

B.SC –I (HOME SCIENCE)
SEMESTER: I (ODD)
INTRODUCTION TO TEXTILES—THEORY AND PRACTICAL

Co 1	Classification and characterization of textiles fibres and practically study them by identifying them using visual inspection microscopic, burning and chemical tests.
Co 2	Discuss the manufacturing properties and importance of natural plant fibre: Cotton, Linen
Co 3	Discuss the manufacturing properties & importance of natural animal fibres: wool, silk
Co 4	Discuss the manufacturing properties & importance of synthetic fibres: rayon, nylon, polyester, acrylic
Co 5	Describe yarns, methods of spinning, twist, crimp count & different types of yarns and study of estimation of thread count of fabrics.
Co 6	Classification of methods of fabric construction
Co 7	Explain weaving, parts of loom & its working and types of weave and practical Identification of weaves and their variations and collection of their samples.
Co 8	Explain knitting technology & types of knits and Preparation of samples
Co 9	Describe netting, knotting, felting, braiding & bonding

SEMESTER – I (ODD)
PAPER: Introductory Chemistry -THEORY AND PRACTICAL

CO 1	Describe the concept of element, mixture and compound. Atomic and Molecular masses.
CO 2	Explain mole concept and Molar masses, Normality. Molarity and mass percentage and practically explain the preparation of solutions (Normal/Molar). Sodium hydroxide, Sodium Carbonate and Hydrochloric Acid
CO 3	Describe subatomic particles: Electrons, Protons and Neutrons, Atomic No., Atomic Weight, Bohr's model of an atom.
CO 4	Explain modern Periodic Law and Periodic Table, Electronic configuration of elements (Na, Mg, C, N, O, F, Cl, H). Periodic properties : Atomic size, Ionisation energy, Electron affinity and Electronegativity, practically prepare Crystals of Copper Sulphate and Potash Alum
CO 5	Describe chemical Bonding : Ionic, Covalent, Coordinate and H-bonding.
CO 6	Explain the concept of Acids, Bases & Salts, pH and pH Scale Numericals based on pH. Buffer solutions and practically determine the normality and strength of given Sodium Hydroxide Solution by volumetric titrations using phenolphthalein as an indicator
CO 7	Describe the carbon and its Characteristic : Tetravalency, Catenation, Isomerism, Electronegativity, Tendency to form multiple bonds
CO 8	Explain the classification of organic compounds, Functional groups, IUPAC Nomenclature of Aliphatic Compounds (alkanes, alkenes, alkynes, alcohols, carboxylic acids, aldehydes & ketones). Classification of carbon atoms in alkanes
CO 9	Describe the synthetic Polymers: Structure and uses of the following polymers (PVC, Teflon, PAN, Nylon - 6, 6 Polyester) and practically determine the normality of the given HCl solution by titrating it against standard Sodium Carbonate solution using methyl orange as an indicator
CO 10	Explain the soaps and synthetic detergents, advantages and disadvantages and practically explain the preparation of Soaps, using any two oils (Coconut oil/castor oil)
CO 11	Describe the chemical Composition in Cosmetics: Creams, Perfumes, Talcum Powder, Deodorants, Lipsticks, Nailpolish, Shampoo & Hair dye and practically perform Qualitative analysis of Chloride, Nitrate, Acetate, Sulphate, phosphate as acid radicals and Lead, Copper, Aluminium, Nickel and Ammonium as basic radicals
CO 12	Explain the paints and Varnishes their composition and uses

