



UNIT-1: FOOD SCIENCE AND FOODS SERVICE MANAGEMENT

- Food science and nutrition.
- Properties of food – physical and chemical properties
- Quality evaluation of foods—objectives and subjective.
- Effects of cooking and processing techniques on nutritional components and other physical parameters, food preservation and application.
- Food pigments and additives.
- Food standards, microbiological safety of food, HACCP, food packaging.
- Perspectives of food service—menu planning, food cost analysis.
- New product development—nano technology
- Food service management of institutional level-hospital, educational institutions, social and special institutions
- Research methods—fundamental issues, concept, need relevance, scope and ethics in research

Unit 2 : NUTRITION AND DIETETICS

- Food groups – balanced diet, food pyramid, macro and micro nutrition.
- Nutrients – role of nutrients in the body, nutrient deficiencies and requirements for Indians.
- Public health nutrition
- Nutrition through life span—physiological changes, growth and development from conception to adolescence, nutritional needs and dietary guidelines for adequate nutrition through life cycle, nutrition concerns.
- Community nutrition, sports nutrition, nutrition in emergencies and disasters. • Nutritional assessment—methods and techniques.
- Nutritional intervention—national nutrition policies and programme, food and nutrition security.
- Clinical and therapeutic nutrition.
- Diet counseling and management.
- Research methods—research designs, principles and purpose of research

Unit-3 : TEXTILES

- Textile terminologies—fibre, yarn, weave, fabric etc., classification of fibers, yarns and weaves, Identification of fibers and weaves.
- Manufacturing process of major natural and manmade fibres, properties and their end uses.
- Different methods of fabric construction—woven, knitted and non woven fabrics, their properties and end uses.
- Textiles finishes—classification, processing and purposes of finishes.
- Dyeing and printing—classification, method of block printing, tie and dye, batik, roller printing, screen printing, discharge, heat transfer printing and digitized printing.
- Traditional textiles of India—embroidered textiles, printed textiles, woven textiles, dyed textiles of various regions in India. Identification on the basis of fibre content , technique, motif, colour and designed.



- Textile Testing and quality control—need of testing, sampling method, techniques of testing fibres, yarn, fabrics and garments. Testing of colour – fastness, shrinkage, pilling and GSM of fabrics.
- Textile and environment—banned dyes, eco-friendly textiles, contamination and effluent treatment, Eco-label and eco marks.
 - Recent developments in textiles and apparels—nano textiles, technical textiles, occupational clothing, zero waste designing, up cycling and recycling.
 - Research methods—types of research, descriptive, survey, historical, qualitative, quantitative, analytical and action research

Unit 4 : APPAREL DESIGNING

- Body measurements—procedure, need, figure types and anthropometry.
- Equipments and tools used for manufacturing garments—advancements and attachments used for sewing machine. Types of machines used and their parts.
- Elements and principle so design and its application to apparel. Illustrations and parts of garments.
- Fashion—Terminologies, fashion cycle, fashion theories, fashion adoption, fashion forecasting and factors affecting fashion.
- Pattern making—drafting, draping and flat pattern making techniques, pattern alteration and dart manipulation techniques.
- Apparel manufacturing—terminology used, seams, techniques and machines used, process of fabric to apparel manufacture.
- Apparel Quality testing—Quality standards and specification, Quality parameters and defects of fabrics and garments.
- Care and maintenance of clothing—principles of washing, laundry agents, storage techniques case labels and symbols.
- Selection of clothing for different age groups. Selection of fabrics for different end uses.
- Research methods—hypothesis testing, types and scope

UNIT-5 RESOURCE MANAGEMENT AND CONSUMER ISSUES

- Management—concept, approaches, management to time, energy, money, space, motivating factors, motivation theories, decision making.
- Functions of management—planning, supervision, controlling, organizing, evaluation, family life cycle—stages, availability and use of resources.
- Resources—classification, characteristics, factors affecting use, resource conservation, time management ,work simplification techniques, classes of change, fatigue and its management
- Management of natural resources—land, forest, water, air, water harvesting, municipal solid waste management, concept of sustainable development, SDGs.
 - Money management—family income, types, supplementation, budgeting, household accounts, family savings and investment, tax implications.



