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. 0.1 (a) List comparative fatty acid profile of some vegetable oil and fat. Explain 07 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. (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 (i) Define following terms: Q.2 07 (a) (1)Biological Value (2) convenience food (3) Neutraceutical (ii) Write a brief note on glycemic index of food (b) Explain in detail the principles of menu planning. 07 OR Give nutritional significance of fermented food including probiotic and 07 (b) prebiotic foods. Q.3 (a) Mother's milk is best food for infant-Explain. Compare nutritive value of 07 mother's milk with cow's milk. What is significance of food exchange list and describe the food exchange 07 (b) list used in India. OR Write in short regarding various disorders of Gastrointestinal tract and Q.3 (a) 07 explain various dietary management practices during the GI disease. (b) Describe the nutritional value of cereals 07 Q.4 (a) List various function dairy ingredients. Write in detail various 07 physiological significance of bioactive peptides. (b) Write a note on wheat and rice based processed products. 07 OR Write various symptoms and nutritional requirements for a diabetic patient Q.4 07 (a) and brief about various artificial and natural intense sweeteners. (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 07 example of each and write in detail about lathyrogens. OR Q.5 (a) Write in detail nutritional requirement of pre-school going children. 07 (b) Write a note on egg yolk proteins. 07 ******