ST. JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS) VISAKHAPATNAM

I SEMESTER **PATHWAY - PAPER – 1** Time:5hrs/week

HSC 1601(4) **INTRODUCTION TO HOME SCIENCE**

w.e.f AK 2023-2024 (Admitted batch) Marks:100

Learning Objectives: The course is designed to enable the students to:

1. Understand the concept, scope, and philosophy of Home Science.
2. Create awareness regarding various applied and core specializations of Home Science.
3. Appreciate the role of Home Science and its multidisciplinary approach in career building.
4. Cultivate human values through learning Home Science.

Learning Outcomes: On completion of the course, the student shall

1. Know the various branches of Home Science
2. Have a clear understanding of the relevance of Home Science
3. Be able to exercise choice towards healthy practices in daily living

UNIT: 1 BASICS OF HOME SCIENCE

- Meaning, Definition and Branches of Home Science, Scope of Home Science
- Development of Home Science as a discipline in India, Home Science Association of India-Role and activities in promoting Home Science
- Linkages of Home Science with other related subjects

UNIT 2: Branches of Home Science

- **Human Development**: Meaning, Definition and Scope of Human Development. • Stages of Human Development, Developmental tasks/milestones.
- **Food and Nutrition**: 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.

UNIT 3: Branches of Home Science contd.

- **Textiles and Clothing:** Origin, Importance and Functions of Clothing. Introduction to textile terms- fiber, yarn, textile, weaving, knitting, Classification of textile fibers.
- **Extension Education and Communication:** Concept, Nature, Scope and principles of Extension and communication. Methods and media of community outreach.
- **Resource management & Interior Design:** Concept and scope, Need for management, Classification of resources, Factors affecting use of resources, Importance of housing and functions of housing and interior design.

UNIT 4: Research in Home Science:

- **Research in Home Science**- Recent developments in Foods & Nutrition, Human Development & Family Studies, Textiles & Clothing, Resource Management & Interior Design and Extension Education & Community Development.

UNIT 5: Careers & Entrepreneurship in Home Science:

- **Scope of careers and entrepreneurship in**

i. **Foods & Nutrition** – In hospitals, health centres, food industry
ii. **Human Development**- welfare programs of Government/NGOs, preschools
iii. **Textiles & Clothing**- in textile industry, boutiques, research labs
iv. **Resource Management**- construction sector (CAD assistants, interior designer), creative crafts entrepreneur
v. **Extension Education**- extension projects of Government/ NGOs, entrepreneur making teaching aids.

References:

1. Chouhan, A. (2015) "Comprehensive Home Science X", 1. Yadav, K and Singh, O. S. (2014) "Home Science", ISBN 9788126919062, Atlantic Publishers and Distributors Private limited.
2. Premlata Mullick, P. "Textbook of Home Science", Kalyani Publishers

Suggested Activities:

1. Virtual or physical visits to Home Science departments in leading Universities/ Colleges offering Home Science at UG/PG/ Ph. D. levels
2. Virtual interactions with some faculty/students of Home Science from other Colleges in A.P./ outside A.P.

ST. JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS) VISAKHAPATNAM

I SEMESTER **PATHWAY - PAPER – II** Time:5hrs/week

HSC 1602(4) **HEALTH, HYGIENE & WELLNESS**

w.e.f AK 2023-2024 (Admitted batch) Marks:100

Learning objectives:

- To understand and apply the emerging concepts and issues to health, hygiene and sanitation
- To critically understand the present scenario of health hygiene in Indian
- To apply and design hygiene promotion and education programmes for development.

Learning Outcome: On completion of the course a student shall

- Possess an understanding of the concept of good health and means to achieve it**.**
- Display the ability to identify the morphology, growth and reproductive features of various microorganisms
- Acquire the skills in various sterilization techniques
- Be equipped with skills of balancing stress and anxiety

Theory

UNIT – I: Health & wellness – Definition & meaning

- Definition and concept-BMI,WHR,Water requirement, Body fat percentage, Lean Body mass calculation
- Factors affecting Health and Wellness
- Indicators of health- concept of Mortality, Morbidity, Disability

UNIT – II: Classification & Study of Microorganisms-

- Bacteria- morphology, growth phase, Difference between gram positive and gram negative bacteria, Classification based on respiration, nutrition, temperature and Reproduction
- Virus- morphology, Classification, Cultivation and Replication steps
- Yeasts- morphology, Nutrition and Reproduction
- Mold- morphology, Nutrition and Reproduction
- Beneficial Applications of Microorganisms in the Food Industry, Agriculture and other areas.