- Human resource management—functions, need, human resource development- challenges, functions, manpower planning, training need assessment, training methodologies, training evaluation.
- Consumer—definition, role, rights and responsibilities, consumer behavior, consumer problems, education and empowerment.
 - Consumer protection—consumer organization, cooperatives, alternative redressal, standardization, standard marks, quality control, buying aids, consumer legislation.
- Entrepreneurship—concept, process, barriers, entrepreneurial motivation, challenges, enterprise setting, project planning and appraisal, enterprise management.
- Research methods—sampling techniques, types of sampling, sampling procedures, probability and non probability sampling

Unit-6 HOUSING AND INTERIOR DESIGN

- Design fundamentals – elements of art, principles of design, principles of composition.
- Colour—dimensions of colour, psychological effects of colour, colour schemes, factors affecting use of colour.
- Space planning and design—housing need and important principles of planning spaces, types of house plans, economy in construction, planning for different income groups.
- Building regulations—norms and standards, zoning, housing for special group and areas, housing finance.
 - Housing and environment—building materials—impact on environment, green rating systems, energy efficiency in buildings, energy auditing, indices of indoor comfort.
- Energy as a resource—conventional and non-conventional sources, renewable /non-renewable energy, energy management, national efforts on energy conservation.
 - Product design—design thinking process, diffusion and innovation, design communication, ergonomic considerations
- Ergonomics—significance, scope, anthropometry, man, machine, environment relationship, factors affecting physiological cost of work, body mechanics, functional design of work place, time and motion study, energy studies.
 - Furniture and furnishing—historical perspectives, architectural styles, contemporary trends, wall finishes, window and window treatments.
- Research methods—selection and preparation of tools for data collection—questionnaire, interview, observation, measuring scales, ranking and measurement, reliability and validity of tools

UNIT-7: CHILD / HUMAN DEVELOPMENT

- Principles of growth and development, care during pregnancy and prenatal and neonatal development.
- Theories of human development and behavior.
- Early childhood care and education – activities to promote holistic development.
- Influence of family, peers, school, community and culture on personality development.



- Children and persons with special needs, care and support, special education, prevention of disabilities, rehabilitation.
- Children at risk—child labour, street children, children of destitute, orphans, child abuse and trafficking.
- Adolescence and youth—changes, challenges and programs to promote optimal development.
- Adulthood, characteristics, changing roles and responsibilities in early and middle adulthood.
- Aging—physical and psychological changes and care needs.
- Research methods – types of variables and their selection.

Unit-8 : FAMILY STUDIES

- Dynamics of marriage and family relationships.
- Family welfare—approaches, programmes and challenges, role in national development.
- Domestic violence, marital disharmony, conflict, resolution of conflict.
- Parent education, positive parenting, community education.
- Family disorganization, single parent families.
- Family studies – family in crisis, family therapy, initiatives for child development.
- Human rights, rights of children, rights of women, status of women, gender roles.
- Guidance and counseling—across life span and for care givers.
- Health and well being across life span development.
 - Research methods—data collection and classification, coding, tabulation, inferential and descriptive statistics.

UNIT- 9 : COMMUNICATION FOR DEVELOPMENT

- Basics of communication—nature, characteristics, functions, process, models, elements, principles, barriers, perception, persuasion and empathy, types of communication, levels (settings) of communication transactions, process of listening.
- Communication systems and communication theories—human interaction theories, mass communication theories, message design theories, communication systems, culture and communication.
- Concept of development—theories, models, measurement and indicators of development.
- Concept of development—communication models and approaches, diffusion and innovation, mass media, social marketing.
- Role of communication in development—need and importance, development journalism, writing for developmentprint, radio, television and internet.
- Concerns of development communication—gender, health, environment, sustainability, human rights, population, literacy, rural and tribal development.
- Advocacy and behavior change communication—concept, theories, models, approaches, application and challenges.
- Traditional, modern and new media for development—folk forms of songs, art, dance, theatre, puppetry, advertisement, cinema, ICTs for development -community radio, participatory video, social media and mobile phones.



- Organisation/ agencies/ institutes working for development communication–international /national/ state and local.
- Research methods–analysis of data through parametric and non parametric tests.

Unit 10 : EXTENSION MANAGEMENT AND COMMUNITY DEVELOPMENT

- Historical perspectives of extension – genesis of extension education and extension systems in India and other countries, objectives of extension education and extension service, philosophy and principles of extension programme development.
- Programme management–need assessment, situation analysis, planning, organization, implementation, monitoring and evaluation.
- Extension methods and materials–interpersonal, small and large group methods, audio-visual aids–need, importance, planning, classification, preparation and field testing, use and evaluation of audio-visual materials.
- Curriculum development and planning for extension education and development activities, Bloom's taxonomy of educational objectives and learning.
- Non-Formal, adult and lifelong education–historical perspectives, concept, theories, approaches, scope, methods and materials used, challenges of implementation and evaluation, issues to be addressed.
- Training, skill development and capacity building for human resource development–methods of training, entrepreneurship development.
- Community development–perspectives, approaches, community organization, leadership, support structures for community development, Panchayath raj institutions, NGOs and community based organisations.
- People's participation and stakeholders' perspectives, Participatory Learning and Action–methods and techniques.
- Development programmes in India for urban, rural and tribal population groups–programmes for nutrition, health, education, wage and self employment, women's development, skill development, sanitation and infrastructure.
- Research methods–scientific report writing, presentation of data, interpretation and discussion.