

# A.S.D. Govt. Degree College for Women (A), Kakinada

## Department of Home Science

I Semester

Major-1

### HSC24101: INTRODUCTION TO HOME SCIENCE

Theory

5 hrs/week

<b>Unit I</b>	<b>Basics of Home Science</b> <ul style="list-style-type: none"><li>• Meaning, Definition and Branches of Home Science</li><li>• Scope of Home Science</li><li>• Development of Home Science as a discipline in India, Home Science Association of India-Role and activities in promoting Home Science</li><li>• Linkages of Home Science with other related subjects</li></ul>
<b>Unit II</b>	<b>Branches of Home Science</b> <ul style="list-style-type: none"><li>• <b>Human Development:</b> Meaning, Definition and Scope of Human Development, Stages of Human Development, Developmental tasks/milestones.</li><li>• <b>Food and Nutrition:</b> Definition, Importance and Functions of Food. Concept of Nutrition, Basic terms used in the study of Nutrition: Nutrients, Food Groups, Balanced Diet and Food Guide Pyramid, branches of nutrition</li></ul>
<b>Unit III</b>	<b>Branches of Home Science contd.</b> <ul style="list-style-type: none"><li>• <b>Textiles and Clothing:</b> Origin, Importance and Functions of Clothing. , Introduction to textile terms- fiber, yarn, textile, weaving, knitting, Classification of textile fibres.</li><li>• <b>Extension Education and Communication:</b> Concept, Nature, Scope and principles of Extension and communication, Methods and media of community outreach.</li><li>• <b>Resource management &amp; Interior Design:</b> Concept and scope, Need for management, Classification of resources, Factors affecting use of resources, Importance of housing and functions of housing and interior design.</li></ul>
<b>Unit IV</b>	<b>Research in Home Science: Research in Home Science</b> <ul style="list-style-type: none"><li>• <b>Foods &amp; Nutrition:</b> Plant-based Diets and Sustainability, Nutritional security, Functional foods, Technology in food safety and preservation, Diet and Immunity, personalized nutrition, nutraceuticals, Ready to eat foods</li><li>• <b>Human Development &amp; Family Studies:</b> ECCE, Parenting, Digital technology and family Dynamics, Mental wellbeing, Work life balance, Aging and Elderly care,</li><li>• <b>Textiles &amp; Clothing:</b> Eco-friendly textiles, Smart and wearable technology, Traditional textiles with modern designs, clothing and culture</li><li>• <b>Resource Management &amp; Interior Design:</b> Financial literacy, Sustainable housing, Technology in home management, Multifunctional designs, biophilic designs</li><li>• <b>Extension Education &amp; Community Development:</b> Digital Literacy, Sustainable living, Women empowerment, Health and nutrition education</li></ul>
<b>Unit V</b>	<b>Careers &amp; Entrepreneurship in Home Science:</b> <ul style="list-style-type: none"><li>• Foods &amp; Nutrition – In hospitals, health centres, food industry</li><li>• Human Development- welfare programs of Government/NGOs, preschools</li><li>• Textiles &amp; Clothing- in textile industry, boutiques, research labs</li></ul>

- Resource Management- Interior designer, creative crafts entrepreneur
- Extension education- extension projects of Government/ NGOs, entrepreneur making teaching aids.

**I Semester**  
**Major-2**  
**HSC 24102: HEALTH, HYGIENE & WELLNESS**

**Theory**

**5 hrs/week**

<b>Unit I</b>	<ul style="list-style-type: none"> <li>• <b>Health</b> – Definition &amp; meaning</li> <li>• <b>Wellness</b> - Definition &amp; meaning</li> <li>• Dimension of health – Physical, Social, Emotional, Intellectual and Spiritual</li> <li>• Dimension of wellness – Physical, Social, Emotional, Intellectual and Spiritual.</li> <li>• Factors affecting Health and Wellness</li> <li>• Indicators of health- Mortality (Mortality Rate – Crude Mortality, Age specific mortality Cause specific mortality. Infant Mortality Rate, Maternal Mortality Rate, Excess Mortality Rate.</li> <li>• Morbidity Rate: Concept, Types</li> <li>• Disability: Concept, Definition, Impairment, Types</li> </ul>
<b>Unit II</b>	<p><b>Classification &amp; Study of Microorganisms-</b></p> <ul style="list-style-type: none"> <li>• Bacteria - Morphology, growth, Nutrition and Reproduction</li> <li>• Virus - Morphology, Classification and Reproduction,</li> <li>• Yeasts - Morphology, growth, Nutrition and Reproduction,</li> <li>• Mould - Morphology, Nutrition and Reproduction</li> <li>• Beneficial Applications of Microorganisms in Food Industry, Agriculture and other areas.</li> </ul>
<b>Unit III</b>	<ul style="list-style-type: none"> <li>• Infection- Definition, sources, Types, mode of transmission.</li> <li>• Factors of infection</li> <li>• Diseases caused by microorganisms-Symptoms, etiology, mode of transmission of               <ol style="list-style-type: none"> <li>a. Bacterial Diseases - Typhoid, Tuberculosis, Tetanus, Pneumonia</li> <li>b. Viral Diseases - Influenza, AIDS, Measles, Mumps, Rubella, Corona</li> <li>c. Parasite Diseases - Malaria, Dengue, Amebiasis</li> </ol> </li> </ul>
<b>Unit IV</b>	<ul style="list-style-type: none"> <li>• Sterilization - Definition, Types (Physical and chemical method).</li> <li>• Immunity- definition, types, Immunization schedule, Resistance</li> <li>• Hygiene - Meaning and importance of personal hygiene</li> <li>• Standard precautions to prevent infections</li> </ul>
<b>Unit V</b>	<ul style="list-style-type: none"> <li>• Modern lifestyle and hypo-kinetic diseases – Diabetes Mellitus, Hypertension, Obesity, Cardiovascular Diseases - prevention and management through Physical exercise</li> <li>• Stress, anxiety, and depression- Definition and concept</li> <li>• Role of Yoga, asanas and meditation in maintaining health and wellness.</li> <li>• Role of sleep-in maintenance of physical and mental health.</li> </ul>

<b>References:</b>	<ol style="list-style-type: none"><li>1. Frazier, W. Candwestnoff, D.C (1997) Food Microbiology, Tata McGraw Hill</li><li>2. A.S. Rao 2001 Introduction to microbiology, Prentice Hall of India</li><li>3. Anna k. Joshua, Microbiology, popular book depot, Madras</li><li>4. R. Ananthanarayanan, C.K.J. Paniker, 2001, Orient Longman Private Limited.</li><li>5. General Microbiology , 1982, power &amp;Daginawala, Himalaya Publishing House</li><li>6. Stanier R. Y., Adelberg, E.A. and Ingraham, J.L. (1989) General Microbiology.</li><li>7. Atlas R. M. (1988) Microbiology, fundamentals and application. Micmillon N. Y.</li></ol>
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**I Semester**  
**Multidisciplinary Course w.e.f. AY 2023-24**  
**MDC 24102: PRINCIPLES OF PSYCHOLOGY**

**Credits: 2**

**2 hrs/week**

<b>Unit I</b>	<ul style="list-style-type: none"> <li>• Psychology- Definition, Origin of psychology, Psychology as a scientific study of behavior</li> <li>• Branches of Psychology-Pure and Applied</li> <li>• Attention: Definition, Types-Voluntary, Involuntary;</li> <li>• Determinants of attention-Extrinsic, Intrinsic</li> <li>• Selective, Sustained and Divided attention.</li> <li>• Perception: Definition and Principles of perception.</li> </ul>
<b>Unit II</b>	<p><b>Emotion and Motivation</b></p> <ul style="list-style-type: none"> <li>• Emotion: Definition, Types, Characteristics, components, Physical and Physiological changes during emotions.</li> <li>• Emotional Quotient - Definition</li> <li>• Motivation: Definition, Nature and types (Intrinsic and extrinsic)</li> <li>• Needs-Meaning, types-Maslow's hierarchy model</li> <li>• Intelligence: Definition, Types, Assessment</li> <li>• Concept and Classification of IQ</li> </ul>
<b>Unit III</b>	<p><b>Learning and memory</b></p> <ul style="list-style-type: none"> <li>• Learning – Definition, Characteristics and Types of learning.</li> <li>• Classical conditioning and principles of classical conditioning</li> <li>• Operant conditioning - schedules of reinforcement</li> <li>• Memory – Definition, Process of memorization,</li> <li>• Types of Memory-Sensory (Immediate), short-term and long-term memory-</li> <li>• Techniques of memorization,</li> <li>• Forgetting and its causes</li> <li>• Personality – Definition, characteristics,</li> <li>• Theories of Personality - Trait approach theories-Hippocrates, Kretschmer, Sheldon's, Jung's, Friedman and Roseman classification.</li> <li>• Type approaches theories-Allport's, Cattell's theories</li> <li>• Assessment of personality.</li> </ul>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Baron, R. A. (2006). <i>Psychology</i> (5th Ed.). New Delhi: Pearson Education.</li> <li>2. Ciccarelli, S. K., &amp; Meyer, G. E. (2009). <i>Psychology</i>. Delhi: Pearson Education.</li> <li>3. Coon, D., &amp; Mitterer, J. O. (2007). <i>Introduction to Psychology: Gateway to mind and behaviour</i>. New Delhi: Cengage.</li> <li>4. Gerrig, R. J., &amp; Zimbardo, P. G. (2006). <i>Psychology and Life</i> (17th Ed.). New Delhi: Pearson Education.</li> </ol>

	4. Singh, A. K. (2009). <i>Uchachtar Samanya Manovigyan</i> . Varanasi: Motilal Banarasi Das.
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**II Semester  
Minor  
M-FSN24201: FOOD SCIENCE**

<b>Course Outcomes</b>	<ol style="list-style-type: none"> <li>1) Identify the basic food groups and understand the concept of My Plate for the day and various cooking methods.</li> <li>2) Demonstrate an understanding of the composition of various food groups in the daily diet.</li> <li>3) Practically apply the knowledge of food composition and cooking methods.</li> <li>4) Analyse the effect of cooking methods on various plant foods and classify beverages.</li> <li>5) Evaluate the effect of different processing methods of animal foods.</li> <li>6) Design Menus or recipes incorporating variety of food groups based on the needs of the individual</li> </ol>
<b>Unit I</b>	<ul style="list-style-type: none"> <li>• Food – Definition, Functions</li> <li>• Classification of Food - Basic 5 food groups</li> <li>• objectives of foods</li> <li>• concept of My Plate for the day</li> <li>• Study of various cooking methods – (Wet, dry and combination methods)- Definition, advantages and disadvantages</li> <li>• Solar cooking and Microwave Methods - Definition, Advantages and disadvantages</li> <li>• Cereals - Structure, composition and nutritive value of cereal grain</li> <li>• Millets – importance of millets in daily diet</li> </ul>
<b>Unit II</b>	<ul style="list-style-type: none"> <li>• Pulses and grams –composition, nutritive value</li> <li>• Germination – Advantages</li> <li>• Toxic constituents present in pulses</li> <li>• Vegetables &amp; Fruits - Classification, composition, nutritive value</li> <li>• Pigments present in Vegetables and Fruits</li> <li>• Changes during ripening</li> <li>• Browning reactions (enzymatic and non-enzymatic) in fruits and vegetables.</li> </ul>
<b>Unit III</b>	<ul style="list-style-type: none"> <li>• Beverages – Definition, Classification</li> <li>• Spices and Condiments – Definition, Medicinal value</li> <li>• Role of spices in cookery</li> <li>• Refined oils, Rancidity</li> <li>• Smoking point of oil</li> <li>• Factors affecting on smoking temperature of Fats and oils</li> <li>• Stages of sugar cookery</li> </ul>
<b>Unit IV</b>	<ul style="list-style-type: none"> <li>• Composition &amp; nutritive value of milk</li> <li>• Types of processed milk available in the market</li> <li>• Uses of milk in cookery</li> </ul>