UNIT – III: Mode of infection

- Infection- sources, mode of transmission.
- Diseases caused by microorganisms-Symptoms, aetiology, mode of transmission, prevention of
- a.**Bacterial diseases**- Typhoid, Tuberculosis, Jaundice, Dysentery;
- b.**Viral Diseases**: Influenza, Measles, Poliomyelitis, AIDS
- c.**Parasite transmitted diseases**- Malaria, Dengue, Filariasis.

UNIT – IV: Prevention & Control

- Control of Micro-organisms – Sanitation, Sterilization & Disinfection- Physical and chemical method.
- Immunity- definition & types, Immunization schedule

- Hygiene - Meaning and importance of personal hygiene
- Standard precautions to prevent infections

Unit V: Management of Health & Wellness

- Modern lifestyle and hypo-kinetic diseases; prevention and management through Physical exercise
- Stress, anxiety, and depression- Definition and concept
- Role of Yoga, asanas and meditation in maintaining health and wellness.
- Role of sleep-in maintenance of physical and mental health.

References:

- Frazier, W. Candwestnoff, D.C (1997) Food Microbiology, Tata McGraw Hill
- A.S. Rao 2001 Introduction to microbiology, Prentice Hall of India
- Anna k. Joshua, Microbiology, popular book depot, Madras
- R. Ananthanarayanan, C.K.J. Paniker, 2001, Orient Longman Private Limited.
- General Microbiology , 1982, power &Daginawala, Himalaya Publishing House
- Stanier R. Y., Adelberg, E.A. and Ingraham, J.L. (1989) General Microbiology.
- Atlas R. M. (1988) Microbiology, fundamentals and application. Micmillon N. Y.

ST. JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS) VISAKHAPATNAM
II SEMESTER **HOMESCIENCE** TIME:4Hrs/Week
HS 2101 (3) **ESSENTIALS OF HOME SCIENCE EXTENSION** Marks:100
w.e.f. 2023-24 admitted batch (23AK)

Learning objectives: The students will be able to:

- Learn the meaning, scope and concept of Home Science Extension.
- Explain the importance of Extension Education in Home Science
- Understand the role Extension worker in community
- Understand the Principles, steps in Teaching and Learning process
- Different Teaching Methods and Teaching Aids in Communication Process.
- Know the importance of Teaching Methods and Teaching Aids in Communication Process.
- Know the barriers of communication and learn how to overcome them.

Learning outcomes:

- Learn Practical skills in planning, preparation of Audio-Visual Aids
- Usage of bulletin board in extension education
- Use of different types of Teaching methods and Audio-Visual Aids for different target groups.
- Qualities of an Extension Worker

SYLLABUS:

UNIT – I: EXTENSION EDUCATION -

- Meaning, Concept, Scope and objectives
- Formal and Non formal Education
- Philosophy and principles of Extension Education
- Role and Qualities of an Extension worker

UNIT-II: TEACHING AND LEARNING PROCESS

- Teaching – Meaning, definition, steps in Teaching
- Learning – Meaning, definition, Elements of Learning
- Learning Situation – Definition, Elements of Learning Situation
- Principles of learning and their Implications for Teaching
- Motivation – Principles of Motivation in Extension
- Classification of motives

UNIT – III: TEACHING METHODS/TECHNIQUES

- Extension Teaching methods – Definition, Functions and Classification of Teaching methods – According to use and form
- Individual methods – Farm and home visits, Telephone calls, Personal letter, Result demonstrations.
- Group methods – Method demonstration, Group meetings/Discussions, Conferences, Field trips etc.
- Mass Methods – Print and electronic media , Internet, Social media and Exhibitions
- Factors to be considered in selection and combination of teaching methods.

