

THIRUVALLUVAR UNIVERSITY
VELLORE – 632115
CENTRE FOR RESEARCH
SYLLABUS FOR COMMON ENTRANCE TEST OF
M. PHIL AND PHD
FOODS AND NUTRITION

Unit -1

Cellular basis of Physiology - Body fluid compartment, membrane potential, Inter cellular communication – Homeostasis, Endocrinology and Reproduction, Respiration and Gastro – Intestinal, Circulation and Excretion, Nervous system, Immunity

Unit – 2

Food Groups, Pulses, Vegetables and fruits -Structure, Classification, Composition, Nutritive value, Methods of Cooking, Changes on Cooking – pigments, Egg, Meat, Fish - Structure, Composition, Nutritive value, Grading, Methods of Cooking and Role of egg in cookery. Milk and Milk Products, Sugar cookery.

Unit-3

Carbohydrates, Lipids, Proteins and Amino acid, Energy, Inter relationship between carbohydrate, fat and protein, nutritional adaptation and hypotheses.

Unit – 4

Homeostasis Maintenance, Fat Soluble Vitamins, Water Soluble Vitamins Macrominerals Micro Minerals

Unit – 5

Recommended allowances, Nutrition in Pregnancy, Nutrition during Lactation, Nutrition in Infancy Nutrition in school children - feeding school children and factors to be considered. Planning a menu, feeding problems, packed lunch. Nutrition during Adolescence. Nutrition in Adult and Elderly.

Unit -6

Types and Classification of microorganism, Micro-organisms and food, Food in relation to disease, Control of microorganism, Sterilization by Physical agents

Unit – 7

Biological Oxidation, Metabolism Of Carbohydrate, Metabolism Of Lipids, Protein And Aminoacid Metabolism, Metabolism Of Nucleic Acids

Unit- 8

Meaning of research, Types of research, Objectives of research. Collection of Data - Methods of collecting data.

Sampling Design, Classification and Tabulation of Data, Representation of data, Measures of central tendency, Probability.

Unit- 9

Definition and brief study of community, family, village and block, Study of common nutritional problem prevailing at community level, Nutrition and National Development, Nutrition intervention Programmes, Demographic changes due to malnutrition. IMR, MMR, Mortality, morbidity rate, birth rate, sex ratio, poverty level.

Nutrition education - Merits, planning, evaluation and conduct.

Health care delivery - PHC, School Health services and their role in preventing communicable diseases.

Unit – 10

Principle of Nutritional care, Types of hospital diets, Diet in Febrile condition, Diseases of cardio vascular system, Diseases of the Gastro intestinal system, Diseases of the Kidney.