$\begin{array}{c} \textbf{GUJARAT TECHNOLOGICAL UNIVERSITY} \\ \textbf{BE-} \ \textbf{V}^{th} \ \textbf{SEMESTER-EXAMINATION-MAY/JUNE-2012} \end{array}$

BE- Vth SEMESTER-EXAMINATION – MAY/JUNE - 2012 Subject code: 151405 Date:

Date: 07/06/2012

•		me: Food Nutrition and Health) pm – 05:00 pm	ks: 70		
 Instructions: Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. 					
Q.1	(a)	Describe in detail food poisoning micro-organisms with their source,	07		
Q.1	(b) (c)	detection, mode of action and control. Describe 'Food Guide Pyramid' with its important features. Highlight the important functions of fat or oil as a food nutrient.	04 03		
Q.2	(a)	Do as directed: i) Give the purpose of balanced diet. ii) Mention the disease caused due to iron deficiency and write its symptoms. iii) Define: Malnutrition iv) How nutrient deficiency diseases are different from other diseases which are caused by viral or bacterial attack. v) Give the adverse effects of 'Tin' metal on human health. vi) Enlist the name of metallic contamination in food. vii) What is food poisoning?	07		
	(b)	Discuss in detail the classification of carbohydrates with examples. OR	07		
	(b)	What are polysaccharides? Write the important properties of starch, pectin and gums.	07		
Q.3	(a)	Explain Vitamin C with respect to: i) source ii) function iii) deficiency disorder	06		
	(b) (c)	Write the symptoms and treatment for kwashiorkor. Give nutrient requirements for pre-school children. OR	04 04		
Q.3	(a)	Explain Vitamin D with respect to: i) source ii) function iii) deficiency disorder	06		
	(b)	Explain the concept of supplementation and how we can differentiate it with fortification.	04		
	(c)	Write energy requirement and dietary guideline for expectant woman.	04		
Q.4	(a)	What do you mean by Basal Metabolism Rate (BMR)? Discuss factors affecting BMR.	06		
	(b)	Define the terms: Protein efficiency ratio, Net protein utilization, Conventional foods, Macronutrients	04		
	(c)	Comments on 'Nutritive value of eggs and egg products'	04		

Q.4	(a)	Discuss factors affecting RDA.	06
	(b) (c)	Explain the important properties of protein. Write briefly the importance of calcium and phosphorus in human body.	04 04
Q.5	(a)	Write short notes on: i) Antivitamins ii) Radioactive materials in food	06
	(b)	Explain the various physical tests for detection of adulteration in food sample.	04
	(c)	Write dietary guidelines for adult.	04
		OR	
Q.5	(a)	Write short notes on: i) Infestation and infection ii) Favism and haemagglutenins	06
	(b)	Explain the various chemical tests for detection of adulteration in food sample.	04
	(c)	Explain modification of diet in old age people.	04
