Seat No.: _____ **Enrolment No.: _____**

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER– IV (NEW) EXAMINATION – SUMMER 2015

Subject Code: 2141408 **Date:03/06/2015**

Subject Name: Fundamentals of Food Nutrition

Time: 10.30am-01.00pm **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Enlist the different factors affecting on human nutrition and Explain it briefly.	**07**
	(b)	What do you mean by nutrient wheel? Give the important of all nutrients.	**07**
Q.2	**(a)**	Define RDA. What are the different factors to be taken into account for estimation of calorie requirements? State the uses of RDA.	**07**
	(b)	How the proteins get affected during heat processing of food products?	**07**
		OR	
	(b)	What is basal metabolism? Explain the different factors affecting Basal Metabolism Rate.	**07**
Q.3	**(a)**	Give the classification of proteins and Explain the functions of proteins.	**07**
	(b)	Discuss functions, deficiency symptoms and requirement of vitamin A.	**07**
		OR	
Q.3	**(a)**	Briefly explain the 11 food groups based on nutritive value and also write the main nutrients contributed in each group.	**07**
	(b)	Discuss the classification of minerals. Briefly explain the functions of calcium and potassium.	**07**
Q.4	**(a)**	Explain the types and role of dietary fibers in our body.	**07**
	(b).1	Describe the classification of food on the basis of physiological functions of food.	**03**
	(b).2	What are the therapeutic diets and how do you plan diet management for diabetes.	**04**
		OR	
Q.4	**(a)**	What do you understand by digestion, absorption and utilization of nutrients? Explain the role of saliva in digestion of nutrients in our body.	**07**
	(b)	Discuss the role of water in human body.	**07**
Q.5	**(a).1**	What are the factors affecting digestion? Explain the protein digestion.	**04**
	(a).2	What are the nutritional requirements for infants and adults?	**03**
	(b)	Discuss the functions and deficiency symptoms of vitamin B_{12}.	**07**
		OR	
Q.5	**(a)**	With the help of a neat flow chart, explain how 6-carbon glucose is converted into 3 carbon pyruvic acid in glycolysis.	**07**
	(b)	Give the classification of vitamins on the basis of solubility. State the functions and deficiency symptoms of Vitamin-C.	**07**

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