UPES
End Semester Examination, May 2023

Course: Human Nutrition   Semester: IInd
Program: M.Sc.(N&D)   Time: 03 hrs.
Course Code: HSND7003   Max. Marks: 100

Instructions: Read question carefully. All the best

SECTION A

S. No.	MCQ's /Fill in the blanks/ T&F (1.5 marks each)	30 Marks	CO
1	According to WHO classification optimum BMI range is between _____.	1.5	CO1
2	3 D's of pellagra are_____.	1.5	CO1
3	_____ hinders iron absorption in the gut.	1.5	CO1
4	Food Fortification is the process of adding _____ and _____.	1.5	CO1
5	Calcium is better absorbed in presence of ____.	1.5	CO2
6	The nutrition transition model was first proposed in _____by_____.	1.5	CO2
7	'ABCD' in assessment of nutritional status stands for: -	1.5	CO2
8	List all food groups.	1.5	CO2
9	Rohan is 40 yrs old cyclist, his BP is generally on higher end . Suggest any 2 nutritional interventions for him to keep his BP in range.	1.5	CO2
10	Normal blood sugar range is _____.	1.5	CO3
11	List any 2 importance of RDA.	1.5	CO3
12	Name any 2 stages of nutrition transition.	1.5	CO3
13	Dietary diversity is related to_____.	1.5	CO3
14	List any 2 principles of meal planning.	1.5	CO4
15	Name any 2 auto-immune diseases.	1.5	CO4
16	Iron requirement for adult male is _____.	1.5	CO4
17	Body weight of reference women is _____.	1.5	CO4
18	Vitamin C is better absorbed in presence of _____.	1.5	CO5
19	Deepti is 30 yrs old, her weight is 70kg and height is 5'5". Calculate her BMI.	1.5	CO5
20	Unit of hemoglobin is_____.	1.5	CO5

SECTION B (5 marks each question)			
Q	Short Answer Type Question (5 marks each) Scan and Upload 4 questions 5 marks. Word limit (100-120)	20 Marks	CO
1	List the equipment used for measuring direct and indirect calorimetry.	5	CO1
2	What are the factors that affect energy requirement?	5	CO2
3	Is there any health implication of consuming genetically modified food.	5	CO3
4	What is physiological fuel value? List 5 factors affecting BMR.	5	CO5
SECTION C 30 marks			
Q	Two case studies 15 marks each sub-sections	30 Marks	CO
1	Case Study 1 (Word limit- 100-150 each question) Rapid economic growth, urbanization, and globalization have resulted in dietary transformation in India. Triple burden of malnutrition remains a significant concern, with high prevalence of undernutrition, widespread micronutrient deficiencies, and rising obesity. Modernization, urbanization, economic development, and increased wealth lead to predictable shifts in diet a) What is Nutrition transition? (5 marks) b) Explain the model of nutrition transition along with the different stages/patterns. (10 marks)	15	CO2
2	Case Study 2 (Word limit- 100-150 each question) Food and nutrition are basic indispensable needs of humans. Nutrition plays a critical role in maintaining the health and well-being of individuals and is also an essential component of the healthcare delivery system. The nutritional status of individuals affects the clinical outcomes. Essential nutrients are classified into six groups, namely carbohydrates, proteins, lipids, minerals, vitamins, and water. Nutritional requirements of healthy individuals depend on various factors, such as age, sex, and activity. Hence, recommended values of dietary intakes vary for each group of individuals. a) Why assessing nutritional status of the community is important? (5 marks) b) Explain the different methods used for assessment of nutritional status. (10 marks)	15	CO4
	SECTION- D 20 marks		
Q	Long Answer type Questions Scan and Upload (10 marks each) Word limit 200-250	20 Marks	CO
1	Explain the benefits of functional foods with suitable examples. What makes nutraceuticals different from Functional foods.	10	CO3
2	Why is important immunity at every stage of life? Discuss the relationship between nutrition, immunity and infection.	10	CO5