PET SYLLABUS FOODS, NUTRITION & DIETETICS

S.NO.	CONTENT	WEIGHTAGE
1	**ADVANCES IN HUMAN NUTRITION** a. Energy requirements of population i. Methods of determining energy needs ii. Energy imbalances-malnutrition-Over & Under nutrition b. Role of macronutrients in health i. Simple and Complex carbohydrates, Dietary fiber, glycemic index &glycemic load ii. Proteins-Evaluation of quality of proteins, protein deficiency, food sources & RDA iii. Lipids-issues of quality and quantity of dietary fat, importance of Essential Fatty acids, food sources & RDA c. Micronutrients - Food sources & RDA, Effect of processing, deficiency and toxicity of vitamins & minerals d. Health benefits of Phytochemicals and Functional foods e. Nutrition throughout the life cycle-infancy, childhood, adolescence, adulthood, Pregnancy and lactation-RDAs and Nutritional concerns f. Nutrition for sports persons-energy metabolism in sports, supplements, Nutritional guidelines for various sports	30%
2	**PUBLIC HEALTH NUTRITION** a. National Nutritional problems-causes and symptoms b. Government policies and programs to control the same c. National Nutrition Mission	10%
3	**NUTRITIONAL BIOCHEMISTRY** a. Classification and metabolism of	20%

	carbohydrates, Proteins and lipids **b. Nucleic acid chemistry** **c. Enzymes & hormones-functions and disturbances**	
4	**CLINICAL NUTRITION** **a. Nutrition care process & Theories of counselling** **b. Pathophysiology and principles of dietary management of the following** **i. Diseases of gastrointestinal system-Peptic & duodenal ulcer, pancreatitis, diverticulosis, diarrhoea & constipation** **ii. Liver diseases** **iii. Kidney diseases** **iv. Chronic degenerative diseases-Diabetes, CVD, Osteoporosis, Metabolic syndrome** **v. Cancer -Effect of cancer & cancer therapy on the nutritional status of patients** **c. Inborn errors of metabolism-dietary management**	**25%**
5	**<u>FOOD SCIENCE</u>** **a. Principles of Food Science:** Properties of carbohydrates, proteins & lipids-Structure, functional properties **b. Principles of Food Preservation:** Heat and cold preservation techniques, Irradiation, Fermentation, Use of preservatives **c. Processing Technology of Foods**: cereals, millets, legumes, oils & Fats, Fruits & vegetables, milk & Milk products, Eggs, Meat & Meat products.	**15%**

Research methodology