	<ul style="list-style-type: none"> <li>• Egg - Structure, composition and nutritive value</li> <li>• Uses of egg in cookery</li> <li>• Methods to assess quality of eggs</li> <li>• Changes during storage</li> </ul>
<b>Unit V</b>	<ul style="list-style-type: none"> <li>• Meat – Composition &amp; nutritive value,</li> <li>• Poultry – Classification, composition &amp; nutritive value.</li> <li>• Fish – Classification, composition &amp; nutritive value</li> <li>• Food Spoilage – Definition, Causes</li> <li>• Food Preservation – Definition,</li> <li>• Methods of food preservation (Low Temperature, High Temperature, Drying)</li> </ul>
<b>Practical</b>	<ol style="list-style-type: none"> <li>1. Measuring different types of foods</li> <li>2. Preparations with cereals and millets.</li> <li>3. Preparations with legumes.</li> <li>4. Preparations with fruits &amp;Vegetables.</li> <li>5. Preparations with Milk</li> <li>6. Preparations with Egg</li> <li>7. Preparations with Flesh foods</li> <li>8. Preparation of Beverages</li> <li>9. Experimental cookery on: Cereals, Pulses, Fruits, Vegetables, GLVs, Milk , Eggs</li> <li>10. Sensory Evaluation and preparation of score card.</li> </ol>
<b>Additional Inputs</b>	1) Traditional foods
<b>References</b>	<ol style="list-style-type: none"> <li>1. Food science, Chemistry and Experimental foods by M. Swaminathan.</li> <li>2. Food Science by Norman. N. Potter.</li> <li>3. Experimental study of Foods by Griswold R.M.</li> <li>4. Food Science by Helen Charley.</li> <li>5. Foundation of Food Preparation by A.G. Peckam.</li> <li>6. Modern Cookery for teaching and trade, volume I&amp;II, Thangam Philip. Orient Longmans Ltd.</li> <li>7. Food Fundamentals by Mac Wiliams, John Willy and son"s, New York.</li> <li>8. Food Facts &amp; Principles by Shakunthala manay &amp; Shadakhraswamy.</li> <li>9. Food Science by Srilakshmi, second edition,2002.</li> </ol>
<b>Co-Circular activities</b>	<ol style="list-style-type: none"> <li>1. Student Seminars on different food groups</li> <li>2. Collection of samples of different food products available in the market and study their nutrient composition and use in cookery.</li> <li>3. Field visits – Visit to food processing units.</li> <li>4. Field study – Survey on Food Additives used in various food products/ processed foods.</li> <li>5. Collection of different ready to eat foods and processed foods.</li> <li>6. Celebration of Important Days (National and International)</li> </ol> <p>World Nutrition day-May 28th  Nutrition week (Sep 1 st 7 th  World food day - October16th</p>

**II Semester**  
**Major-1**  
**HSC 24201: ESSENTIALS OF HOME SCIENCE EXTENSION**

<b>Unit I</b>	<p><b>Extension Education</b></p> <ul style="list-style-type: none"> <li>• Meaning, Concept, Scope and objectives of Extension Education</li> <li>• Formal, Informal and Non formal Education</li> <li>• Philosophy and principles of Extension Education</li> <li>• Role and Qualities of an Extension worker</li> </ul>
<b>Unit II</b>	<p><b>Teaching and Learning Process</b></p> <ul style="list-style-type: none"> <li>• Teaching – Meaning, definition, steps in Teaching.</li> <li>• Learning – Meaning, definition, Elements of Learning.</li> <li>• Learning Situation – Definition, Elements of Learning Situation.</li> <li>• Principles of learning and their Implications for Teaching</li> <li>• Motivation – Definition, Principles of Motivation in Extension</li> <li>• Classification of motives</li> </ul>
<b>Unit III</b>	<p><b>Teaching Methods/Techniques</b></p> <ul style="list-style-type: none"> <li>• Extension Teaching methods – Definition, Functions</li> <li>• Classification of Teaching methods – According to use and form</li> <li>• Individual methods – Farm and home visits, Telephone calls, Personal letter, Result demonstrations.</li> <li>• Group methods – Method demonstration, Group meetings/Discussions, Conferences, Field trips.</li> <li>• Mass Methods – Print and electronic media, Internet, social media and Exhibitions</li> <li>• Factors to be considered in selection and combination of teaching methods</li> </ul>
<b>Unit IV</b>	<p><b>Audio - Visual Aids</b></p> <ul style="list-style-type: none"> <li>• Audio Visual Aids – Meaning and Classification</li> <li>• Factors Influencing selection of Audio-Visual Aids</li> <li>• Principles of Preparing, Planning, Presentation and evaluating in Audio-Visual Aids</li> <li>• The cone of Experience</li> </ul>
<b>Unit V</b>	<p><b>Communication</b></p> <ul style="list-style-type: none"> <li>• Communication – Meaning, Definition and scope of Communication</li> <li>• Key Elements in Communication process – (Communicator, Messages, Channel, Treatment of Messages, Audience and Audience Response).</li> <li>• Types of Communication – Verbal, Non-Verbal, Small group and Mass Communication.</li> <li>• Barriers to communication.</li> </ul>
<b>Practical</b>	<ol style="list-style-type: none"> <li>1. Visit to a community/ village to find out the socio- economic needs of the people</li> <li>2. Preparation of Survey Schedule</li> <li>3. Preparation and display of teaching aids – Posters, charts, flash cards etc.</li> </ol>

	<ol style="list-style-type: none"> <li>4. Display of bulletin board</li> <li>5. Illustrated Lecture and Method Demonstration to any community on Home Science related Topics.</li> </ol>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Adivi Reddy (1985). Extension Education, Sreelakshmi press, Bapatla,</li> <li>2. Dahama.O.P. (1981). Extension and Rural welfare, Ram Prasad and Sons Agra Bhopal.</li> <li>3. Doshi, S.L. (2007). Rural Sociology. Delhi Rawat Publishers.</li> <li>4. Dubey, V.K.. (2009). Extension Education &amp; Communication, 1<sup>st</sup> edition New Age International Ltd</li> <li>5. Indhubala (1980), Gruhavignasastravistarana , Telugu academy text book publications</li> <li>6. Sanths Govind, G. Tamliselvi And J. Meenainbigai .(2011). Extension Education and Rural Development .Agrobios (India) Chopasani Road Jodhpur- 342002 (Raj.)</li> <li>7. Shekar Serene &amp; Santosh Ahlawat . (2013).Text book of Home Science Extension Education, 1<sup>st</sup> edition, Daya Publishing house.</li> <li>8. Supe, S.V.( 1983). An Introduction to Extension Education. Oxford &amp; IBH publishing Co, New Delhi.</li> </ol>
<b>Co-curricular Activities</b>	<ol style="list-style-type: none"> <li>1. Adoption of a village based on the socio-economic background.</li> <li>2. Visit to an adopted village and conduct <ul style="list-style-type: none"> <li>● Baseline survey regarding demographic, population, Educational and felt needs of the villagers.</li> <li>● Collection of data.</li> <li>● Pooling and Analyzing the data.</li> </ul> </li> <li>3. Preparation, use and evaluation of visual aids viz., <ul style="list-style-type: none"> <li>● Poster</li> <li>● Different types of charts.</li> <li>● Flash cards</li> <li>● Display of Bulletin Board.</li> </ul> </li> <li>4. Presentation of seminars in the class rooms.</li> <li>5. Blackboard teaching for 15 minutes in the class room.</li> <li>6. Promoting effective verbal and non-verbal communications among students.</li> </ol>



**II Semester  
Major-2  
HSC 24202: CHILD DEVELOPMENT**

<b>Unit I</b>	<ul style="list-style-type: none"> <li>• Growth and development- definitions of growth, development</li> <li>• Principles of development</li> <li>• Determinants of development-Maturation and Learning-Heredity Vs Environment</li> <li>• Factors affecting growth and development</li> <li>• Stages of life span</li> </ul>
<b>Unit II</b>	<ul style="list-style-type: none"> <li>• Prenatal period- stages of pre natal development with its Hazards</li> <li>• Factors influencing prenatal development</li> <li>• Major and minor complications during pregnancy</li> <li>• Parturition-stages, types of birth</li> </ul>
<b>Unit III</b>	<ul style="list-style-type: none"> <li>• Neonate: APGAR test, Physical and physiological needs of neonate- characteristics of neonate, adjustments of neonate</li> <li>• Infancy/Babyhood- Developmental Tasks and Characteristics, Physical-motor development, Cognitive development – Piaget’s Sensory motor stage, Language, Socioemotional development.</li> </ul>
<b>Unit IV</b>	<ul style="list-style-type: none"> <li>• Early Childhood Period –Developmental tasks-Characteristics -Physical, Emotional, Social and Cognitive development - Piaget’s Pre-operational stage</li> <li>• Play-Importance-Values-social stages in play</li> </ul>
<b>Unit V</b>	<ul style="list-style-type: none"> <li>• Parenting Styles – Authoritarian, Authoritative and Permissive styles, Influence of child rearing practices on child’s personality.</li> <li>• Behavioral Problems – Definition, Common Behaviour problems - Thumb sucking, enuresis, temper tantrums, destructiveness - Early identification.</li> </ul>
<b>Practical</b>	<ol style="list-style-type: none"> <li>1. Case study of a pregnant women</li> <li>2. Observation of characteristics of an infant</li> <li>3. Observation of different Developments of pre-school children –Physical development, Language development, Concept development.</li> <li>4. Conducting a study on effect of parenting on child’s personality using a structured questionnaire</li> <li>5. Collect a case study of a child with behavioural problems</li> </ol>
<b>Additional inputs</b>	<ol style="list-style-type: none"> <li>1. History of study of child development</li> <li>2. Theories of play</li> </ol>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Berk, L. E. (2007). Child Development. Prentice-Hall of India Pvt. Ltd, New Delhi.</li> <li>2. Feldman, R.S. (2011). Understanding Psychology, Tenth Edition, Tata MCGraw Hill Education Private Limited, McGraw- Hill, New Delhi.</li> <li>3. Hallahan, D.P. and Kauffman, J.M. (1991). Introduction to exceptional children. 5th ed. Allyn and Bacon, Boston.</li> </ol>

	<ol style="list-style-type: none"> <li>4. Hurlock – E.B. (1990) Child Development, Tata McGraw Hill Company Ltd, New York. McGraw- Hill, New Delhi.</li> <li>5. Rozario, J. and Karanth, P. (2003). Learning disability in India. Sage publication, New Delhi.</li> <li>6. Santrock, J. W. (2013). Child Development. Tata McGraw Hill Company Ltd, New Delhi.</li> <li>7. Singh, A. ( 2015). Foundations of Human Development: A life span approach, 1<sup>st</sup> edition Orient Black Swan Pvt. Ltd., New Delhi.</li> <li>8. Prasad, J. and Prakash, R. (1996). Education of handicapped children, problems and solution. Kanishka publication distribution. New Delhi.</li> </ol>
<p><b>Co-curricular Activities</b></p>	<ol style="list-style-type: none"> <li>1. Observation of neonatal characteristics by visiting a maternity hospital.</li> <li>2. Familiarise with childhood disabilities by visiting local centres for special children like Mentally challenged, Visually challenged and special schools.</li> <li>3. Identifying children with learning disability in nearby elementary schools</li> <li>4. Observation of a pre-school child</li> <li>5. Visiting an observation home and finding out the reasons for placement in Juvenile homes</li> <li>6. Celebration of Important Days (National and International): - <ul style="list-style-type: none"> <li>● World Hearing day (March 3<sup>rd</sup> )</li> <li>● International day of elderly-October 1<sup>st</sup></li> <li>● Children’s Day ( Nov 14<sup>th</sup> )</li> <li>● World Disability Day (Dec 3<sup>rd</sup> )</li> </ul> </li> </ol>

