3	CO5

PART – C

(1 x 15 = 15 Marks)

Q.No.	Questions	Marks	KL	CO
16. a)	Explore the role of various types of therapeutic diet and their functions.	15	K3	CO5
	(OR)			
b)	Discuss about the various types of food additives and food contaminants with examples.	15	K3	CO4