UNIT – IV: AUDIO - VISUAL AIDS:

- Audio Visual Aids – Meaning and Classification
- Factors Influencing selection of Audio-Visual Aids
- Principles of Preparing in Planning, Presentation and evaluating in Audio-Visual Aids
- The cone of Experience

UNIT-V COMMUNICATION

- Communication – Meaning, Definition and scope of Communication
- Key Elements in the process of Communication – 1. Communicator 2. Messages, 3.Channel 4. Treatment of Messages 5. Audience 6. Audience Response.
- Types of Communication – Verbal, Non Verbal, Small group and Mass Communication.
- Barriers to communication.

REFERENCES:

1. Adivi Reddy (1985). Extension Education, Sreelakshmi press, Baptla,
2. Dahama.O.P .(1981). Extension and Rural welfare, Ram Prasad and Sons Agra Bhopal.
3. Doshi, S.L. (2007). Rural Sociology. Delhi Rawat Publishers.
4. Dubey,V.K.. (2009). Extension Education & Communication, 1st edition New Age International Ltd
5. Indhubala (1980), Gruhavignasastravistarana , Telugu academy text book publications
6. Sanths Govind, G. Tamliselvi And J. Meenainbigai .(2011). Extension Education and Rural Development .Agroblos (India) Chopasani Road Jodhpur- 342002 (Raj.)
7. Shekar Serene & Santosh Ahlawat . (2013).Text book of Home Science Extension Education, 1st edition, Daya Publishing house.
8. Supe, S.V.(1983). An Introduction to Extension Education. Oxford& IBH publishing Co, New Delhi.

CO- CURRICULAR ACTIVITIES

1. Adoption of a village based on the socio-economic background.
2. Visit to an adopted village and conduct

- Baseline survey regarding demographic, population, Educational and felt needs of the villagers.
- Collection of data.
- Pooling and Analyzing the data.

3. Preparation, use and evaluation of visual aids viz.,
    - Poster
    - Different types of charts.
    - Flash cards
    - Display of Bulletin Board.
4. Presentation of seminars in the class rooms.
5. Blackboard teaching for 15 minutes in the class room.
6. Promoting effective verbal and non- verbal communications among students.

ST. JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS) VISAKHAPATNAM

II SEMESTER **HOME SCIENCE** TIME:2Hrs/Week

HS 2151 (2) **ESSENTIALS OF HOME SCIENCE EXTENSION** Marks:50

w.e.f. 2023-24 admitted batch (23AK) **Practical Syllabus**

Learning objectives: The students will be able to:

- Learn Practical skills in planning, preparation of Audio-Visual Aids
- Usage of bulletin board in extension education
- Use of different types of Teaching methods and Audio-Visual Aids for different target groups.

Learning outcomes: The students will be able to:

- Identify and apply art and design elements, principles, and terminology in the creation and improvement of work.
- Demonstrate effective use of media and techniques while creating works of art and/or design.

SYLLABUS:

1. Visit to a community/ village to find out the socio- economic needs of the people
2. Preparation of Survey Schedule
3. Preparation and display of teaching aids – Posters, charts, flash cards etc.
4. Display of bulletin board
5. Illustrated Lecture and Method Demonstration to any community on Home Science related Topics.

REFERENCES:

- Adivi Reddy (1985). Extension Education, Sreelakshmi press, Baptla,
- Dahama.O.P .(1981). Extension and Rural welfare, Ram Prasad and Sons Agra Bhopal.
- Doshi, S.L. (2007). Rural Sociology. Delhi Rawat Publishers.
- Dubey,V.K.. (2009). Extension Education & Communication, 1st edition New Age International Ltd
- Indhubala (1980), Gruhavignasastravistarana , Telugu academy text book publications
- 6. Sanths Govind, G. Tamliselvi And J. Meenainbigai .(2011). Extension Education and Rural Development .Agroblos (India) Chopasani Road Jodhpur- 342002 (Raj.)
- Shekar Serene & Santosh Ahlawat . (2013).Text book of Home Science Extension Education, 1st edition, Daya Publishing house.
- Supe, S.V.(1983). An Introduction to Extension Education. Oxford& IBH publishing Co, New Delhi.