**III-Semester  
Minor  
M-FSN23301: BASIC NUTRITION**

<b>Unit I</b>	<ul style="list-style-type: none"> <li>• Definitions – Nutrition, Types of Nutrition (Good and Malnutrition)</li> <li>• Nutrients – Importance, Definition, Types (Macro and Micro Nutrients)</li> <li>• Carbohydrates - Classification, functions, Dietary source</li> <li>• Role of dietary fiber in human nutrition</li> <li>• Protein – Nutritional Classification, Functions, sources</li> <li>• Protein quality – PER, BV,NPU, digestibility coefficient</li> <li>• Nutritional classification of Amino Acids</li> <li>• Lipids – Classification, functions, sources</li> <li>• Importance of essential fatty acids</li> </ul>
<b>Unit II</b>	<ul style="list-style-type: none"> <li>• Classification of Vitamins</li> <li>• Fat soluble vitamins - functions, source of A, D, E, K</li> <li>• Deficiency disorders of Vitamin A &amp; D</li> <li>• Water soluble vitamins - functions, source of Thiamine (B1), Riboflavin (B2), Niacin (B3), Folic acid, Cyanocobalamin (B12) and Ascorbic Acid (Vitamin C)</li> <li>• Deficiency disorders of Thiamine, Riboflavin, Folic Acid, Ascorbic Acid</li> </ul>
<b>Unit III</b>	<ul style="list-style-type: none"> <li>• Classification of Minerals</li> <li>• Macro Minerals: Calcium &amp; Phosphorus, Sodium, Potassium – Functions, Sources</li> <li>• Micro minerals – Iron, Zinc, copper, Iodine – Functions, Sources</li> <li>• Deficiency disorders of Calcium, Iron and Iodine</li> </ul>
<b>Unit IV</b>	<ul style="list-style-type: none"> <li>• Energy - Definition of Kilocalorie, Joule</li> <li>• Determination of Gross energy value of foods by Bomb Calorimeter</li> <li>• Physiological energy value of food</li> <li>• Basal Metabolic Rate (BMR) - definition, factors influencing BMR</li> <li>• Physical Activity – Definition, Types (Aerobic Activity, Other types)</li> <li>• Benefits of physical activity</li> </ul>
<b>Unit V</b>	<ul style="list-style-type: none"> <li>• Functions of water</li> <li>• Regulation of water balance in the human body</li> <li>• Regulation of acid-base balance in the human body</li> <li>• Nutraceuticals – Definition, Classification               <ul style="list-style-type: none"> <li>a) Dietary Supplements</li> <li>b) Functional Foods</li> </ul> </li> </ul>
<b>Practical</b>	<ol style="list-style-type: none"> <li>1. List out nutrient rich foods</li> <li>2. List out Nutritional Requirement for different age groups</li> <li>3. Plan and calculate one recipe mentioning the portion size and nutritive value of each.</li> <li>4. Study of the nutritive foods supplied by the government through ICDS projects during the current plan period.</li> </ol>

	5. Preparation and calculation of nutritive values of low-cost weaning foods.
<b>References:</b>	<ol style="list-style-type: none"> <li>1. Essential of food &amp; Nutrition –Vol. 1 M. Swaminathan, Bappco,Bangalore.</li> <li>2. Human Nutrition and Dietetics –Davidson S. Passmore</li> <li>3. Normal and Therapeutic Nutrition- Corinne. H.Robinson &amp; Marilyn Lawler</li> <li>4. Contemporary Nutrition - Gordon M. Wardlaw, Paul Insel et, al., (2000)Mosby, Chicago.</li> <li>5. Nutrition- concepts and controversies- Eleanor Whitney –Eighth Edition (2000)</li> <li>6. Basic principles of Nutrition- Seema Yadav, First edition (1997)</li> <li>7. Essentials of Nutrition and Diet therapy -Sue Rodwell Williams, fifth edition, TimesMirror Mosby College Publishing, 1990.</li> <li>8. Understanding Nutrition -Whitney P.N. and Roes S.R., West Publication Co, 1996.</li> </ol>
<b>Co-curricular activities:</b>	<ol style="list-style-type: none"> <li>1. Student seminars on different nutrients.</li> <li>2. Preparation of posters, charts, flashcards etc. related to different nutrients – Functions, RDA dietary sources, nutrient content of foods and deficiency symptoms.</li> <li>3. Collections of food samples rich in particular vitamins and minerals like calcium, iron etc.</li> <li>4. Visit to food stores, vegetable and fruit markets to study locally available foods.</li> <li>5. Study projects to collect the data from people. Eg. Foods avoided or given in specific conditions.</li> <li>6. Celebration of Important Days (National and International) <ul style="list-style-type: none"> <li>• World’s Breast Feeding Week (August 1<sup>st</sup> - 7<sup>th</sup> )</li> <li>• Nutrition Week – September 1<sup>st</sup> - 7<sup>th</sup></li> <li>• Nutrition Month – September month</li> <li>• Hand Washing Day – October 15<sup>th</sup></li> </ul> </li> <li>7. World Food Day – October 16<sup>th</sup></li> </ol>

**III-Semester**  
**Major-1**  
**HSC 23301: TEXTILE FIBERS**

<b>Unit I</b>	<p><b>Introduction to Textiles</b></p> <ul style="list-style-type: none"> <li>• Introduction to textiles</li> <li>• Importance of study of textiles</li> <li>• General properties of a Textile Fiber - Primary and Secondary.</li> <li>• Classification of textile fibers – Based on origin (Natural and manmade), based on composition (cellulose, protein, synthetic and mineral)</li> </ul>
<b>Unit II</b>	<p><b>Natural Fibers</b></p> <ul style="list-style-type: none"> <li>• Cellulose fibers – Cotton and Linen - Production, properties, use and care</li> <li>• Minor cellulose fibers- Jute - Production, properties, use and care</li> <li>• Protein fibers – Silk and wool - Production, properties, use and care.</li> </ul>
<b>Unit III</b>	<p><b>Synthetic Fibers</b></p> <ul style="list-style-type: none"> <li>• Nylon – Production, properties use and care</li> <li>• Polyester – Production, properties use and care</li> <li>• Acrylic fibers – Production, properties use and care</li> </ul>
<b>Unit IV</b>	<p><b>Mineral Fibers</b></p> <ul style="list-style-type: none"> <li>• Mineral fibers – Fiber glass and Asbestos Production, properties and Uses</li> <li>• Mixtures and Blends – Importance and advantages of Blending</li> <li>• Blends of Natural cellulose fibers</li> <li>• Blends protein fibers and</li> <li>• Blends manmade fibers.</li> </ul>
<b>Unit V</b>	<p><b>Yarns</b></p> <ul style="list-style-type: none"> <li>• Yarns – Definition, Types of Yarns - Staple and Filament</li> <li>• Methods of spinning – Mechanical process</li> <li>• Methods of spinning – Chemical process - Wet, Dry</li> <li>• Classification of yarns – simple, novelty and textured yarns</li> </ul>
<b>Practical</b>	<ol style="list-style-type: none"> <li>1. Identification and collection of Textile Fibres <ul style="list-style-type: none"> <li>• Plant Fibres – Cotton, Linen, Jute</li> <li>• Animal Fibres – Silk, Wool</li> <li>• Synthetic Fibres – Polyester, Nylon, Acrylic</li> </ul> </li> <li>2. Identification and collection of Yarns - Simple Yarns, Novelty Yarns,</li> <li>3. Tests to identify textile fibers -Texture, Microscopic examination and Burning test.</li> </ol>

<b>References</b>	<ol style="list-style-type: none"> <li>1. Deepali Rastogi and Sheetal Chopra (2017). Textile Science, 1st edition, Orient BlackSwan Pvt. Ltd.</li> <li>2. Kanwar Varinder Pal Singh. (2014). Introduction to Textiles, 1st edition, KalyaniPublishers.</li> <li>3. Seema Sekhri. (2017). Text book of Fabric – Fundamentals to Finishing, 2nd edition, PHILearning Pvt. Ltd.</li> <li>4. Sushma Gupta, Neeru Garg, Renu Saini. (2018). Text book of clothing, textiles andlaundry, 8th edition, Kalyani publishers.</li> <li>5. Vastala, R. (2013) .Text book of Textiles and Clothing, 1st edition, Published by ICAR.</li> </ol>
<b>Co-curricular activities</b>	<ol style="list-style-type: none"> <li>1. Seminar/Assignment/Quiz/Group Discussion</li> <li>2. Use of ICT in Class reports and Seminars.</li> <li>3. Project Work</li> <li>4. Construction of garments and their exhibition.</li> <li>5. Visit to nearby weaving, dyeing units and printing Centres.</li> </ol>

**III Semester**  
**Major-2**  
**HSC 23302: EARLY CHILDHOOD EDUCATION**

<b>Unit I</b>	<ul style="list-style-type: none"> <li>• Significance of pre-school education – Aims and objectives of Pre-school education-Types of preschools</li> <li>• Contributions of Educators to ECE - Indian contributors – Mahatma Gandhi, Rabindranath Tagore, Tarabai Modak, Jijubai Badeka, Jiddu Krishnamurthy</li> <li>• International – Friedrich Froebel, Maria Montessori, John Dewey and Pestalozzi.</li> </ul>
<b>Unit II</b>	<ul style="list-style-type: none"> <li>• Growth of ECE in five year plans – Role of Anganwadi in ICDS scheme</li> <li>• ECE guidelines as per National Educational Policy 2020</li> <li>• Roles and responsibilities of               <ol style="list-style-type: none"> <li>1. Preschool administrator,</li> <li>2. the teacher,</li> <li>3. other personnel</li> </ol> </li> <li>• Qualities of a good preschool teacher</li> </ul>
<b>Unit III</b>	<ul style="list-style-type: none"> <li>• Physical facilities – Building, Location, space allotment – indoor and outdoor space</li> <li>• Arrangement of activity centers</li> <li>• Pre-school Equipment - Principles underlying in selection of equipment for various development – indoor and outdoor equipment.</li> </ul>
<b>Unit IV</b>	<ul style="list-style-type: none"> <li>• Principles of curriculum planning</li> <li>• Long and Short-term planning</li> <li>• Steps in Curriculum planning</li> <li>• Importance of different activities in a day’s programme</li> <li>• A days programme in nursery school</li> <li>• Importance of Science experience, readiness activities and creative activities in ECE.</li> <li>• Developmentally appropriate curriculum</li> </ul>
<b>Unit V</b>	<ul style="list-style-type: none"> <li>• Records – Teacher related, child related and school related, purpose and maintenance of records.</li> <li>• Parent Involvement and participation – Home and school interaction – PTA meetings, casual meetings.</li> </ul>
<b>Practical</b>	<ol style="list-style-type: none"> <li>1. Observation and recording of a day’s programme in a pre-school/Anganwadi centre,</li> <li>2. Observation of qualities of a pre-school teacher in a pre-school/Anganwadi centre</li> <li>3. Planning a day’s programme for pre-school children</li> <li>4. Preparation of stories for pre-school children</li> <li>5. Preparation of rhymes for pre-school children</li> <li>6. Preparation of readiness kit and creative activities for pre-school children</li> </ol>

<p><b>References</b></p>	<ol style="list-style-type: none"> <li>1. Pankajam, G. 1994, 'PreSchool Education Philosophy and Practice', The India publications, Ambala Cantt</li> <li>2. Aggarwal, J.C. 1983 Methods and materials of nursery education, published by DOABAhouse, Delhi.</li> <li>3. MujibulHasanSiddiqui 2004-early childhood education, APH Publishing Corporation, New Delhi.</li> <li>4. Crosser, S. (2005). What Do We Know About Early Childhood Education?“, Researchbased Practice (pp. 154-165). U.S.A: THOMSON Delmar Learning.</li> <li>5. Dorothy, J. S. A., &amp; Dorsey, G.(2003). Developing and Administering”, A child carecenter, 5th edition (pp. 361-374). U.S.A: Thomson Delmar Learning.</li> <li>6. Billman., &amp; Sherman, J.A. (1996). Observation and Participation in Early Childhoodsettings, A Practicum Guide (pp.13-39). U.S.A: Allyn &amp; Bacon.</li> </ol>
<p><b>Co-curricular Activities</b></p>	<ol style="list-style-type: none"> <li>1. Field Trips to ECE Centres: Students can observe and document the physical structures, facilities, and equipment used. This activity enhances their understanding and provides practical insights into the application of theoretical concepts.</li> <li>2. Interactive Workshops with ECE Practitioners: Conduct workshops where experienced ECE practitioners share insights into the qualities of an ideal preschool teacher .</li> <li>3. Community Engagement Projects: Students can design age-appropriate activities such as storytelling sessions, art workshops, or mini-science experiments, in collaboration with local preschools.</li> <li>4. Parent-Teacher Association (PTA) Simulation: Simulate PTA meetings where students take on roles as teachers and parents. They can learn the importance of parental involvement in early childhood education.</li> <li>5. Creative Development Workshops: Offer workshops focused on creating educational materials for preschool children, Students can collaborate to develop engaging and culturally relevant content.</li> </ol>



