



**HOME SCIENCE**  
**(DEGREE STANDARD)**  
**(FOR THE POST OF CHILD DEVELOPMENT PROJECT OFFICER)**

**SUBJECT CODE:342**

**UNIT – I: FOOD**

Food pyramid, functions, classification, conservation of nutrients, cooking methods, meal planning for different age & income groups. Weaning foods – meaning, importance and preparation. Food spoilage - causes and prevention. Methods of food preservation. Food safety - evaluation of food safety, quality analysis and applications of HACCP in food safety. Regulatory agencies in food safety - BIS, AGMARK, FSSAI. Food adulteration and food laws.

**UNIT - II: NUTRITION**

Nutrition – Energy - factors affecting total energy requirement. Determination of total energy requirement. Energy requirements for different age groups and physiological conditions. Sources, functions, requirements and deficiencies of macro and micro nutrients. Metabolism of carbohydrate, protein and fat. Water - functions, dehydration, water balance.

**UNIT – III : COMMUNITY NUTRITION**

Communicable and Noncommunicable diseases. Communicable diseases - Epidemiology, mode of transmission, prevention and control of AIDS, Cholera, Typhoid, Tuberculosis, Malaria, Dengue, Hepatitis and Leptospirosis. Non -Communicable Diseases - Double burden of malnutrition. Assessment of nutritional status of a community-Direct and Indirect methods - Anthropometry, Biochemical, Clinical, Functional indices and Diet survey. Nutrition Education - methods of nutrition education, use of audio visual aids. Nutrition intervention programmes and National and International Agencies in Combating malnutrition.

#### **UNIT - IV: NORMAL NUTRITION**

Nutrient requirements and meal planning from infancy to old age - Importance of breast feeding, weaning and immunization. Nutrition related problems of infants, pre-school, school going children, adolescents and old age. Nutrition during pregnancy and lactation.

#### **UNIT - V: THERAPEUTIC NUTRITION**

Special feeding methods - Enteral and Parenteral Nutrition. Etiology, symptoms and dietary modifications for – Fevers, Obesity, Gastrointestinal diseases, Diabetes Mellitus, Renal diseases, Cardiovascular diseases and Cancer. Significance of Nutraceuticals and Functional foods in the prevention and management of diseases.

#### **UNIT - VI: RESOURCE MANAGEMENT**

Resource Management: Principles of management, systems approach to management, classification of resources, - human and non - human resources - time, energy, and money management. Tools in Time Management – Peak Loads, work curve and rest periods . Energy management - work simplification-definition and techniques. Fatigue - physiological and psychological fatigue, ways to overcome fatigue. Money management - Budget - definition, steps involved in planning a budget. Advantages of budgeting.

#### **UNIT - VII: HUMAN DEVELOPMENT AND FAMILY RELATIONSHIPS**

Stages of human life span. Principles of development, Growth monitoring, Prenatal development and care. Birth process, types of birth. Child rearing practices - early stimulation , socialization practices. Characteristics of development from infancy to adolescence - physical, motor, mental, cognitive, social, emotional, language, creative and moral development. Habit formation, behaviour problems and discipline. Exceptional children, identification and rehabilitation. Physical changes and psychological problems of adolescence, adulthood and old age. Family – Structure,

types and functions. Family crisis. Marriage - motives, factors influencing marital relationship. Adjustments in Family life cycle. Guidance and counselling - role of schools and community. Population education, Sex education.

### **UNIT - VIII: EXTENSION**

Extension education - meaning, process and principles of learning in extension. Communication – definition, principles, types, process and problems. Extension workers - definition and qualities. Extension teaching methods - individual and group contact methods. Planning and evaluation of health and nutrition programmes - content, methods and techniques for different groups. Nutrition intervention programmes - Balwadi feeding programme, mid-day meal programme, ICDS.

### **UNIT – IX: COMMUNITY DEVELOPMENT**

Meaning and principles of Community development. Community based Institutions – Village Panchayats, Schools, and Primary Health Centres. Science and Technology for rural development - Health promotion, environmental sanitation, waste disposal and recycling. Role of NGO's in rural development . Functioning of central and state Social Welfare Board. Current programmes of rural development in India.

### **UNIT – X: RESEARCH**

Meaning, objectives, types and methods of research, research ethics. Research design- meaning and types. Sampling - meaning and types. Tools of data collection, processing of data - editing, coding , classification tabulation and presentation. Project proposal preparation, report writing.

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