SEMESTER – I (ODD)
Subject: FOOD SCIENCE -THEORY AND PRACTICAL

CO1	Describe definition, classification and functions of Food
CO2	Identify composition and nutritional contributions of Cereals and Pulses and describe various techniques for weights and measures, standard and household measures for raw and cooked foods
CO3	Identify composition and nutritional contributions of Milk and Milk Products and explain common Cookery Terms and their uses in cooking
CO4	Identify composition and nutritional contributions of Nuts and Oils and describe the preparation of minimum two items of Sandwiches;Paranthas/Poories – (simple & stuffed);Egg - Boiled, fried and poached
CO5	Identify composition and nutritional contributions of Meat, Fish, Poultry and Egg and Preparation of Rice - Pulao, biryani and sweet rice;
CO6	Identify composition and nutritional contributions of Condiment and Spices, gives knowledge about the preparation of Snacks - sweet and salty using different common methods of cooking
CO7	Identify composition and nutritional contributions of Sugar and Jaggery and preparation of food items by fermentation, germination and supplementation
CO8	Describe objectives and principles of cooking of food and preparation of Raitas & Beverages (Hot and cold)
CO9	Describe different methods of cooking - their advantages and disadvantages
CO10	Explain effect on nutritive and other values of foods during cooking
CO11	Understanding Germination, Fermentation, Supplementation and Fortification and Enrichment

SEMESTER – I (ODD)
Paper: Introduction to Human Development (THEORY)

CO 1	Explain the meaning and difference of growth and development
CO 2	Explain the historical trends and early concept of child development
CO 3	Describes the importance and scope of human development
CO 4	Gives knowledge about various methods used for child study-observation, case study, questionnaire, interview etc.
CO5	Explain Principles of development and factors affecting growth and development.
CO6	Describe Lifespan development through different stages and sub stages, different areas of development.

SEMESTER – I (ODD)
Paper: Hygiene and promotive Health (THEORY)

CO 1	Explain various Infections diseases - Causes, symptoms, mode of spread, treatment and prevention.
CO 2	Describe Personal Hygiene - Physical Health - Regular Habits in daily living, eating and eliminating, cleanliness of body and different organs, rest and sleep.
CO 3	Explain mental health
CO 4	Describe the concept of positive Health
CO5	Explain Immunity - Definition and types of immunity, vaccination schedule (Triple Vaccine, BCG, Polio drops etc.)
CO6	Explain School Hygiene - medical Inspection of children (Periodic health Check up) Public health organization – WHO
CO7	Gives knowledge about various National Health Programmes. (Malaria Eradication, Leprosy and Tuberculosis, Pulse Polio).

B.SC –I (HOME SCIENCE)**SEMESTER: II (EVEN)****Paper: PRENATAL AND INFANT GROWTH AND CARE (THEORY)**

CO 1	Explain Development during prenatal stage: Conception, signs of pregnancy and physiological changes during pregnancy and Factors affecting prenatal development.
CO 2	Describe Stages of prenatal development. Prenatal growth and activities in first, second and third trimesters of pregnancy and The birth process, stages of delivery, types of birth. Discomforts and complications of pregnancy.
CO 3	Explain The New Born: Physical characteristics of the neonate - size, weight, body-proportions, sensory capacities i.e. hearing, vision, taste, smell, touch, temperature, reflex actions.
CO 4	Discussion was done on care of new born babies- Physical, motor, social and emotional development. Rearing and care of the infant - feeding, weaning, sleeping, bathing and toilet training. Common diseases and immunization during infancy.

SEMESTER: II (EVEN)**Paper: Introductory Home Management (THEORY)**

CO 1	Explain Definition, Concept and objectives of home management-
CO 2	Explain Process of management: Planning, organizing, controlling and evaluating.
CO 3	Describe Family life cycle and stages. Qualities and responsibilities of a good home maker. Developing managerial abilities/skills.
CO 4	Explain Factors motivating management. Values - Definition, classification and characteristics. Goals - Definition, classification, characteristics and factors affecting goal setting. Standards - Definition, meaning and classification.

