

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- Vth SEMESTER-EXAMINATION – MAY/JUNE - 2012****Subject code: 151401****Date: 05/06/2012****Subject Name: Design and Formulation of Food****Time: 02:30 pm – 05:00 pm****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) List comparative fatty acid profile of some vegetable oil and fat. Explain role of fat in development of atherosclerosis and discuss role of PUFA including Omega-3 and Omega -6 fatty acids in preventing Cardio Vascular Disease. 07
- (b) Define following 06
- a) Protein b) Menu Planning c) Food Exchange List
- d) Nutrients e) RDA f) Fortification
- (c) List various symptoms of PEM 01
- Q.2 (a) (i) Define following terms: 07
- (1) Biological Value (2) convenience food (3) Nutraceutical
- (ii) Write a brief note on glycemic index of food
- (b) Explain in detail the principles of menu planning. 07
- OR
- (b) Give nutritional significance of fermented food including probiotic and prebiotic foods. 07
- Q.3 (a) Mother's milk is best food for infant-Explain. Compare nutritive value of mother's milk with cow's milk. 07
- (b) What is significance of food exchange list and describe the food exchange list used in India. 07
- OR
- Q.3 (a) Write in short regarding various disorders of Gastrointestinal tract and explain various dietary management practices during the GI disease. 07
- (b) Describe the nutritional value of cereals 07
- Q.4 (a) List various function dairy ingredients. Write in detail various physiological significance of bioactive peptides. 07
- (b) Write a note on wheat and rice based processed products. 07
- OR
- Q.4 (a) Write various symptoms and nutritional requirements for a diabetic patient and brief about various artificial and natural intense sweeteners. 07
- (b) Describe the morphological structure of an egg. 07
- Q.5 (a) Write short note : 07
- (i) Dietary fibre (ii) Follow-up formula
- (b) Enlist the different anti-nutritional factors naturally found in foods with one example of each and write in detail about lathyragens. 07
- OR
- Q.5 (a) Write in detail nutritional requirement of pre-school going children. 07
- (b) Write a note on egg yolk proteins. 07
