Home Science, Nutrition and Dietetics

Syllabus

Unit I: Resource Management

a) Principles of resource management, classification of resources, Management of resources in family – Time, energy, money.

b) Interior design & interior decoration - concept and meaning, basic design fundamentals – classification of designs, elements of design – Harmony, balance, proportion and emphasis.

c) Colour – sources, theories, concept and classification of colour schemes. Application of colour's in Interior space – Prang colour and Munsell Colour system's

Unit II: Textile and Clothing

a) Textile fibers, classification of fibers – Man made and natural fibers, types of textile fabrics – staple, filament, tow and it's applications.

b) Weaving terminologies - warp, weft, grain, fabric count, weaving process – shedding, picking, beating, let off & take up

c) Knitting terminologies – wales, courses, stitch density, count, gauge and cuts

Unit III: Human Development

a) Growth and development – Meaning, distinction, and factors influencing; – Theories of Human behaviour of development – Cognitive theories and Psycho – analytic theories

b) Prenatal development; Infancy – Characteristics and early adjustments; Early and late childhood – Characteristics, developmental tasks and milestones, habit formation, behaviour problems and discipline; Adolescence – Characteristics, developmental tasks and milestones, physiological and psychological challenges.

c) Childhood Interests; Play; Personality development; Family relationships; Developmental delays and Children with special needs.

Unit IV: Extension

a) Principles of extension – meaning, process, scope and steps in extension education, functions and classification of extension methods in the community.

b) Rural communication – concept, nature and scope of rural communication, communication for individual group and mass contact – types and methods.

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c) Schemes for Women and Child Welfare – Janani Siksha Suraksha Karyakram, Muthulakshmi Reddy Maternity Benefit Scheme, CM Girl Child Protection Scheme, Cradle Baby Scheme, Puthumai Penn Scheme, Mahalir Urimai Kappitu Thittam.

Unit V: Community Development and Public Health

a) Community based institutions – Village panchayats, schools, primary and secondary health centres – objectives and functions.

b) Women and child health wellbeing – Reproductive health - Menstrual hygiene, Poly Cystic Ovarian Syndrome (PCOS), pregnancy and lactation – lactation guidelines, breast feeding, breast milk – composition, colostrum – importance and need, bottle feeding vs breast feeding – advantages. Best weaning and supplementary feeding practices. Nutrition education – Methods, planning, implementation and evaluation of the nutrition education programmes.

c) Nutritional programmes and Schemes – Integrated Child Development Services (ICDS), Mid Day Meal Programme, Poshan Maah, Breast Feeding Week, Anemia Mukht Bharat, Poshan Abhiyaan and PM Poshan.

Unit VI: Food Science

a) Food groups – basic and functional food groups, Cooking methods - physico-chemical changes

b) Nutritive value of cereals, pulses, vegetables and fruits, milk and milk products, fleshy foods and egg

c) Nutraceuticals and functional foods – Classification and uses.

Unit VII: Principles of nutrition

a) Energy – Sources, Carbohydrates, fats and proteins – Sources, functions, digestion, absorption and metabolism, effects of deficiency, Assessment of nutritional deficiency.

b) Vitamins and minerals – Classification, functions, assessment of deficiency and toxicity.

c) ICMR Nutritional requirements for different age groups, pregnancy and lactation.

Unit VIII: Diet therapy

a) Etiology, signs and symptoms and dietary modifications for fever and infections gastrointestinal disorders and liver diseases.

b) Etiology, sign and symptoms and dietary modifications for diabetes mellitus, obesity, under weight, cardiovascular disorders.

c) Etiology, sign and symptoms and dietary modifications for renal disorder, cancer and allergies, classification of therapeutic diet types and feeding in pre and post operative conditions.

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Unit IX: Food Service Management

a) Types of food service institutions, Organisation – Types and Principles, Management – Principles, tools and techniques.

b) Personnel management – Selection, induction, training and supervision, motivation and performance appraisal. Quantity cookery – Purchasing storage, production, pricing and cost control measures.

c) Sanitation and safety – Hazard Analysis Critical Control Point (HACCP) – Importance, objectives, guidelines, procedures and personal hygiene and significance of sanitation for health care providers and work area hygiene, safety measures in food services.

Unit X: Food security, food safety and quality control

a) SDG goals, prevention of nutritional deficiency disorders, National prophylactic measures.

b) Quality control – Principles and stages of quality control, Adulterations – Types, tests to detect adulterants. Food standard authorities – Food Safety and Standards Authority of India (FSSAI) – Structure and function, Role of Food Safety Officer, Designated Officer, Food Commissioner.

c) Food safety – Food borne illness transmitted through food and water, Factors affecting growth of microorganisms. Source of food contamination and their preventive measures, Food infection - preventive measures.

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