# **RAJASTHAN PUBLIC SERVICE COMMISSION, AJMER**

## SYLLABUS FOR COMPETITIVE EXAMINATION FOR THE POST OF ASSISTANT PROFESSOR IN HOME SCIENCE (FOOD NUTRITION) FOR COLLEGE EDUCATION DEPARTMENT

## PAPER-II

### UNIT I – BASIC NUTRITION-

Balance diet, basic food groups. Carbohydrates, protein, lipids- functions, digestion, absorption, sources and effects of deficiencies and excess (signs and symptoms only). Importance of fibre in human nutrition.

Vitamins and minerals: functions, sources, absorption, bioavailability, storage, excretion, and effects of deficiency and excess (signs and symptoms only). Nutrients interrelationships.

Methods of assessing requirements of energy protein, fat, minerals and vitamins.

### **UNIT II - NUTRITION DURING LIFE CYCLE-**

Growth and development, physiological changes, nutritional requirements and dietary guidelines through life span. Principles of meal planning for people of different age groups, sex, occupation and economic status.

### UNIT III - CLINICAL NUTRITION AND DIETETICS-

Modification of normal diet for therapeutic purpose and special feeding methods for patient care. Signs and symptoms, dietary guidelines and principles of meal planning in diseases of gastrointestinal tract, cardiovascular system, kidney, liver and gall bladder, lactose intolerance, Celiac disease, cancer, burns, surgery, fevers, undernutrition, over nutrition and metabolic disorders. Sports nutrition, Dietary counseling, diet and drug interaction.

### UNIT IV- COMMUNITY NUTRITION-

Nutritional epidemiology. Assessment of nutritional status- anthropometry, diet survey, biochemical and clinical methods, vital statistics, parameters, tools and techniques, standards, indices and interpretation of data to quantify malnutrition. Growth monitoring, its importance, use of growth charts for assessment of nutritional status of preschool children. Nutrition surveillance.

Assessment of body composition and its importance. Food and nutrition security. Infant and young child feeding practices. Behavior Change communication.

## UNIT V - PROBLEMS IN HUMAN NUTRITION-

Pathogenesis, Prevalence, Etiology. Preventive and therapeutic measures at community level of major nutrition problems of India: protein energy malnutrition, severe acute malnutrition management, Nutritional Anaemia, Vitamin A deficiencies, iodine deficiency disorders, Vitamin D deficiency, osteoporosis and fluorosis.

Pathogenesis, biochemical and clinical manifestations, preventive measures of lathyrism, epidemic dropsy, aflatoxicosis, entero-ergotism, heavy metal contamination and pesticide residue.

National food and nutrition policies and programmes to combat malnutrition. Role of national and international agencies. Nutrition in disaster situations.

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Note :- <u>Pattern of Question Paper</u>

- 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. Medium of Competitive Exam: Bilingual in English and Hindi
- 7. There will be Negative Marking.