

DEVI AHILYA VISHWAVIDYALAYA INDORE

Ph.D. Entrance examination syllabus - Part - B.

Subject: Home Science

Subject specific components

**UNIT-I : FOOD NUTRITION AND DIETETICS**

1. Introduction to Food science and Nutrition.
2. Effect of cooking and processing techniques on nutritional components and other physical parameters, food preservation and application.
3. Food pigments and additives.
4. Food standards, microbiological safety of food, HACCP, food packaging.
5. Food groups – balanced diet, food pyramid.
6. Nutrients-role of nutrients in the body, nutrient deficiencies and requirements for Indians.
7. Nutrition through life span-physiological changes, growth and development from conception to adolescence, nutritional needs and dietary guidelines for adequate nutrition through life cycle.
8. Nutritional intervention-national nutrition policies and programs, food and nutrition security.
9. Clinical and therapeutic nutrition.
10. Diet counseling and management.

**Unit-II : TEXTILES and APPAREL DESIGNING**

1. Textile terminologies- fiber, yarn, weave, fabric . Classification of fibers, yarns and weaves.
2. Manufacturing process of major natural and manmade fibers and their properties.
3. Different methods of fabric construction-woven, knitted and non woven fabrics and their properties
4. Textiles finishes-classification, processing and purpose of finishes.
5. Dyeing and printing-classification, method of block printing, tie and dye, batik, roller printing, screen printing, discharge, heat transfer printing and digitized printing.
6. Body measurements-procedure, need, figure types and anthropometry.
7. Elements and principles of design and its application to apparel. Illustrations and parts of garments
8. Pattern making-drafting, draping and flat pattern making techniques, pattern alteration and dart manipulation techniques.
9. Apparel manufacturing-terminology used, seams, techniques and machines used, process of fabric to apparel manufacture.
10. Selection of clothing for different age groups. Selection of fabrics for different and uses.

Shakti  
14.9.2021

N. Sankar  
14.9.2021

### UNIT-III : RESOURCE MANAGEMENT AND HOUSING AND INTERIOR DESIGN

1. Management-concept, approaches, management of time, energy, money, space, motivating factors, motivation theories, decision making.
2. Functions of management-planning, supervision, controlling, organizing, evaluation, family life cycle-stages, availability and use of resources.
3. Resources-classification, characteristics, factors affecting use, resource conservation, time management, work simplification techniques, classes of change, fatigue and its management.
4. Money management-family income, types, supplementation, budgeting, household accounts, family savings and investment, tax implications.
5. 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
6. Design fundamentals – elements of art, principles of design, principles of composition.
7. Color - dimensions of color, psychological effects of color, color schemes, factors affecting use of color.
8. Space planning and designing - housing needs and importance, principles of planning spaces, types of house plans, planning for different income groups.
9. 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.
10. Furniture and furnishing - historical perspectives, architectural styles, contemporary trends, wall finishes, window and window treatments.

### UNIT-IV : HUMAN DEVELOPMENT AND FAMILY STUDIES

1. Principles of growth and development.
2. Theories of human development and behavior.
3. Care during pregnancy and pre-natal and neonatal development. Early childhood care and education – activities to promote holistic development.
4. Influence of family, peers, school, community and culture on personality development.
5. Adolescence and youth: changes, challenges and programs to promote optimal development.
6. Adulthood, characteristics, changing roles and responsibilities in early and middle adulthood.
7. Aging-physical and psychological changes and care needs.
8. Human rights, rights of children, rights of women, status of women, gender roles.
9. Guidance and counseling- across life span and for care givers.
10. Health and well being across life span development.

*Bhavit*  
14.9.2021

*n. Senth*  
14.9.2021

## UNIT-V : EXTENSION MANAGEMENT AND COMMUNITY DEVELOPMENT

1. 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..
2. Role of communication in development- need and importance, development , journalism, writing for development-print, radio, television and internet.
3. Concerns of development communication- gender, health, environment, sustainability, human rights, population, literacy, rural and tribal development.
4. 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.
5. Organization/agencies/institutes working for development.
6. Communication international/national/state and local.
7. 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 program development. \
8. Program management- need assessment, situation analysis, planning, organization, implementation, monitoring and evaluation.
9. Extension methods and materials- interpersonal, small and large group methods, audiovisual aids- need, importance, planning, classification, preparation and field testing, use and evaluation of audio-visual materials.
10. Community development- perspectives, approaches, community organization, leadership, support structures for community development, Panchyati raj institutions, NGOs and community based organizations..
11. Development program in India for urban, rural and tribal population groups program for nutrition, health, education, wage and self employment, women’s development, skill development, sanitation and infrastructure.

Bhark  
14.9.2021

Abanish  
14.9.2021