CO- CURRICULAR ACTIVITIES

1. Adoption of a village based on the socio-economic background.
2. Visit to an adopted village and conduct

- Baseline survey regarding demographic, population, Educational and felt needs of the villagers.
- Collection of data.
- Pooling and Analyzing the data.

3. Preparation, use and evaluation of visual aids viz.,
    - Poster
    - Different types of charts.
    - Flash cards
    - Display of Bulletin Board.
4. Presentation of seminars in the class rooms.
5. Blackboard teaching for 15 minutes in the class room.
6. Promoting effective verbal and non- verbal communications among students.

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ST. JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS) VISAKHAPATNAM

II SEMESTER **HOME SCIENCE** TIME:4Hrs/Week

HS 2201(3) **HOUSING FOR BETTER LIVING** Marks: 100

W.e.f. 2023-24 admitted batch (23AK)

Learning objectives:

- Learn about the types of shelter that people have constructed to protect themselves, their possessions, and their activities.
- Understand the choices involved in the construction of such buildings.
- Learn about the effects of climate, topography, and architectural style on types of building materials and housing costs.
- Learn about the changing functions of buildings and rooms within buildings.

Learning outcomes:

- Students will cultivate healthy, meaningful relationships with others.
- Students will contribute to the social, economic, or educational development of the campus and surrounding community.

THEORY

UNIT- I: HOUSING:

- Importance and functions of a house; Influence of housing on health and Family Living.
- Requirements for purchasing land for building a house - Selection of site, soil condition, locality, orientation, sanitary facilities, good neighborhood, legal characteristics etc.
- Principles of planning a house – aspect, prospect, privacy, flexibility, roominess, grouping, circulation, furniture requirements, sanitation, practical considerations.

UNIT- II: HOUSE PLANS:

- Planning of different rooms in the house – Veranda, living room, bed room, kitchen etc.
- Kitchen plans – Planning of efficient work centres, Kitchen Planning- L shape, U shape, single walled, corridor, peninsular shaped kitchens. Storage facilities in kitchen and other rooms.
- Advantages and disadvantages of owning and renting a house.

UNIT- III: BUILDING MATERIALS AND FLOORING MATERIALS

- Building Materials – Properties and uses of – a.) Metals – Iron, Steel, Aluminium, Copper, Lead; Gypsum & related products; b.) Non-Metals - Stone; Brick, Cement; Lime Mortar; Concrete; Timber; Plywood & related products; c.) Plastics & related products.
- B. Flooring – Factors in selection of flooring material and Types of flooring.
- C. Prefabrication – Importance, Elements; Laurie Baker Housing, Green Buildings – Concept and Importance.

UNIT- IV: BUILDING PROTECTION & RESEARCH ORGANIZATIONS

- Dampness & Fire Protection – Reasons/ Causes, Preventive and curative methods of dampness & fire accidents
- Types of Residential Buildings, Importance of Housing Standards – Functions, Floor Space Index, Setback, Zoning.
- NBO, NEERI, NBRI, APSHCL.

UNIT-V: HOUSEHOLD EQUIPMENT:

- Factors to be considered for the selection and purchase of household equipment.
    - Principle of operation and care of the following equipment -
    - Small electrical appliances – mixers, toasters, beaters, iron etc.
    - Large electrical appliances – Refrigerator, washing machine, vacuum cleaner, dish washer, electric range etc.
- Appropriate Technology for rural areas – hay box, low cost refrigerator, Biogas plant, solar cooker – construction, operation and advantages.
- Points to be considered while operating electrical appliances and safety measures to avoid accidents

REFERENCES:

1. Premlata Mullick, (2016). Textbook of Home Science, 4th edition,, Kalyani Publishers
2. Varghese & Oagle (2005) Home Management, New Age International Publishers.
3. Subasini Mohapatra (2010).Home Management and Household Economics, Kalyani Publishers.
4. Premavathy Seetharaman, Parveen Pannu (2005), Interior Design and Decoration, 1st edition, CBS Publishers.
5. Sushma Gupta, Neeru Garg &Renu Saini (2018), Text book of Family Resource Management, Hygiene and Physiology, 11th edition, Kalyani Publishers.
6. Pratap Rao, M. (2012), Interior Design – Principles & Practice, 4th edition, Standard Publishers & Distributors.
7. Prof. Veena Gandotra, Dr. Sarjoo Patel (2006), Housing for Family Living, 1st edition, Dominant Publishers & Distributors