**III Semester**  
**Major-3**  
**HSC 23303: HOUSING FOR BETTER LIVING**

<b>Unit I</b>	<p><b>Housing</b></p> <ul style="list-style-type: none"> <li>● Importance and functions of a house</li> <li>● Factors influencing the choice of house.</li> <li>● Requirements for purchasing land for building a house - Selection of site, soil condition, locality, orientation, sanitary facilities, good neighbour-hood, legal characteristics.</li> <li>● Principles of planning a house – aspect, prospect, privacy, flexibility, roominess, grouping, circulation, sanitation, practical considerations.</li> </ul>
<b>Unit II</b>	<p><b>House Plans</b></p> <ul style="list-style-type: none"> <li>● Planning of different rooms in the house – Veranda, living room, bed room, kitchen.</li> <li>● Kitchen plans – Planning of efficient work centres (L shape, U shape, single walled, peninsular shaped kitchens)</li> <li>● Planning for efficient storage different areas of house</li> <li>● House plans for different income groups – IBHK, 2BHK and 3BHK</li> <li>● Advantages and disadvantages of owning and renting a house.</li> </ul>
<b>Unit III</b>	<p><b>Building Materials and Flooring Materials</b></p> <ul style="list-style-type: none"> <li>● Types and properties of Building Materials – Stone; Cement; Mortar; Concrete; Timber; Plywood &amp; related products; Paints &amp; related products;</li> <li>● Flooring – Factors in selection of flooring material and Types of flooring</li> <li>● Kitchen Garden (KG) – importance, layout, plants suitable for KG, Home Composting</li> </ul>
<b>Unit IV</b>	<p><b>Building Protection</b></p> <ul style="list-style-type: none"> <li>● Dampness Protection – Reasons, Preventive and curative methods of dampness</li> <li>● Termite Protection – Sources, preventive and curative methods of termite attack</li> <li>● Fire Protection – Causes of fire, preventive measures and fire resisting construction</li> </ul>
<b>Unit V</b>	<p><b>Household Equipment</b></p> <ul style="list-style-type: none"> <li>● Factors to be considered for the selection and purchase of household equipment.</li> <li>● Construction principles and care of the following equipment <ul style="list-style-type: none"> <li>a) Small electrical appliances – mixers, toasters, beaters, iron box</li> <li>b) Large electrical appliances – Refrigerator, washing machine, vacuum cleaner, dish washer, electric range.</li> <li>c) Appropriate technologies for rural areas: hay box, low-cost refrigerator, solar cooker and Biogas plant</li> </ul> </li> <li>● Points to be considered while operating electrical appliances and safety measures to avoid accidents</li> </ul>
<b>Practical</b>	<ol style="list-style-type: none"> <li>1. House plan - symbols, site plan, floor plan, elevation, landscape</li> <li>2. House planning – 1 BHK, 2BHK, (3BHK optional)</li> </ol>

	<ol style="list-style-type: none"> <li>3. Kitchen plans- L shape, U shape, broken L, U Shape, peninsular, one walled.</li> <li>4. Market study on building materials &amp; identification of – floor finishes, wall finishes and ceiling finishes.</li> <li>5. Care and cleaning of metals and Non-metal items.</li> <li>6. Care and cleaning of different types of floors and walls using suitable cleaning equipment and cleaning agents</li> <li>7. Planning for a Kitchen Garden layout</li> </ol>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Premlata Mullick, (2016). Textbook of Home Science, 4<sup>th</sup> edition,, Kalyani Publishers</li> <li>2. Varghese &amp; Oagle (2005) Home Management, New Age International Publishers.</li> <li>3. Subasini Mohapatra (2010).Home Management and Household Economics, Kalyani Publishers.</li> <li>4. Premavathy Seetharaman, Parveen Pannu (2005), Interior Design and Decoration, 1<sup>st</sup> edition, CBS Publishers.</li> <li>5. Sushma Gupta, Neeru Garg &amp;Renu Saini (2018), Text book of Family Resource Management, Hygiene and Physiology, 11<sup>th</sup> edition, Kalyani Publishers.</li> <li>6. Pratap Rao, M. (2012), Interior Design – Principles &amp; Practice, 4<sup>th</sup> edition, Standard Publishers &amp; Distributors.</li> <li>7. Prof. Veena Gandotra, Dr. Sarjoo Patel (2006), Housing for Family Living, 1<sup>st</sup> edition, Dominant Publishers &amp; Distributors</li> </ol>
<b>Co-curricular Activities</b>	<ol style="list-style-type: none"> <li>1. Study of building materials and equipment which are not included in the syllabus</li> <li>2. Visiting Places- Building sites/ Construction</li> <li>3. Drawing layouts</li> <li>4. Model making- clay, cardboard etc</li> <li>5. Debates/Seminar/Group discussions/Quiz</li> <li>6. Charts &amp; Poster Presentations</li> <li>7. Organizing exhibitions</li> <li>8. Album making of Layouts, finishes. Household Equipment etc</li> </ol>

**III Semester  
Major-4**

**HSC 23304: EXTENSION EDUCATION AND COMMUNITY DEVELOPMENT**

<b>Unit I</b>	<p><b>Program Planning</b></p> <ul style="list-style-type: none"> <li>• Definition, Objectives and Principles of Program Planning in Extension</li> <li>• Steps in Program Planning</li> <li>• Evaluation – Principles, methods of evaluating individual and group performances.</li> <li>• Methods to find out felt and unfelt needs of the community.</li> </ul>
<b>Unit II</b>	<p><b>Lesson Planning</b></p> <ul style="list-style-type: none"> <li>• Characteristics of good lesson plan – Pre-requisites and components of lesson planning.</li> <li>• Planning lessons for specific groups – Women, adolescents and Children</li> <li>• Life style education – Definition, characteristics, Lifestyle and Health, Social context of lifestyle behaviour</li> <li>• Problems in communicating sustainable lifestyle behaviour</li> </ul>
<b>Unit III</b>	<p><b>Community Types and Their Characteristics</b></p> <ul style="list-style-type: none"> <li>• Features of Rural community</li> <li>• Features of Urban community</li> <li>• Features of Tribal community</li> <li>• Engendering- concept, strategic gender needs, practical gender needs, gender budgeting, gender auditing, gender sensitive approaches to development.</li> </ul>
<b>Unit IV</b>	<p><b>Community Development</b></p> <ul style="list-style-type: none"> <li>• Community Development – Definition, Scope, objectives – Role of Functionaries</li> <li>• 3 tier Panchayat Raj Systems in India</li> <li>• Mandal Parishath – Seven Committees (Planning, Production etc.,) Functions</li> <li>• Zilla Parishath – Communittees, Functions- District, State and central level</li> <li>• Extension organization in Panchayath raj set-up</li> <li>• Concept of Welfare State, Directive Principles</li> </ul>
<b>Unit V</b>	<p><b>Government and Non-Governmental Organizations</b></p> <ul style="list-style-type: none"> <li>• Government and Non- Governmental Organizations-Meaning and definition</li> <li>• Role of organizations (Government and Voluntary) for the development of people <ul style="list-style-type: none"> <li>a) International Agencies – WHO, CARE, UNICEF,</li> <li>b) National and Voluntary Agencies – ICDS, RASS, KVK, DWCRA, MEPMA</li> <li>c) Local Level Voluntary Agencies, people’s organizations at grass roots – PASS</li> </ul> </li> </ul>

<b>Practical</b>	<ol style="list-style-type: none"> <li>1. Plan a programme to create awareness among women and children of community surveyed according to their needs and interests - Lecture cum group discussion</li> <li>2. Field Visits – Mandal Office, ICDS, Mahila Pranganam, PASS organization</li> <li>3. Community development – Need based group project work.</li> <li>4. Field Visit to Voluntary Organizations to know functioning</li> <li>5. Interaction with village level functionaries to understand issues at grassroot level.</li> <li>6. Interaction with women self- helps group leaders/ members to know the impact of welfare programmes.</li> <li>7. Field visit to a tribal area to know their issues(optional)</li> <li>8. Collect the organograms of different institutes and agencies</li> </ol>
<b>References</b>	<ol style="list-style-type: none"> <li>1. A guide book for Anganwadi workers. Published by the department of women &amp; child development. Ministry of Human resource development. Government of India.</li> <li>2. Doshi, S.L. (2007). Rural Sociology. Delhi Rawat Publishers</li> <li>3. Dahama.O.P. (1981). Extension and Rural welfare, Ram Prasad and Sons Agra Bhopal.</li> <li>4. Indhubala (1980), Gruhavignasastravistarana , Telugu academy text book publications</li> <li>5. Adivi Reddy (1985). Extension Education, Sreelakshmi press, Bapatla,</li> <li>6. Dubey, V.K.. (2009). Extension Education &amp; Communication, New Age International Ltd</li> <li>7. Sanths Govind, G. Tamelisvi And J. Meenainbigai. (2011). Extension Education and Rural Development .Agroblos (India) Chopasani Road Jodhpur- 342002 (Raj.)</li> </ol>
<b>Additional Inputs</b>	<ul style="list-style-type: none"> <li>• Different topics for lesson plans – Swatcha Bharath, Swaasthya Bhaarat, Energy Conservation, Stress Management, Millets for Health, health education.</li> </ul>
<b>Co-curricular Activities</b>	<ol style="list-style-type: none"> <li>1. Prepare a model lesson plan to create awareness among women and children in the community surveyed.</li> <li>2. Execute the lessons in the community.</li> <li>3. Prepare a model/ method demonstration to educate the women on nutritious locally available foods and demonstrate in the community.</li> <li>4. Visit to the ICDS office to acquaint with the services rendered and submit the report.</li> <li>5. Visit to local NGO (Eg: PASS) organization to know the functions.</li> <li>6. Visit to KVK, Mahila pranganam to have awareness on different training programs given by the Government to the needy women.</li> <li>7. Plan, organize and execute awareness program in the community at the end of the SEMESTER on nutrition, environment, energy conservation and health education.</li> </ol>

**IV Semester  
Minor-1  
M-FN23401: HUMAN PHYSIOLOGY**

<b>Unit I</b>	<ul style="list-style-type: none"> <li>• Cell - Structure and functions.</li> <li>• Tissues – Types and functions</li> <li>• Digestive system – structure and Process of digestion</li> <li>• Structure and functions of Liver, Gall Bladder and Pancreas</li> </ul>
<b>Unit II</b>	<ul style="list-style-type: none"> <li>• Blood and its composition, functions RBC, WBC, Platelets and Lymph.</li> <li>• Clotting factor, blood grouping and blood transfusion and Rh factor.</li> <li>• Circulatory system - Heart structure and functions, blood vessels, types of circulation (pulmonary and systemic circulation). Cardiac cycle and cardiac output</li> <li>• Blood pressure and its factors affecting blood pressure</li> </ul>
<b>Unit III</b>	<ul style="list-style-type: none"> <li>• Respiratory system - Basic Physiology of the respiratory system,</li> <li>• process of respiration,</li> <li>• Chemistry of Respiration and mechanism of transport.</li> <li>• Endocrine glands - Structure and function of pituitary, thyroid, parathyroid and adrenal gland.</li> </ul>
<b>Unit IV</b>	<ul style="list-style-type: none"> <li>• Reproductive system - Physiology of the male and female reproductive organs.</li> <li>• Menstrual cycle.</li> <li>• Pregnancy and associated changes.</li> <li>• Sense organs - Structure and function of eye, ear, nose, tongue and skin.</li> </ul>
<b>Unit V</b>	<ul style="list-style-type: none"> <li>• Excretory system - Excretory organs –structure of kidney and functions,</li> <li>• formation of urine (micturition)</li> <li>• composition of urine.</li> <li>• Structure of the nerve cell (Neuron, neuroglia)</li> <li>• Central nervous system – Structure of Brain and Spinal cord</li> <li>• Peripheral Nervous system – Sympathetic and para-sympathetic</li> </ul>
<b>Practical</b>	<ol style="list-style-type: none"> <li>1. Identification of tissues</li> <li>2. Bleeding time, Clotting time</li> <li>3. Blood groups – identification</li> <li>4. Measurement of Hemoglobin</li> <li>5. Measuring Pulse Rate, Measuring Blood Pressure</li> <li>6. RBC, WBC – demonstration</li> <li>7. CBP Diagnostic Tests</li> </ol>
<b>Additional Inputs</b>	
<b>References</b>	1. Chaterjee, C.C., Human Physiology, Vol-I&II Medical allied agency, Calcutta 1981.

