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Question Paper Code	12577
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**B.E. / B.Tech. - DEGREE EXAMINATIONS, APRIL / MAY 2024**

Seventh Semester

**Computer Science and Engineering**

**20CEOE902 - HUMAN NUTRITION AND HEALTH**

Regulations - 2020

Duration: 3 Hours

Max. Marks: 100

**PART - A (10 × 2 = 20 Marks)**

Answer ALL Questions

	<i>Marks</i>	<i>K- Level</i>	<i>CO</i>
1. What is the RDA for energy and protein for a coal mine worker?	2	K1	CO1
2. Differentiate Anabolism and Catabolism.	2	K2	CO1
3. Difference between Monounsaturated and polyunsaturated fats.	2	K2	CO2
4. If you are eating a serving of wheat crackers that has 5 grams of fat, 22grams of carbohydrates and 2grams of protein, how many total calories should be in this serving?	2	K3	CO2
5. Differentiate between water-soluble and fat-soluble vitamins.	2	K2	CO3
6. Define Co-factor.	2	K1	CO3
7. Define physiological fuel factor.	2	K1	CO4
8. Give the classification based on occupation.	2	K1	CO4
9. Draw the food pyramid.	2	K1	CO5
10. Give the classification of modified diets.	2	K1	CO5

**PART - B (5 × 13 = 65 Marks)**

Answer ALL Questions

11. a) Explain the importance of carbohydrates in our body.	13	K2	CO1
<b>OR</b>			
b) What do you mean by minimal nutritional requirement? Explain how is it different from RDA?	13	K2	CO1
12. a) Show the classification of lipids based on structure.	13	K3	CO2
<b>OR</b>			
b) Sketch the digestive process of Protein in our body.	13	K3	CO2
13. a) Explain the functions of minerals along with its types.	13	K2	CO3
<b>OR</b>			
b) Explain about			
i) Role of vitamin A in vision.	7	K2	CO3
ii) Role of vitamin E in maintaining integrity of cell membranes.	6	K2	CO3

*K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create*

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14. a) Explain the estimation of energy requirement for humans. 13 K2 CO4

**OR**

b) What is BMR? Explain the test associated with BMR along with the factors affecting it. 13 K2 CO4

15. a) Explain how the use of food groups simplifies planning of balanced meals. 13 K2 CO5

**OR**

b) As a chef in a restaurant, what measures would you take to enhance the nutritive value of foods served? 13 K2 CO5

**PART - C (1 × 15 = 15 Marks)**

16. a) Explain the various categories of convenience foods giving a suitable example for each category. 15 K2 CO6

**OR**

b) Discuss about Smart packaging / Intelligent packaging. 15 K2 CO6