CO-CURRICULAR ACTIVITIES:

1. Study of building materials and equipment which are not included in the syllabus
2. Visiting Places- Building sites/ Construction
3. Drawing layouts
4. Model making- clay, cardboard etc
5. Debates/Seminar/Group discussions/Quiz
6. Charts & Poster Presentations
7. Organizing exhibitions
8. Album making of Layouts, finishes. Household Equipment etc

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ST. JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS) VISAKHAPATNAM

II SEMESTER **HOME SCIENCE** TIME:2Hrs/Week

HS 2251(1) **Housing For Better Living Practical Syllabus** Marks: 50

w.e.f. 2023-24 admitted batch (23AK)

Learning objectives:

- Learn about the types of shelter that people have constructed to protect themselves, their possessions, and their activities.
- Understand the choices involved in the construction of such buildings.
- Learn about the effects of climate, topography, and architectural style on types of building materials and housing costs.
- Learn about the changing functions of buildings and rooms within buildings.

Learning outcomes:

- Students will cultivate healthy, meaningful relationships with others.
- Students will contribute to the social, economic, or educational development of the campus and surrounding community.

Syllabus:

1. House plan - symbols, site plan, floor plan, elevation, landscape
2. House plans for different income levels - low income, middle income and high income.
3. Kitchen plans- L shape, U shape, broken L, U Shape, peninsular, one walled.
4. Market study on building materials & identification of – floor finishes, wall finishes and ceiling finishes.
5. Care and cleaning of metals and Non-metal items.
6. Care and cleaning of different types of floors and walls using suitable cleaning equipment and cleaning agents

REFERENCES:

1. Premlata Mullick, (2016). Textbook of Home Science, 4th edition,, Kalyani Publishers
2. Varghese & Oagle (2005) Home Management, New Age International Publishers.
3. Subasini Mohapatra (2010).Home Management and Household Economics, Kalyani Publishers.
4. Premavathy Seetharaman, Parveen Pannu (2005), Interior Design and Decoration, 1st edition, CBS Publishers.
5. Sushma Gupta, Neeru Garg &Renu Saini (2018), Text book of Family Resource Management, Hygiene and Physiology, 11th edition, Kalyani Publishers.
6. Pratap Rao, M. (2012), Interior Design – Principles & Practice, 4th edition, Standard Publishers & Distributors.
7. Prof. Veena Gandotra, Dr. Sarjoo Patel (2006), Housing for Family Living, 1st edition, Dominant Publishers & Distributors

ST. JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS) VISAKHAPATNAM

II SEMESTER **HOME SCIENCE** TIME:4Hrs/Week

HS-Mi 2301 (3) **FOOD SCIENCE** Marks: 100

W.e.f. 2023-24 admitted batch (23AK)

OBJECTIVES: To enable students

1. Obtain knowledge of different food groups, their composition and role in diet.
2. To gain knowledge of different plant and animal derived foods and their nutritive values and properties.
3. Different methods of processing and cooking.

LEARNING OUTCOMES:

1. Demonstrate and use the different methods of cooking
2. Understand the composition and nutritive value of both animal and plant food
3. Apply the different techniques to check the stages in sugar cookery.
4. Able to identify different structures and identification of spoilage of egg
5. Interpret the importance and functions of food and its nutrients

UNIT – I:

FOOD GROUPS: **8 hours**

1. Basic food groups in foods and nutrition. Functional and objectives of food groups-energy yielding, body building and protective foods. Food Pyramid, My Plate.
2. Study of various cooking methods - Boiling, steaming, stewing, frying, baking, roasting, broiling, cooking under pressure.
3. Solar cooking and Microwave Methods-Advantages and disadvantages
4. Cereals –Structure, composition and nutrition of cereal, milling process of wheat, wheat products, cooking on parboiled and raw rice, principles of starch cookery, gelatinization, dextrinization and syneresis. Gluten formation and factors affecting gluten formation.