SEMESTER: II (EVEN)**Subject: BASIC NUTRITION -Theory and Practical**

CO1	Define Carbohydrate and explain functions, sources, recommended dietary allowances, effects of deficiency and excess (in brief) of Carbohydrates and Planning, Calculation and Preparation of Vitamin A rich snacks
CO2	Define Protein , explain functions, sources, recommended dietary allowances, effects of deficiency and excess (in brief) of Proteins and Planning, Calculation and Preparation of Iron rich snacks
CO3	Define lipid , explain functions, sources, recommended dietary allowances, effects of deficiency and excess (in brief) of lipids and Planning, Calculation and Preparation of Calcium rich snacks
CO4	Describe functions and sources of water for human body, effects of excess and low intake of water on human body and Planning, Calculation and Preparation of Protein rich snacks
CO5	Classify dietary fibre, functions or role of dietary fibre in the human body, sources
CO6	Explain Functions, sources, recommended dietary allowances, effects of excess and deficiency of Vitamin A and Preperation of Salads
CO7	Explain Functions, sources, recommended dietary allowances, effects of excess and deficiency of Vitamin D and Preperation of Soups
CO8	Explain Functions, sources, recommended dietary allowances, effects of excess and deficiency of Vitamin E
CO9	Explain Functions, sources, recommended dietary allowances, effects of excess and deficiency of Vitamin K and Preperation of Deserts
CO10	Explain Functions, sources, recommended dietary allowances, effects of excess and deficiency (in brief) of Vitamin C
CO11	Explain Functions, sources, recommended dietary allowances, effects of excess and deficiency of Vitamin Bcomplex and Preperation of Main Course Dishes
CO12	Explain Functions, sources, recommended dietary allowances, effects of excess and deficiency of Macro Minerals and Micro Minerals and Preperation of Cakes

SEMESTER: II (EVEN)
Subject: HUMAN PHYSIOLOGY-Theory

CO1	Describe Animal cell structure, composition of protoplasm and Cell division
CO2	Identify different bones and Joints of the skeleton
CO3	Describe structure and functions of various parts of alimentary canal and concept of digestion and absorption
CO4	Understanding the concept of circulatory system
CO5	Describe Respiratory passage - its parts & functions, structure and functions of lungs
CO6	Explain structure and functions of kidneys, mechanism of urine formation
CO7	Explain structure of reproductive organs in a woman, menstrual cycle
CO8	Describe major parts of the nervous system

SEMESTER: II (EVEN)
Paper: Nutritional Biochemistry THEORY AND PRACTICAL

CO 1	Explains the importance of various nutrients like carbohydrates, protein, fats, minerals and vitamins and practically describe the preparation of solutions of different concentrations and expressing concentrations in different units
CO 2	Describes the classification, structures and biological importance of all nutrients present in food and practically preparing the buffer solution (Acetate buffer-0.2 Molar, pH-10.2)
CO 3	Explain the various processes of digestion, absorption and metabolism of carbohydrates, protein, lipids and nucleic acid and practically give the knowledge about qualitative analysis of Carbohydrates, Protein and Lipids
CO 4	Describe the chemical nature, classification of enzymes and also explain the factors affecting activity of enzymes and their importance in human body, practically determining the Vitamin C by titrimetric method and fat (demonstration by Soxhlet apparatus) in different food stuffs
CO 5	Explain biological importance of minerals and practically gives the knowledge about determination of saponification value and acid value of two different fats or oils and development of chromatogram of known amino acids and mixture of amino acids by 2-D paper chromatography
CO 6	Describe structure, chemistry and functions of minerals and practically estimating chloride in table salt by titrimetric method

SEMESTER-II (EVEN)
PAPER: LAUNDRY SCIENCE & FINISHING OF FABRICS (THEORY & PRACTICAL)

CO 1	Explain the concept of Laundry process, Laundry equipments and Washing & Finishing of all type of garment and household items
CO 2	Give deep knowledge of Soaps and supplies: Soaps and & solvents.
CO 3	Increase awareness of use, care of fabrics and study the phenomenon of dry Cleaning of Fabrics.
CO 4	Explains the phenomenon of Stains - classification of stains and different methods of removing stains.
CO 5	Describe and evaluate variety of Fabric Finishing - a) Physical b) Chemical - c) Special purpose finishes. detergents; Stiffening Agents; Blueing Agents; Bleaching & other laundry reagents; Grease absorbents