## **TEST NAME: 302 - FNS - FOOD AND NUTRITION SCIENCES**

**Pregnancy:** Impact of maternal malnutrition on outcome of pregnancy Nutrient requirement, intake and gaps, prenatal and antenatal nutritional importance, metabolic adjustments in pregnancy; nutrition intervention and pregnancy outcome; common symptoms (nausea and vomiting, Heartburn- Pica, habits constipation), nutritional management, problems and Complications

**Lactation:** Nutritional requirements, intake, gaps, physiology of milk production, hormonal control, effects of lactation on Nutrition composition of Human-Milk, Factors affecting breast milk quality and comparative advantages & disadvantages of breast and formula feeding.

**Infancy:** Nutritional requirements, intake and gaps. Suitability of breast milk to the infant. Need for infant formulae, types of infant formulae, care in Preparation, importance of preparation of weaning foods using locally available foods. Home prepared versus commercial weaning foods, Feeding problems-Lactose and cow's milk protein intolerance, vomiting, diarrhea, teething problems, concept of human milk bank for specific nutritional problems

**Pre-school children:** Age, growth & development, nutrient requirements, Intake and gaps. Effects of Macro & Micro nutrient malnutrition on physical mental development.

**School-going children:** Nutritional demands, intake and gaps. Importance of breakfast and its impact on school performance, specific nutritional problems, Macro and Micro nutrient deficiencies and their impact on health and nutritional status and control measures.

Carbohydrates: Functions, storage, effect of excess/low intake of carbohydrates, dietary carbohydrates and oral diseases.

**Lipids:** Lipids and fatty acid requirements, functions, storage, lipid transformation in the liver, lip tropic factors, role of essential fatty acids, prostaglandins, deposition of fat in the body, effects of deficiency and excess of fats.

**Proteins and amino acids:** Review of functions, sources, protein turnover, Synthesis and stores, proteins as a source of energy, protein requirements through Factorial method and balance study. evolution of dietary protein quality, Vegetable protein mixtures in combating protein malnutrition.

**Diet planning:** Menu and meal planning, Principles and importance of diet planning Dietary guidelines, normal and therapeutic diets, low-cost nutritious recipes.

**Community Nutrition** –Nutritional problems, Nutritional status Assessment; Direct and Indirect methods, – Nutrition intervention Programmes for children, women and families, Nutrition Education Programmes.