UNIT – II: **10 hours**

1. Pulses and grams – Varieties of pulses & grams, composition, nutritive value, forms of pulses, effects of cooking, storage and infestation of pulses, role of pulses in cookery, toxic constituents.
2. Vegetables - Classification, composition, nutritive value,pigments, selection and processing and preparation, role of vegetables in cookery. Different methods of preservation and processing of vegetables.
3. Fruits - Composition, nutritive value, pigments, post harvest changes, ripening of fruits, methods and effects of cooking, enzymatic browning and non enzymatic browning.

UNIT – III: **10 hours**

1. Spices and Condiments - Uses and abuses. Fats and Oils - Types of oils, function of fats and oils, shortening effects of oil, smoking point of oil, factors affecting absorption of oil.
2. Sugar cookery- Stages of sugar cookery, crystallization and factors affecting crystallization.

UNIT – IV: **10 hours**

1. Milk - Composition, nutritive value, types of milk, pasteurization and homogenization of milk, effect of heat, acid, enzymes on milk constitutes, role of milk and milk products in cookery.
2. Egg - Structure, composition,, nutritive value, role of egg in cookery, evaluation of egg quality, methods of cooking, foam formation and factors affecting foam formation.

UNIT – V: 10 hours

1. Meat -Structure, composition, nutritive value, selection of meat, post mortem changes in meat, aging, tenderness, methods of preparing meat products, processing and preparation of meat products.
2. Poultry – types, composition, nutritive value, selection, methods of cooking.
3. Fish - Structure, composition, nutritive value, selection of fish, spoilage, storage and preservation of fish, processing and preparation of fish products.

REFERENCE BOOKS:

1. Food science, Chemistry and Experimental foods by M. Swaminathan.
2. Food Science by Norman.N.Potter.
3. Experimental study of Foods by Griswold R.M.
4. Food Science by Helen Charley.
5. Foundation of Food Preparation by A.G. Peckam.
6. Modern Cookery for teaching and trade, volume I&II,Thangam Philip. OrientLongmans Ltd.
7. Food Fundamentals by MacWiliams, John Willy and son"s, New York.
8. Food Facts & Principles by Shakunthalamanay&Shadakhraswamy.
9. Food Science by Srilakshmi, second edition,2002.

CO-CIRCULAR ACTIVITIES:

1. Student Seminars on different food groups
2. Collection of samples of different food products available in the market and study their nutrient tcomposition and use in cookery.
3. Field visits –Visit to food processing units.
4. Field study–Survey on Food Additives used in various food products/processed foods.
5. Collection of different ready to eat foods and processed foods.
6. Celebration of Important Days (National and International)
   - WorldNutritionday-May28th
   - Nutrition week(Sep1st7th
   - World food day-October16th

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ST. JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS) VISAKHAPATNAM

II SEMESTER **HOME SCIENCE** TIME:2Hrs/Week

HS-Mi 2351 (2) **FOOD SCIENCE PRACTICAL SYLLABUS** Marks: 50

W.e.f. 2023-24 admitted batch (23AK)

LEARNING OUTCOMES:

1. Knowledge on standardization of weights.
2. Differentiate different methods of cooking
3. Understanding different pre preparation methods and time saving procedures
4. Able to calculate energies required for various health conditions
5. Skill in preparation of score cards for sensory evaluations

LEARNING OUTCOMES:

1. Demonstrate and use the different methods of cooking
2. Understand the composition and nutritive value of both animal and plant food
3. Apply the different techniques to check the stages in sugar cookery.
4. Able to identify different structures and identification of spoilage of egg
5. Interpret the importance and functions of food and its nutrients

SYLLABUS

1. Measuring ingredients Methods of measuring different types of foods – grains, flours & liquids
2. Cooking methods Moist heat methods – (i) boiling, simmering, steaming, & Pressure cooking, (ii). Dry heat methods – baking. (iii), Fat as a medium, Cooking-shallow and deep fat frying.
3. Methods of cooking fine and coarse cereals. Examination of starch
4. Cooking of soaked and unsoaked pulses, Common preparations with pulses.
5. Experimental cookery using vegetables of different colours & textures. Common Preparations with vegetables. Preparation of soups and salads. Prevention of darkening in fruits & vegetables.
6. Milk & milk products: Common preparation with milk, cheese & curd.-cheese curry & cooking vegetables in milk.
7. Flesh foods: Fish, meat & poultry- preparations.
8. Egg Experimental cookery- boiled egg, poached egg. Common preparations with egg.
9. Beverages Preparation of hot beverages- coffee, tea. Preparation of cold Beverages-fruit drinks & milk shake.
10. Sensory Evaluation and preparation of score card.