	<ol style="list-style-type: none"> <li>2. Best and Taylor, Living body. Mc.Graw hill company, Newyork.</li> <li>3. Sathya Narayana, Essentials of Biochemistry (2000).</li> <li>4. Saratha Subramanian, Text of Human Physiology(2000).</li> <li>5. Stuart Ira Fox, Human Physiology (2003)</li> </ol>
<b>Co-curricular Activities</b>	<ol style="list-style-type: none"> <li>1. Preparation of posters, charts, ppt of different organs</li> <li>2. Model making of different mechanisms of organs</li> <li>3. Visits to different lab to learn the techniques of blood samples</li> <li>4. Seminar, quiz, JAM and games for improving knowledge</li> <li>5. Week celebration related to human organs- Heart day, Aids day, Hypertension week,Diabetes week</li> </ol>

**IV Semester**  
**Minor-2**  
**M-FN23402: FAMILY AND COMMUNITY NUTRITION**

<b>Unit I</b>	<ul style="list-style-type: none"> <li>• Importance of Balanced Diet</li> <li>• Basic Principles of Meal Planning</li> <li>• Points to be consider whileplanning menu for different age groups.</li> <li>• Adults –Definitions of Reference man and women.</li> <li>• Food requirements &amp; Recommended Dietary allowances for adults (Sedentary, Moderate, Heavy workers)</li> <li>• Pregnancy - Physiological changes, complications</li> <li>• Food requirements &amp; Recommended Dietary Allowances during Pregnancy.</li> </ul>
<b>Unit II</b>	<ul style="list-style-type: none"> <li>• Lactation – Role of Hormones in milk secretion</li> <li>• Food requirements &amp; Dietary Allowances during lactation.</li> <li>• Infancy - Importance of colostrum, Advantages of Breast Feeding,</li> <li>• Dietary Allowances for infants, Bottle feeding.</li> <li>• Weaning/Supplementary Foods – Definition, Types</li> <li>• Points to be considered while introducing Weaning/Supplementary Foods.</li> <li>• Preschool children -Healthy eating habits among preschoolers,</li> <li>• Food requirements &amp; Dietary Allowances for Preschool Children.</li> </ul>
<b>Unit III</b>	<ul style="list-style-type: none"> <li>• School children - Food requirements &amp; Dietary Allowances,</li> <li>• Packed lunch for School children.</li> <li>• Adolescence - Food requirements &amp; Dietary Allowances,</li> <li>• Nutritional problems in adolescence- anemia, obesity, anorexia nervosaand bulimia nervosa.</li> <li>• Old Age - Physiological changes in ageing,</li> <li>• Nutritional problems of aged,</li> <li>• Food requirements &amp; Dietary Allowances during oldage</li> </ul>
<b>Unit IV</b>	<ul style="list-style-type: none"> <li>• Community nutrition – Definition and scope</li> <li>• Nutritional Status Assessment – Classification</li> <li>• Direct Assessment – Nutritional Anthropometry, Clinical, Biochemical and Biophysical Assessment</li> <li>• Indirect Assessment – Dietary Assessment, Ecological factors and Vital Statistics</li> </ul>
<b>Unit V</b>	<p><b>Schemes and programmes to combat Nutritional Problems in India-</b></p> <ul style="list-style-type: none"> <li>• National Prophylaxis Programmes for Vitamin A, Iron and Iodine deficiency, PEM</li> <li>• Schemes – ICDS (Supplementary Nutrition), Mid Day Meal Programme</li> <li>• Nutrition Education and its importance</li> <li>• Role of National and International organizations in alleviating malnutrition               <ul style="list-style-type: none"> <li>i) National Organizations – ICAR, ICMR, NIN, CFTRI, NNMB</li> <li>ii) International Organizations – WHO, FAO, UNICEF</li> </ul> </li> </ul>
<b>Practical</b>	<ol style="list-style-type: none"> <li>1. Standardization of portions for cooked food.</li> <li>2. Planning menu and calculation of nutrients for men and women of different occupations.</li> <li>3. Planning menu and calculation of nutrients for pregnant mother.</li> </ol>

	<ol style="list-style-type: none"> <li>4. Planning menu and calculation of nutrients for lactating mother.</li> <li>5. Planning menu and calculation of nutrients for preschool children</li> <li>6. Packed lunch planning for school going children.</li> <li>7. Planning menu and calculation of nutrients for adolescent girls and boys.</li> <li>8. Planning menu and calculation of nutrients for old age.</li> </ol>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Nutrition Trends in India -Vinodhini Reddy, Prahlad Rao, Govmth Sastry andKashinath, NIN, Hyderabad, 1993.</li> <li>2. Modern Nutrition in Health and Diseases- Shills, E.M. Olson, A.J. and Shike, Lea and Febiger</li> <li>3. Dietetics -B. Srilakshmi, New Age International Pvt. Ltd, 2003.</li> <li>4. Nutrition Science-B.Srilakshmi, New AgeInternational Pvt.Ltd., 2003.</li> <li>5. Food, nutrition and diet therapy -Krause, Eleventh edition</li> <li>6. Human Nutrition and Dietetics- Davidson S Passmore R, Brock JP, ELBS andChurchill, Livingstone.</li> <li>7. Fundamentals of foods and Nutrition - Mudambi SR and Rajagopal M Y, Wiley Eastern Ltd.</li> <li>8. ICMR- Nutritive value of Indian Foods, 1989.</li> <li>9. Nutrition throughout the life cycle, Bonnie S.Worthinton, Roberts, Sue Rod well Williams.,The McGraw- Hill company,1996.</li> <li>10. Nutrition in the life span- Virginia Beal, John Wiley &amp; sons New York.</li> </ol>
<b>Co-curricular Activities</b>	<ol style="list-style-type: none"> <li>1. Academic based: - <ul style="list-style-type: none"> <li>• Preparation of charts and posters for Nutrition education</li> <li>• Essay writing competitions</li> <li>• Group discussions on topics relevant to community nutrition</li> <li>• Exhibition on low cost nutritious foods and balanced diet</li> </ul> </li> <li>2. Lab/Research based: -</li> <li>3. Visit to Anganwadi centre</li> <li>4. Visit to school lunch programs</li> <li>5. Visit to village and urban slum area for assessing thenutritional status of rural and urban slum population</li> <li>6. Value based: - <ul style="list-style-type: none"> <li>• Nutrition and Health awareness camp</li> <li>• Poster and puppet show regarding nutrition education andimportance of community participation</li> </ul> </li> </ol> <p>Celebration of Important Days (National and International):</p> <ul style="list-style-type: none"> <li>• Breast feeding week-August 1to7th</li> <li>• International Women’s day-March 8<sup>th</sup></li> <li>• World Health day-April 7<sup>th</sup></li> <li>• International Day of Elderly – October 1<sup>s</sup></li> </ul>



**IV Semester**  
**Major -1**  
**HSC23401: INTERIOR DESIGN AND DECORATION**

<b>Unit I</b>	<p><b>Interior Design &amp; Decoration – Elements &amp; Principles</b></p> <ul style="list-style-type: none"> <li>• Interior Decoration – Meaning, objectives of Interior decoration.</li> <li>• Good taste – Meaning, development of good taste</li> <li>• Design – Definition, Classification of design (structural and decorative designs),</li> <li>• Types of Decorative Design.</li> <li>• Elements of design – Line, Form, Texture, Colour, Value</li> </ul>
<b>Unit II</b>	<p><b>Principles of art</b></p> <ul style="list-style-type: none"> <li>• Harmony – Definition, elements, uses</li> <li>• Proportion – Definition, uses</li> <li>• Balance – Definition, types, uses</li> <li>• Emphasis – Definition, uses</li> <li>• Rhythm – Definition, types, uses</li> </ul>
<b>Unit III</b>	<p><b>Interior Design- Colour</b></p> <ul style="list-style-type: none"> <li>• Colour – Importance and effect</li> <li>• Prang’s colour system – Primary, Secondary, tertiary and quaternary colours,</li> <li>• Characteristics of colour- Hue, Value and Intensity</li> <li>• Colour schemes, classification of colour schemes and their use in interior decoration;</li> <li>• Factors affecting choice of colour schemes for different rooms and different areas in the house.</li> </ul>
<b>Unit IV</b>	<p><b>Interior Decoration - Furniture &amp; Furnishings</b></p> <ul style="list-style-type: none"> <li>• Furniture Arrangement – Selection of furniture</li> <li>• Furniture arrangement in different rooms.</li> <li>• Furnishings – Classification, Factors in Selection of furniture.</li> <li>• Lighting – Natural and Artificial Fittings</li> <li>• Types and their use in Interior Decoration</li> </ul>
<b>Unit V</b>	<p><b>Interior Decoration -Accessories</b></p> <ul style="list-style-type: none"> <li>• Accessories – Functions, classification, selection and care of accessories</li> <li>• Window Treatments – Types of windows and window treatments;</li> <li>• Factors to be considered in the selection of curtains and draperies</li> <li>• Table setting – General rules for setting and laying the table</li> <li>• Types – Formal and Informal table setting</li> <li>• Types of flower arrangement – Line, mass, line &amp; mass, miniature.</li> <li>• Materials and equipment used in flower arrangement</li> </ul>

	<ul style="list-style-type: none"> <li>• Points to be considered while selecting, storing and making of flower arrangements.</li> </ul>
<b>Practical</b>	<ol style="list-style-type: none"> <li>1. Interior Design – A) Elements of Design, B) Types of Design – Natural, Decorative, Types of Decorative Design - Naturalistic, Stylized, Geometric and Abstract – Drawing/ Sketching</li> <li>2. Application of Principles of art in different rooms- a) Harmony b) Balance c) Rhythm d)Emphasis and e) Proportion – Drawing/ painting/sketching/clippings from magazines.</li> <li>3. Colour – Value chart, Prang’s colour chart and six standard colours,Application of colour harmonies.</li> <li>4. Different types of flowers arrangement.</li> <li>5. Furniture arrangement in different rooms – Sketching/ Drawing Room plans and pasting.</li> <li>6. Table setting – Formal and informal table setting.</li> <li>7. Window treatments – Types</li> </ol>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Bela Bhargava (2016). Family resource Management &amp; Interior Decoration, 1<sup>st</sup> edition reprint,University Book House Pvt Ltd. Jaipur.</li> <li>2. Parimalam, Andal, &amp; Premlatha (2015).A Textbook of Interior Decoration,1<sup>st</sup>editionreprint, Satish Serial Publishing Home.</li> <li>3. Premavathy Seetharaman &amp; ParveenPannu (2014). Interior Design and Decoration, CBSPublishers.</li> <li>4. Premlata Mullick (2016). Textbook of Home Science, 4<sup>th</sup> edition , Kalyani Publishers</li> <li>5. Stella Soundara raj (2009). A Text book of Household Arts, 4<sup>th</sup> edition, OrientBlack SwanLtd.</li> <li>6. SubasiniMohapatra (2010). Home Management and Household Economics, 1<sup>st</sup> editionKalyani Publishers.</li> <li>7. Sushma Gupta, Neeru Garg &amp;Renu Saini (2018). Text book of Family Resource Management,Hygiene and Physiology, 11<sup>th</sup> edition, Kalyani Publishers.</li> <li>8. Verghese, M.A. &amp; Oagle, M.N. (2005). Home Management, New Age International Publishers.</li> </ol>
<b>Co-curricular Activities</b>	<ol style="list-style-type: none"> <li>1. Drawing, colouring, and painting using principles of art, Interior designing &amp; Decoration</li> <li>2. Modelling- clay, chart, cardboard etc.</li> <li>3. Quiz, Seminars , debates and Group discussion</li> <li>4. Chart and Poster Presentations</li> <li>5. Organizing exhibitions</li> <li>6. Flower Arrangements</li> <li>7. Table Settings</li> <li>8. Furniture arrangement</li> <li>9. Album making</li> </ol>

