

**DIRECT RECRUITMENT FOR THE POST OF POST GRADUATE ASSISTANTS /
PHYSICAL EDUCATION DIRECTORS GRADE-I – 2018-2019**

Subject : Home Science

Unit-I

Methods of Collecting data- Conducting statistical enquiries to collect primary data. Source of secondary data - Preparation of schedules and questionnaire. Pretesting data. Interview Methods of enquiry.

Unit-II

Classification and organization of data collected classification by categories and measurement- Discreets and continuous variables. Tabulation schemes – Preparation of tabular forms- Methods of securing accuracy in tabulation.

Unit-III

Mesures of Central Tendency- The mean, median and mode, their relative advantages and disadvantages. Measures of dispersion. The mean deviation, standard deviation, quartile deviation – coefficient of variation.

Unit-IV

Graphic and Diagrammatic Representation- Bar diagrams, Pie diagrams, scatter diagrams, Histograms, frequency polygons, frequency curve, ogive, logarithmic graphs.

Unit-V

Microbiological Intoxications and Infections. Toxin production significance of toxic organism like clostridium botulinum, staphylococci and clostridium perfringes. Sources of infection through foods by pathogenic organisms. Symptoms and methods of control and prevention of infection.

Unit-VI

Food Hygiene- Sources of contamination of food. Microbial indicators of hygiene. Significance of cleaning and sanitizing agents. Hygienic handling, processing and packaging of food. Lessons for India.

Unit-VII

Application of art principles in interior decoration. Colour scheme for different rooms, furniture arrangement, flower arrangement and accessories. Optical illusion in interior decoration.

Unit-VIII

Clothing selection. Importance of clothing and accessories to express individually and distinction in appearance. Application of basic art principles in achieving a pleasing personality. Study of figure irregularities and methods of minimizing the effect.

Unit-IX

Nutrition in pregnancy and lactation. Physiological implication of pregnancy and lactation. Nutritional requirements during pregnancy and lactation. Impact of nutrition on the outcome of pregnancy and efficiency of milk production. Public Health measures for the pregnant and lactating mothers.

Unit-X

Nutrition in Infancy. Physical and mental development- prenatal and postnatal. Nutritional requirements during infancy. Feeding of infants- value of breast feeding versus artificial feeding. Types of milk and their use in infant feeding. Weaning- Supplementary foods and infant weaning foods. Nutritional disorders infancy. Common diseases in infancy. Feeding the sick child. Immunisation schedule.

Unit XI - MANAGEMENT AS A SYSTEM

Definition of system components of Management system-Input, throughput, output and feedback. Characteristics of system. Factors influencing management Unit-XII TIME AND ENERGY MANAGEMENT Factors affecting use of time. Tools in time management. Effective use of body- body mechanics in energy management. Types and causes of fatigue work simplification- techniques and principles- Ideas for simplifying work tasks.

Unit XIII - Financial Management

Values and goals in financial management. Income- Types of income- Expenditure budgeting. Savings- types and institutions. Use of credits. Records in maintaining accounts.

Unit XIV - Communication

Meaning and importance of communication. Communication and social changes. Communication process. Factors affecting communications. Barriers in communication. Growing popularity of mass media communication. Recent trends in communication media.

Unit XV - Food Science

Changes in food due to cooking, physical and physico-chemical changes in foods in relation to cookery, gel formation, denaturation of protein. Properties of Colloids, emulsion. Stabilisers and browning reactions.

Unit XVI - Dietetics

Therapeutic adaptation of normal diet, calculation and Planning of normal diet. Modification of diets in relation of gastro intestinal disorders including those of the liver. Cardiovascular conditions and renal disorders.

Unit XVII - Nutrition needs

Preschool age, school age, adolescence, adult and old age, Growth and development during preschool and schoolage. Changes of growth during adolescence. Prevalence of malnutrition in children and adolescents. Supplementary foods- Feeding programmes.

Unit XVIII - Community Nutrition

Assessment of nutritional status- Need for assessment methods, anthropometry, clinical assessment, food weighing and biological analysis. Organisation working for nutritional improvement Indian Council of Agricultural Research, Indian Council of Medical Research, State Nutrition Councils and Bureaus, Extension programmes. The Applied Nutrition Programme, ICDS, SNP etc., Central Food Technological Research Institute, Voluntary Bodies, special programmes such as Nutrition Noon Meal Scheme. Midday Meal programmes International Organisations such as FAO, WHO, UNICEF, CARE, AFPRO, CWS, CRS, IBP, World Bank and others.

Unit XIX - Textile Design

Printing and dyeing. Different methods of hand printing- Block printing, Resist printing methods- Stenciling, tie and dye, screen printing and batik.

Unit-XX

Sources of consumer Information and protection- Information- Advertisement display, labels, journals and magazines. Protection- Standardisation, ISIR standards, consumer organizations.