

# **RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER**

## **SYLLABUS FOR COMPETITIVE EXAMINATION FOR THE POST OF ASSISTANT PROFESSOR IN HOME SCIENCE FOR COLLEGE EDUCATION DEPARTMENT**

### **PAPER – II**

#### **Unit I: Food & Nutrition-**

1. Nutrition through lifespan-physiological changes, growth & development from conception till old age.
2. Therapeutic nutrition and diet counselling for weight management, diabetes, fever, disorders of gastro intestinal tract, gall bladder, surgery and burns.
3. Public health nutrition.
4. Physiology of circulatory system, respiratory system, reproductive system and excretory system.
5. Enzymes and metabolism of carbohydrate, protein and fats.
6. Microbial food spoilage and food borne diseases.
7. Community nutrition, sports nutrition, nutrition in emergencies and disasters.
8. Nutritional assessment methods and techniques.
9. Nutrition intervention, national nutrition policies and programs, food and nutrition security.

#### **Unit-II: Apparel Designing -**

1. Clothing construction Process-
  - I. Equipments and tools used for manufacturing garments-advancements and attachments used for sewing machine. Types of machines used and their parts.
  - II. Fabric Selection, preparation, layout, calculation of material for different garments.
  - III. Body measurements- procedure, need, figure types and anthropometry.
2. Apparel manufacturing
  - I. terminology used
  - II. seams and seam finishes, disposal of fulness, plackets, fasteners, yokes, necklines, collars, sleeves, trimming and pockets.
  - III. Elements and principles of design and its application to apparel. Illustrations and parts of garments.
  - IV. Pattern making- drafting, draping and flat pattern making techniques, pattern alteration and dart manipulation techniques.

3. Fashion-Terminologies, fashion cycle, fashion theories, fashion adoption, fashion forecasting and factors affecting fashion.
4. Physiological, psychological and sociological aspects of clothing-
  - I. Origin and theories of clothing
  - II. Role of clothing in personality development and self-concept.
  - III. Factors affecting clothing selection
  - IV. Social impact of clothing in relation to occupation, occasion, nationality and income.
  - V. Selection of clothing for different age groups. Selection of fabrics for different uses.
5. Apparel Quality testing- Quality standards and specification, Quality parameters and defects of fabrics and garments. Common fitting problems and their remedies. Care and maintenance of clothing- principles of washing, laundry agents, storage techniques case labels and symbols.

### **Unit-III: Housing and Interior Design-**

1. Design fundamentals – design, importance and functions, elements of art, principles of design.
2. Colour - dimensions of colour, psychological effects of colour, colour schemes, factors affecting use of colour, colour theories, advancing and receding colours. Use of colour in interiors of residential and non residential buildings.
3. Lighting- Types of lights and lighting, illusion, unit of measurement, lighting for different spaces, lighting fixtures.
4. Space planning and design- housing need and importance, principles of planning spaces, types of house plans, economy in construction, planning for different income groups.
5. Building regulations-norms and standards, zoning, housing for special groups and areas, housing finance.
6. Furniture and furnishing - architectural styles, contemporary trends, wall finishes, wall and window treatments, floor & floor coverings.
7. Housing and environment- building materials, impact on environment, green rating systems, energy efficiency in buildings, energy auditing, indices of indoor comfort, carbon foot prints.
8. Energy as a resource- conventional and non- conventional sources, renewable /non-renewable energy, advance energy management, National efforts on energy conservation.
9. Product design - design thinking process, diffusion and innovation, design communication, ergonomic considerations.
10. Ergonomics - significance, scope, anthropometry, man, machine,

environment relationship, factors affecting physiological cost of work, body mechanics, functional design of work place. Occupation health and safety. Ergonomics and kitchen management.

#### **Unit—IV Family Studies and Exceptional Children -**

1. Dynamics of marriage and family relationships --Meaning, definition, functions and types of marriage, Readiness of marriage, Mate selection, Alternatives to marriage, single hood, consensual unions and their socio emotional implications, Marital Harmony -Pre and post marital counseling and its importance.
2. Family- meaning, definition and types of family. Concept of family life cycle, changing needs of family at different stages of family life cycle beginning expanding & contracting.
3. Domestic violence, marital disharmony, conflict, resolution of conflict
4. Parent education, positive parenting, community education.
5. Human rights, rights of children, rights of women, status of women, gender roles.
6. Guidance and counseling- across life span and for care givers.
7. Children with special needs -definition, classification, characteristics, identification, education and special considerations
8. Organizations working for children with special needs.
9. Laws related to women and children.

#### **Unit-V: Communication for 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. Communication Theories- human interaction theories, mass communication theories, message design theories.
3. Concept of development- theories, models, measurement and indicators of development.
4. Diffusion and adoption of innovation, adoption process, adopter categories.
5. Role of communication in development- concept, need and importance, development journalism, use of print, radio, television and internet in development.
6. Concerns of development communication- gender, health, environment, sustainability, human rights, population, literacy, rural and tribal development.
7. Behavior change communication- concept, importance, principles, models

and process of behaviour change.

8. 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.
9. Organisation/agencies/institutes working for development communication- international/national/state and local.

## **Unit VI: Research Methodology**

1. Meaning of research, its significant and objective, Criteria of good research in Home science.
2. Role of statistics in research, type and methods of research.
3. Review of literature, Planning for research
4. Sampling method and tools of data collection.
5. Processing of data, Reliability and validity of data, Tabulation and presentation using graphs charts/diagrams.
6. Types of reports.
7. Principles of writing, Technical writing.
8. Bibliography, executive summary and footnotes writing, Reference citation.
9. Report presentation.

### **Note: - Pattern of Question Paper**

1. Objective type paper
2. Maximum Marks: 75
3. Number of Questions: 150
4. Duration of Paper: Three Hours
5. All questions carry equal marks.
6. There will be Negative Marking.
7. Medium of Competitive Exam: Bilingual in English & Hindi.