**Semester-IV**  
**HSC23401: PRINCIPLE OF GARMENT CONSTRUCTION**

<b>Unit I</b>	<p><b>Equipment in Garment Construction</b></p> <ul style="list-style-type: none"> <li>• Equipment- Measuring, Drafting, marking, sewing and finishing equipment.</li> <li>• Sewing Machine – Parts of sewing machine, Defects and causes, adjustments in sewing machine and care of sewing machine.</li> <li>• Types of sewing machine- Mechanical , Electronic , Computerized or Automated, Embroidery Machine , Over lock Sewing Machine</li> </ul>
<b>Unit II</b>	<p><b>Body Measurements and Pattern Making</b></p> <ul style="list-style-type: none"> <li>• Recording of body measurements- Importance- Types of measurements – vertical, Horizontal and Girth measurements. Care to be taken in body measurements.</li> <li>• Pattern making- Methods of pattern making -Drafting, draping and flat pattern making,</li> <li>• Drafting – Tools for drafting— Points to be kept in mind while drafting.</li> </ul>
<b>Unit III</b>	<p><b>Estimation and Preparation of the Fabric and Pattern Layout</b></p> <ul style="list-style-type: none"> <li>• Estimation of fabric for different garments-saree-petticoat, salwar and kameez.</li> <li>• Importance of grain in fabric for cutting and garment construction.</li> <li>• Steps in Preparation of fabric for cutting</li> <li>• Pattern Layout – Importance, guidelines and care to be taken in pattern layout</li> <li>• Fabric Cutting – Guidelines to cut out pattern pieces,</li> </ul>
<b>Unit IV</b>	<p><b>Garment Components</b></p> <ul style="list-style-type: none"> <li>• Necklines – Types of necklines.</li> <li>• Collars-Factors in designing collar styles, shapes and kinds of collars.</li> <li>• Sleeves – Categories and styles of sleeves.</li> <li>• Yokes – Factors for selection of yokes design and types of yokes.</li> </ul>
<b>Unit V</b>	<p><b>Garment Fitting</b></p> <ul style="list-style-type: none"> <li>• Elements of fit – grain, set, line, balance and ease <ul style="list-style-type: none"> <li>• Readymade garments –Selection and examination for quality, fitting and shape</li> <li>• Tailor made and Homemade garments – examination for fitting and shape</li> <li>• Comparison of readymade, tailor and homemade garments</li> </ul> </li> </ul>
<b>Practical</b>	<ol style="list-style-type: none"> <li>1. Basic Stitches – Temporary, permanent and neat ending finishes.</li> <li>2. Seam and seam finishes.</li> <li>3. Neckline finishes – Bias, Binding and shaped finishing.</li> <li>4. Plackets – Continuous bound and two piece plackets.</li> <li>5. Sleeves – Plain, Puff and bell sleeve.</li> </ol>

	<ol style="list-style-type: none"> <li>6. Introducing fullness - Darts, tucks, gathers and pleats.</li> <li>7. Fasteners – Hook and Eye, press buttons, button and button hole.</li> <li>8. Drafting and construction of saree petti coat</li> </ol>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Mary Mathews (2001). Practical clothing construction part I &amp;II esigning drafting&amp; tailoring,Cosmic Press, chennai.</li> <li>2. ManmeetSodhia. (2005). Dress Designing, 1st edition, Kalyani Publishers.</li> <li>3. Pooja Khurana&amp; Monika Sethi (2017). Introduction to Fashion Technology, 2nd edition,2017, Fire Well Media.</li> <li>4. PremalataMullick. (2019).Garment Fabrication and Designing, 1stedition, Kalyani Publishers.</li> <li>5. PremlataMullick(2010). Garment Construction Skills,1st edition, Kalyani Publisher</li> <li>6. Sumathi, G.J.(2002) . Elements of Fashion &amp; Apparel Design, 1st edition New AgeInternational (P) Ltd.</li> <li>7. Sushma Gupta, NeeruGarg, Renu Saini. (2018). Text book of clothing, textiles and laundry,8th edition, Kalyani publishers.</li> </ol>
<b>Co-curricular Activates</b>	<ol style="list-style-type: none"> <li>1. Seminar/ Assignment / Quiz /Group Discussion</li> <li>2. Use of ICT in Class reports and Seminars.</li> <li>3. Visiting nearby tailoring units and observing different garment components.</li> <li>4. Visiting nearby Ready-made clothing shops and observing different garment component</li> </ol>

**Semester-IV**  
**HSC23403: MARRIAGE, FAMILY AND CHILD WELFARE**

<b>Unit I</b>	<ul style="list-style-type: none"> <li>• Marriage –Definition and Functions, needs and goals. Criteria for successful marriage.</li> <li>• Values and goals of marriage – Indian context. Different Marriage practices- Advantages and disadvantages.</li> <li>• Preparation for Marriage – Factors to be considered in the choice of marriage partner. Modes of mate selection, Self-choice marriage and arranged marriage – Advantages and disadvantages.</li> <li>• Premarital Counselling</li> </ul>
<b>Unit II</b>	<ul style="list-style-type: none"> <li>• Adjustments in marriage – In laws, sex adjustment to mate, adjustment to parenthood, and financial adjustments.</li> <li>• Family– Meaning, Definition, functions of family, sociological significance of family.</li> <li>• Types of Family–Definitions of Joint, Extended, Nuclear Families, Alternate family styles- Modern trends in family –Advantages and disadvantages.</li> <li>• Changing Indian family structure –Changing family functions.</li> </ul>
<b>Unit III</b>	<ul style="list-style-type: none"> <li>• Parenting -definition-Transition to Parenthood – Factors that influence Planned Parenthood.</li> <li>• Parenting Styles –Authoritarian, Authoritative and Permissive styles, Influence of childrearing practices on child’s Behaviour.</li> <li>• Role of father in child rearing</li> </ul>
<b>Unit IV</b>	<ul style="list-style-type: none"> <li>• Concept of Child welfare, principles. Programmes and services for children, crèches, day care centres.</li> <li>• Children in difficult situations – Child Abuse, Street Children, Child Labour National and International Child Welfare Programmes - Government and Non-Governmental Programmes –Adoption – Foster care – Institutional Care –SOS.</li> <li>• Family Welfare – Objectives of family Welfare ; Family Welfare Programmes and agencies -Government and Non-Government organizations-</li> </ul>
<b>Unit V</b>	<ul style="list-style-type: none"> <li>• Legislation related to Marriage: Hindu Marriage Act, Special marriage Act, Dowry Prohibition Act., Domestic Violence Act</li> <li>• Legislation related to Family</li> <li>• Need for family Counselling centres and family court</li> </ul>
<b>Practical</b>	<ol style="list-style-type: none"> <li>1. Case study of Married couple-Marital adjustment</li> <li>2. Case study of an elderly couple</li> <li>3. Visit to family counselling centres</li> <li>4. Visit to Day care centres</li> <li>5. Visit to Orphanage/ NGO s for Child welfare</li> <li>6. Role play on modern families</li> </ol>

<b>Additional Inputs</b>	<ul style="list-style-type: none"> <li>• Social media and family dynamics</li> <li>• Effect of changing family dynamics on children</li> </ul>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Paul Choudary, D. (1995). <i>Child welfare and development</i>, Atmaram and Co. New Delhi.</li> <li>2. Alfred D. Souja. (1973). <i>Children in India, critical issues in human development</i>, Indian Social Science Research Institute, Delhi.</li> <li>3. Kumar, R.(2002).<i>Child Development in India</i>, Ashish Publishing House, New Delhi, Reprint.</li> <li>4. Parbati Sahu.(2009). <i>Marriage and Family Relationships</i>, 1st edition, Kalyani publishers</li> <li>5. Rajammal P Devadasand and Jaya, N..(1984). <i>A Text Book on Child Development</i>, MacMillan India ltd.</li> </ol>
<b>Co-curricular Activities</b>	<ol style="list-style-type: none"> <li>1. Analysing the reasons for suicides among adolescents reported in mass media</li> <li>2. Identification of Mate selection criteria depicted in Mass media</li> <li>3. Visiting counselling centres and understanding coping up strategies of problems</li> <li>4. Familiarise with problems of elderly through case studies and institutional visits.</li> </ol>

**V Semester**

**HFA225301-16C: FOOD QUALITY CONTROL AND ASSURANCE**

<b>Unit I</b>	<ul style="list-style-type: none"> <li>• Quality control, Quality Assurance and Food Quality – Definitions</li> <li>• Key elements in quality control,</li> <li>• Food Quality Attributes</li> <li>• Consumer – Definition, Rights and responsibilities of Consumers</li> <li>• Role of Food Safety officer</li> <li>• Quality Control in Food Industry</li> </ul>
<b>Unit II</b>	<ul style="list-style-type: none"> <li>• <b>Food Safety Programmes –</b> <ul style="list-style-type: none"> <li>a) Good Agricultural Practices (GAP)</li> <li>b) Good Manufacturing Practices (GMP)</li> <li>c) Total Quality Management (TQM)</li> </ul> </li> <li>• <b>National Standards:</b> <ul style="list-style-type: none"> <li>a) Prevention of Food Adulteration Act (PFA)</li> <li>b) Fruit Product Order (FPO)</li> <li>c) Milk and Milk Product Order (MMPO)</li> <li>d) Bureau of Indian Standards (BIS)</li> <li>e) Agricultural Marketing (AGMARK)</li> </ul> </li> <li>• <b>International Standards:</b> <ul style="list-style-type: none"> <li>a) Food and Agricultural Organization (FAO)</li> <li>b) World Health Organization (WHO)</li> <li>c) World Trade Organization (WTO)</li> <li>d) Codex Alimentarius Commission (CAC)</li> <li>e) International Organization for Standardization (ISO)</li> <li>f) World food safety issues</li> </ul> </li> </ul>
<b>Unit III</b>	<ul style="list-style-type: none"> <li>• Sensory evaluation: definition, factors affecting on sensory characteristics</li> <li>• Objectives of Sensory evaluation</li> <li>• Sensory evaluation - Importance for consumers, Advantages and disadvantages</li> <li>• Types of Sensory Evaluation – Subjective and objective evaluation</li> </ul>
<b>Unit IV</b>	<ul style="list-style-type: none"> <li>• Food Packaging – Definition, Material used</li> <li>• Quality assessment – selection, storage and Food Standards for</li> <li>• Cereals,</li> <li>• Pulses,</li> <li>• Fruits,</li> <li>• Vegetables products</li> </ul>
<b>Unit V</b>	<ul style="list-style-type: none"> <li>• General Food Labelling Requirements</li> <li>• Quality assessment – selection, storage and Food Standards for</li> </ul>

	<ul style="list-style-type: none"> <li>• Meat</li> <li>• Poultry</li> <li>• Egg</li> <li>• Processed food products</li> </ul>
<b>Practical</b>	<ol style="list-style-type: none"> <li>1. Sensory and instrumental methods for measuring food sensory attributes.</li> <li>2. Selection and training of sensory panel</li> <li>3. Assessment of sensory evaluation of foods by Hedonic scale</li> <li>4. Quality assessment of cereals</li> <li>5. Quality assessment of fruits and vegetables</li> <li>6. Quality assessment of meat, poultry and other processed products.</li> <li>7. Quality assessment of dairy products.</li> <li>8. Visit to food testing lab and writing report on quality assessment of different foods</li> <li>9. Visit to food processing industry to study the quality measures undertaken by them.</li> </ol>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Manay,S. and shadaksharamasamy, Food Facts and principles, Newage International.(p) publishers, New Delhi.</li> <li>2. Srilakshmi, B., 2002, Food Science, 2nd edition, New Age International private limited.,New Delhi.</li> <li>3. Sivasankar,B.(2013)Foodprocessingandpreservation 2<sup>nd</sup>edition,Prentice Hall,pvt,Ltd.</li> <li>4. Swaminadhan,M., Food Science, Chemistry and Experimental foods, Bappco publishers,Banglore,2004</li> <li>5. Ranganna S, Hand book of Analysis and Quality-Fruits and Vegetable products, Tata McGraw Hill, New Delhi,1986.</li> </ol>
<b>Co-curricular Activities</b>	<ol style="list-style-type: none"> <li>1. Visit to food processing industries to understand the principles and methods of quality control and assurance in foods.</li> <li>2. Visit to food testing lab or any agency of food standards.</li> <li>3. Market survey of preserved fruits and vegetable products</li> <li>4. Nutrition labelling requirements and developments</li> <li>5. Assessment of personal hygiene</li> <li>6. Assessment of surface sanitation by swab/rinse method</li> <li>7. Celebration of Important days (National and International) World Food safety day - 7<sup>th</sup> JUNE World Food day- 16<sup>th</sup> OCT</li> </ol>



## V Semester

### HFH 225301-17C: FOOD SAFETY SANITATION AND HYGIENE

<b>Unit I</b>	<ul style="list-style-type: none"><li>• Food safety- Definition, importance</li><li>• factors affecting on food safety</li><li>• Scope of food safety</li><li>• Food safety hazards and health risk (Biological, Physical, chemical)</li><li>• Food safety and standards bill 2005</li></ul>
<b>Unit II</b>	<ul style="list-style-type: none"><li>• Basic principles of Food hygiene and Sanitation</li><li>• Personal and environmental Hygiene</li><li>• Hygiene aspects of Food handlers (While preparation, Storage and serving)</li><li>• Classification of foods for storage</li><li>• Dish washing and garbage disposal</li><li>• Safety of leftover foods.</li><li>• Methods of sanitation and hygiene</li></ul>
<b>Unit III</b>	<ul style="list-style-type: none"><li>• Food Adulteration: Definition, Types</li><li>• Tests for detecting adulterants</li><li>• Consequences or ill effects of adulterants</li><li>• Prevention of Food Adulteration Act</li></ul>
<b>Unit IV</b>	<ul style="list-style-type: none"><li>• Regulatory compliance requirement for establishment of food outlets</li><li>• Frame work for enabling environment for serving safe and nutritious food at food establishment or outlets.</li><li>• Sterilization and disinfection using heat and chemicals</li><li>• Solid and liquid waste management and disposal</li></ul>
<b>Unit V</b>	<ul style="list-style-type: none"><li>• Objectives of developing Food Safety and Standards</li><li>• Enforcement of structure and procedure for Food Safety and Standards</li><li>• Role of food Analyst</li><li>• Statutory and regulatory requirements to establish food outlets</li><li>• Certification - HACCP, ISO-22000, FSSC-22000</li></ul>
<b>Practical</b>	<ol style="list-style-type: none"><li>1. Detection of common adulterants in foods</li><li>2. Assessment of personal hygiene</li><li>3. Assessment of surface sanitation by swab/ rinse method</li><li>4. Scheme for detection of food borne pathogens</li><li>5. Market survey of preserved fruits and vegetable products.</li><li>6. Demonstration of safe food handling procedure</li><li>7. Visit to Food Service Centre -Hotel/Fast food centre to study the food safety measures and report writing</li><li>8. Visit to Food service Institution- Hostel /Hospital to study the food safety, hygiene &amp; sanitation measures and report writing.</li></ol>

<b>References</b>	<ol style="list-style-type: none"> <li>1. Manay,S. and shadaksharamasamy, Food; Facts and principles, New age International.(p) publishers,New delhi.</li> <li>2. Mahtab,S,Bamji.S,Kamala Krishnaswamy, Brahmam G.N.V,Text book of Human Nutrition,Third edition, Oxford and IBH publishing co. private limited,New Delhi.</li> <li>3. Srilakshmi,B.,2002,Food Science,2<sup>nd</sup> edition, New Age International private limited.,New Delhi.</li> <li>4. Swaminadhan ,M., Advanced Text book on Food and Nutrition,Vol.1,Second Edition, Bangalore printing and publishing Co.Ltd,Banglore,2012</li> <li>5. Dietary Guidelines for Indians, ICMR, National Institute of Nutrition</li> <li>6. Norman Marriott (1999), Principles of Food Sanitation, 4th ed., Sanitation in Food Processing, JohnA. Troller, 1993, Academic press.</li> </ol>
<b>Co-curricular Activities</b>	<ol style="list-style-type: none"> <li>1. Market survey of preserved fruits and vegetable products</li> <li>2. Visit to Food Service Centre-Hotel/Fast food centre to study the food safety measures and report writing.</li> <li>3. Visit to Food service Institution - Hostel /Hospital to study the food safety, hygiene &amp; sanitation measures and report writing.</li> <li>4. Group discussion on principles, actions and limitations of food safety, sanitation and hygienic procedures.</li> <li>5. Celebration of Important days (National and International) World sanitation day - 19<sup>th</sup> November</li> </ol> <p><b>World Hand Hygiene Day - 5<sup>th</sup> May</b></p>

**V Semester**  
**HGC 225303-18C: GUIDANCE AND COUNSELLING**

<b>Unit I</b>	<ul style="list-style-type: none"> <li>• Meaning and definition of guidance</li> <li>• Need, functions and scope of Guidance</li> <li>• Principles of Guidance</li> <li>• Types of Guidance- Educational, Vocational, and Personal Guidance</li> <li>• Limitations of guidance</li> </ul>
<b>Unit II</b>	<ul style="list-style-type: none"> <li>• Goals of counselling</li> <li>• Types of Counselling—Crisis, facilitative, preventive, developmental</li> <li>• Different types of counselling Techniques - Directive, Non-directive, Eclectic</li> <li>• Stages of Counselling- Beginning, Middle and Ending phase</li> </ul>
<b>Unit III</b>	<ul style="list-style-type: none"> <li>• Process of Counselling- physical setting – Establishing the relationship – conducting counselling interview – Problems involved – Termination of counselling.</li> <li>• Skills in Counselling- (listening, questioning, responding)-Diagnostic, Exploration, Relationship, Understanding, Action, Attending/ Listening Skills, Group process and Evaluation skills</li> </ul>
<b>Unit IV</b>	<ul style="list-style-type: none"> <li>• Role of a Counsellor - As a communication expert, inhibitor, trainer, facilitator, an idol, a teacher, and a supporter.</li> <li>• Characteristics of an effective counsellor</li> <li>• Confidentiality and ethics in counselling</li> </ul>
<b>Unit V</b>	<ul style="list-style-type: none"> <li>• Counselling in educational settings</li> <li>• Counselling children with behavioural and emotional problems</li> <li>• Counselling Parent of children with special needs</li> <li>• Counselling Adolescents with problems- delinquents and addicts</li> </ul>
<b>Practical</b>	<ol style="list-style-type: none"> <li>1. Group discussion and listing of problems faced by them and categories the problems in following categories - Personal/ Social/ Academic, Health etc.</li> <li>2. Collection of case study of children with special need and prepare a report.</li> <li>3. Collection of case study of children with problem from electronic and print media.</li> <li>4. Simulation exercises/Mock session/ Role play as counsellor and counsellee by taking above case studies– children/adolescents</li> <li>5. Visit to a guidance and counselling center</li> </ol>
<b>Additional inputs</b>	<ul style="list-style-type: none"> <li>• Substance Abuse</li> <li>• Academic stress</li> <li>• Suicide ideation</li> </ul>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Aggarwal J. C., (2004) Educational and Vocational Guidance and Counseling, 7th Edition, Doaba House; Delhi.</li> <li>2. Bhatnagar, R.P. &amp; Rani Seema (2003) Guidance and Counseling in Education and Psychology, Meerut, Surya Publication.</li> <li>3. Chauhan, S.S. (2009) Principles and Techniques of Guidance, VikasPublicashing House Pvt. Ltd. New Delhi</li> <li>4. Crow, L.D &amp; Crow.A. (1966) Introduction to Guidance, New Delhi: Eurasia Publishing House.</li> </ol>

	<ol style="list-style-type: none"> <li>5. Dash (2003) - Guidance services Schools, Forminant publishers and Distibutions, New Delhi.</li> <li>6. Gibson Robert L. Michel Marianne. J (2005)-Introduction to counselling and guidance, practice Hall India Pvt.Ltd.</li> <li>7. Indu Deve (1984): The Besic Essentials of counselling, sterling Pvt.Ltd, New Delhi.</li> <li>8. Jaffee,A K. and Elian K. (1993) - Teacher as a counselor, sage publication, London.</li> <li>9. Jones, A.J. (1934) Principles of Guidance, New York: MC Graw Hill Book Co</li> <li>10. Kochar, S.K. (1987) Educational and Vocational Guidance in SecondarySchools, New Delhi: Sterling Publishers Ltd.</li> <li>11. Nande S.K. and Sherma,S (1992)- Fundamentals of guidance, Chandigerh.</li> <li>12. Narayana Rao, S. (1991) – Counselling and Guidance – Second Edition, Tata Mc Graw Hill publishing company, Ltd. New Delhi.</li> <li>13. Sharma, R.N. (2006) Guidance and Counselling, Delhi, Surjeet Publication.</li> <li>14. Pedersen (1996) - counselling across cultures, sage publications, London.</li> <li>15. Shrivastava (2003) – Principles of guidance and counselling, Kanishka publishers, New Delhi.</li> </ol>
<p><b>Co-curricular Activities</b></p>	<ol style="list-style-type: none"> <li>1. <b>For Teacher:</b> Training of students by teacher in laboratory and field for a total of 15 hours on visit to Library, educational institutions and guidance centre for collection of psychological tools, case studies and other information. Observing and guiding students in mock sessions of counselling.</li> <li>2. <b>For Student:</b> Individual visit to nearby library and educational institutions and guidance centre for collection of psychological tools, case studies and other information. Submission of a hand-written list outs, case studies and observation report.</li> <li>3. Max marks for Field Work Report: 05.</li> <li>4. Suggested Format for Field work: <i>Title page, student details, content page, introduction, work done, findings, conclusions and acknowledgements.</i></li> <li>5. Unit tests (IE).</li> <li>6. Training of students by experts.</li> <li>7. Assignments</li> <li>8. Seminars, Group discussions, Quiz, Debates etc. (on related topics).</li> <li>9. Video show and films on related issues</li> <li>10. Preparation of resource files by collecting news article of children and adolescents with problems</li> <li>11. Invited lectures and presentations on related topics by experts.</li> </ol>

**V Semester**  
**HEP 225304-19C: EDUCATION AND COUNSELLING FOR PARENTS AND COMMUNITY**

<b>Unit I</b>	<ul style="list-style-type: none"> <li>• Parent education –Need, aspects,</li> <li>• Types of parent education.</li> <li>• Parents as - stake holders, planners, advisers, volunteers, and resource persons.</li> </ul>
<b>Unit II</b>	<ul style="list-style-type: none"> <li>• Community education – <ul style="list-style-type: none"> <li>a) Fundamental principles of community.</li> <li>b) Community education with reference to education Health, rights of children, child rearing.</li> <li>c) Socialization in various socio-cultural settings.</li> </ul> </li> </ul>
<b>Unit III</b>	<ul style="list-style-type: none"> <li>• Techniques of Parent and community Education <ul style="list-style-type: none"> <li>a) Informal meeting,</li> <li>b) group and individual meetings</li> <li>c) Use of audiovisual aids.</li> </ul> </li> <li>• Organizing parent and community programmes –school, community centers, Recreation centers, Youth clubs and other NGO’s.</li> </ul>
<b>Unit IV</b>	<ul style="list-style-type: none"> <li>• Role of professional in parent and community education</li> <li>• Contribution of professionals in parent and community education,</li> <li>• Training programmes for young parents.</li> <li>• Evaluation of parent and community education programmes.</li> </ul>
<b>Unit V</b>	<ul style="list-style-type: none"> <li>• Methods of Parent Education and Counseling</li> <li>• Strategies and Management skills for parents to deal with normal children.</li> <li>• Children of developmental delays and disabilities.</li> <li>• Counselling parents of Children with Special Needs.</li> </ul>
<b>Practical</b>	<ol style="list-style-type: none"> <li>1. Study various methods of parent and community education.</li> <li>2. Visit to local community for identifying parents of normal and exceptional children,</li> <li>3. Conducting case studies on parents of normal children.</li> <li>4. Conducting case studies on parents of exceptional children.</li> <li>5. Identification of areas and issues for parent education.</li> <li>6. Developing parent education programmes.</li> <li>7. Planning, conducting and evaluating parent education programmes.</li> <li>8. Conducting awareness among the community regarding counselling centres.</li> </ol>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Campbell, D. (2003). Group parent education: Promoting parents learning and</li> </ol>

	<p>support. Sage publication</p> <p>2. Epstein, L.J. (2010). School, family and community Partnership: Preparing educators and Improving School, West view press.</p> <p>3. Tett, L. (2006). Community education: Lifelong learning and social inclusion (Policy &amp; practice in education). Dunedin Academic Press.</p>
<p><b>Co-curricular Activities</b></p>	<p><b>1. For Teacher:</b> Training of students by teacher in laboratory and field for a total of 15 hours on visit to Library, educational institutions and counseling and community centres for collection of psychological tools, case studies and other information. Observing and guiding students in mock sessions of education &amp; counselling.</p> <p><b>2. For Student:</b> Individual visit to nearby library and educational institutions, Community and counselling centre for collection of psychological tools, case studies and other information. Submission of a hand-written list outs, case studies and observation report.</p> <p><b>3.</b> Max marks for Field Work Report: 05.</p> <p><b>4.</b> Suggested Format for Field work: <i>Title page, student details, content page, introduction, work done, findings, conclusions and acknowledgements.</i></p> <p><b>5.</b> Unit tests (IE).</p> <p><b>6.</b> Training of students by experts.</p> <ol style="list-style-type: none"> <li>1. Assignments</li> <li>2. Seminars, Group discussions, Quiz, Debates etc. (on related topics).</li> <li>3. Video show and films on related issues</li> <li>4. Preparation of resource files by collecting news article of Parents and children with Problems</li> <li>7. Invited lectures and presentations on related topics by experts.</li> </ol>

## V Semester

### HID225305-20A: INTERIOR DESIGN AND DECORATION

<b>Unit 1</b>	<ul style="list-style-type: none"> <li>• Introduction to interior design -goals, Design – definition, classification, requirements,</li> </ul> <p><b>Elements of design</b></p> <ul style="list-style-type: none"> <li>• Line</li> <li>• Form</li> <li>• Texture</li> <li>• Value, Size</li> <li>• Direction</li> <li>• Color</li> </ul>
<b>Unit II</b>	<p><b>Principles of Art:</b></p> <ul style="list-style-type: none"> <li>• Harmony</li> <li>• Balance</li> <li>• Proportion</li> <li>• Rhythm</li> <li>• Emphasis – methods of obtaining in interiors, importance.</li> </ul>
<b>Unit III</b>	<ul style="list-style-type: none"> <li>• Colour in interiors – Importance, Classification, Prang’s colour system – hue, value and intensity, colour harmonies – classification and application</li> <li>• <b>Factors affecting colour choice for different rooms</b></li> </ul>
<b>Unit IV</b>	<ul style="list-style-type: none"> <li>• Furniture – styles, selection and arrangements of furniture for interiors,</li> <li>• Furnishings – classification, selection of furnishings, window treatment – types of curtains/draperies.</li> <li>• <b>Lighting: Natural lighting and artificial fittings</b></li> </ul>
<b>Unit V</b>	<ul style="list-style-type: none"> <li>• Accessories – Importance, classification</li> <li>• Flower Arrangement – Importance, styles, classification, care of cut flowers</li> <li>• Plants as accessories – Bonsai, Indoor plants – selection and care</li> </ul>
<b>Practical</b>	<ol style="list-style-type: none"> <li>1. Interior Design – A) Elements of Design, B) Types of Design – Natural, Decorative, Types of Decorative Design - Naturalistic, Stylized, Geometric and Abstract – Drawing/ Sketching</li> <li>2. Application of Principles of art in different rooms- a) Harmony b) Balance c) Rhythm d)Emphasis and e) Proportion – Drawing/ painting/sketching/clippings from magazines.</li> <li>3. Colour – Value chart, Prang’s colour chart and six standard colours,Application of colour harmonies.</li> </ol>

	<ol style="list-style-type: none"> <li>4. Different types of flowers arrangement.</li> <li>5. Furniture arrangement in different rooms – Sketching/ Drawing Room plans and pasting.</li> <li>6. Table setting – Formal and informal table setting.</li> <li>7. Window treatments – Types</li> </ol>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Bela Bhargava (2016). Family resource Management &amp; Interior Decoration, 1<sup>st</sup> edition reprint, University Book House Pvt Ltd. Jaipur.</li> <li>2. Parimalam, Andal, &amp; Premlatha (2015). A Textbook of Interior Decoration, 1<sup>st</sup> edition reprint, Satish Serial Publishing Home.</li> <li>3. Premavathy Seetharaman &amp; Parveen Pannu (2014). Interior Design and Decoration, CBS Publishers.</li> <li>4. Premlata Mullick (2016). Textbook of Home Science, 4<sup>th</sup> edition, Kalyani Publishers</li> <li>5. Stella Soundara raj (2009). A Text book of Household Arts, 4<sup>th</sup> edition, Orient Black Swan Ltd.</li> <li>6. Subasini Mohapatra (2010). Home Management and Household Economics, 1<sup>st</sup> edition Kalyani Publishers.</li> <li>7. Sushma Gupta, Neeru Garg &amp; Renu Saini (2018). Text book of Family Resource Management, Hygiene and Physiology, 11<sup>th</sup> edition, Kalyani Publishers.</li> <li>8. Verghese, M.A. &amp; Oagle, M.N. (2005). Home Management, New Age International Publishers.</li> </ol>
<b>Co-curricular Activities</b>	<ol style="list-style-type: none"> <li>1. Drawing, colouring, and painting using principles of art, Interior designing &amp; Decoration</li> <li>2. Modelling- clay, chart, cardboard etc.</li> <li>3. Quiz, Seminars, debates and Group discussion</li> <li>4. Chart and Poster Presentations</li> <li>5. Organizing exhibitions</li> <li>6. Flower Arrangements</li> <li>7. Table Settings</li> <li>8. Furniture arrangement</li> <li>9. Album making</li> </ol>



## V Semester

### HTD225306-21A: TEXTILE DESIGN

<b>Unit I</b>	<ul style="list-style-type: none"><li>• Introduction to textile Design</li><li>• Elements of design</li><li>• Principles of design</li><li>• Classification of design for fabric – structural and surface designs</li></ul>
<b>Unit II</b>	<ul style="list-style-type: none"><li>• Weaves Classification<ul style="list-style-type: none"><li>a) Basic weaves – plain weave, twill weave and satin weave – features, identification</li><li>b) Decorative weaves – Jacquard weave, Dobby weave, Swivel weave, Lappet weave, Pile weave, Leno weave – features, identification</li></ul></li></ul>
<b>Unit III</b>	<ul style="list-style-type: none"><li>• Dyeing – preparation of fabric,</li><li>• Classification of dyes (Natural and Synthetic)</li><li>• Mode of action and application for various fibres and fabrics</li><li>• Printing – preparation of fabric</li><li>• Preparation of printing paste,</li><li>• Fabric printing methods – <i>block printing, screen printing, roller, stencil, spray, digital, tie &amp; dye and batik printing</i></li></ul>
<b>Unit IV</b>	<ul style="list-style-type: none"><li>• Importance Traditional Textiles - origin, fabrics of different states of India - Dacca Muslins, Benaras Brocades, Chanderi,</li><li>• Embroideries of India – motifs used, typical colors and fabrics used for – Kanthas of Bengal, Kasuti of Karnataka, Chikankari of Lucknow, Kashida of Kashmir, Phulkari of Punjab, Pipli of Orissa.</li></ul>
<b>Unit V</b>	<ul style="list-style-type: none"><li>• <b>Dyed, Printed and Painted Textiles – History, Significance, Typical designs &amp; fabrics used for</b><ul style="list-style-type: none"><li>a) Bandini/Bandhej of Gujarat &amp; Rajasthan, Patolas, Ikkats, Telia Rumal, Pochampalli</li><li>b) Kalamkari of Andhra Pradesh</li><li>c) Block Printing, Stencil printing, Batik.</li></ul></li></ul>
<b>Practical</b>	<ol style="list-style-type: none"><li>1. Elements of Design and types of design – naturalistic, stylized, geometric and abstract</li><li>2. Structural and decorative design – requirements and critical evaluation of art objects</li><li>3. Art principles – harmony, balance, proportion, rhythm and emphasis sketching to illustrate application in interiors.</li><li>4. Colour and colour harmonies – application in interiors</li></ol>

	<p>5. Furniture arrangement-Sketching/ Drawing Room plans and pasting.</p> <p>6. Table setting-Formal and informal</p>
<b>Additional Inputs</b>	<ul style="list-style-type: none"> <li>• Table setting: Indian and western</li> <li>• Orientation/vastu in designing interiors</li> </ul>
<b>References</b>	<p>1. Faulkner &amp; Faulkner “Inside Today’s Home”</p> <p>2. Goldstein &amp; Goldstein “Art in Everyday Life”</p> <p>3. Premavathy Seetharaman &amp; Parveen Pannu “Interior Design &amp; Decoration”</p>
<b>Co-curricular Activities:</b>	<p>6. a). Mandatory: (Training of students by teacher on field related skills: 15 hrs)</p> <p>For Teacher: Training of students by teacher in laboratory and field for a total of 15 hours on visit to Interior Designing agencies, boutiques etc. to demonstrate the application of elements of design, colour harmonies and Art principles in interior decoration</p> <p><b>For Student:</b></p> <ol style="list-style-type: none"> <li>1. Observing use of color in interiors in different platforms</li> <li>2. Making an album of AutoCAD drawings to showcase skill in designing using the software.</li> <li>3. Max marks for Field Work Report: 05.</li> <li>4. Suggested Format for Field work: <i>Title page, student details, content page, introduction, work done, findings, conclusions and acknowledgements.</i></li> <li>5. Unit tests (IE)</li> <li>6. Training of students by Interior design experts in Auto CAD.</li> <li>7. Assignments, Seminars, Group discussions, Quiz, Debates etc. (on related topics).</li> <li>8. Drawing sketches, Paintings using various colour harmonies.</li> <li>9. Video show and films on Interior design works and decoration of Interiors.</li> <li>10. Preparation of resource files by collecting new and innovative designs and models of Interior design.</li> <li>11. Invited lectures and presentations on related topics by Designer experts.</li> </ol>