REFERENCE BOOKS:

1. Food science, Chemistry and Experimental foods by M. Swaminathan.
2. Food Science by Norman.N.Potter.
3. Experimental study of Foods by Griswold R.M.
4. Food Science by Helen Charley.
5. Foundation of Food Preparation by A.G. Peckam.
6. Modern Cookery for teaching and trade, volume I&II,Thangam Philip. OrientLongmans Ltd.

7. Food Fundamentals by MacWiliams, John Willy and son‟s, New York.
8. Food Facts & Principles by Shakunthalamanay&Shadakhraswamy.

10. Food Science by Srilakshmi, second edition,2002.

CO-CIRCULAR ACTIVITIES:

- Student Seminars on different food groups
- Collection of samples of different food products available in the market and study their nutrient tcomposition and use in cookery.
- Field visits –Visit to food processing units.
- Field study–Survey on Food Additives used in various food products/processed foods.
- Collection of different ready to eat foods and processed foods.
- Celebration of Important Days (National and International)
    - WorldNutritionday-May28th
    - Nutrition week(Sep1st7th
    - World food day-October16th

III Semester

BASIC NUTRITION (THEORY)

Objectives: To enable students

1. Understand the vital link between nutrition and health.
2. Gain knowledge on functions, metabolism and effects of deficiency of nutrients
3. Learn the foundational concepts of Ayurveda, including the significance of food in maintaining health and the roles of the three doshas (Vata, Kapha, and Pitta).

Learning outcomes: To enable students to learn:

1. Understand the fundamental concepts of Ayurveda and the significance of food in health, learn about energy balance and metabolic rates, and gain knowledge about carbohydrates and dietary fiber, their functions, sources, and the consequences of deficiencies.
2. Acquire a comprehensive understanding of proteins and fats, including their functions, sources, and the consequences of deficiencies. They will learn about the importance of essential amino acids and fatty acids in human nutrition.
3. Identify and understand the functions, sources, requirements, and deficiency disorders associated with both fat-soluble and water-soluble vitamins, emphasizing their role in maintaining health.
4. Knowledge of the role of minerals in the body, their classification, and the specific functions, sources, and deficiency disorders related to both macro and micro minerals.
5. Importance about the crucial functions of water in the body, understand the distribution and regulation of water, and be able to identify and explain disturbances in fluid balance such as dehydration, oedema, and water toxicity.

UNIT-I -10 hours

1. Ayurvedic- Definition, significance of food in maintenance of health. Ayurveda doshas-Vata, Kapha and Pitta, types of food-Tamasic, rajasic, Sattvic.
2. Energy - Definition of Kilocalories, Joule, energy value of foods. Basal metabolic rate-definition, factors influencing BMR. Recommended Dietary Allowances for energy. Energy imbalance: undernutrition and obesity.
3. Carbohydrates – Classification**,** functions, source, requirement, utilization, deficiencies, Sources Role of dietary fiber in human nutrition.

UNIT-II -10 hours

1. Protein - Functions, sources and requirements, utilization, deficiency-PEM, Essential amino acids, their importance.
2. Fats and Lipids – Classification, functions, sources, requirements, importance of essential fatty acids, their requirements and deficiency.

UNIT-III -10 hours

1. Vitamins – Fat soluble vitamins –A, D, E and K- functions, source, requirements, deficiency disorders.
2. Vitamins – Water soluble vitamins –The B-complex vitamins – Thiamine, Riboflavin, Niacin, Folic acid, Biotin, Pantothenic acid, B12 and Vitamin C - functions, source, requirements and deficiency disorders.

UNIT-IV-10 hours

1. Minerals - General functions in the body, classification- macro and micro minerals. Micro minerals – Iron, Fluorine, Zinc, copper, Iodine -functions, source, requirements and deficiency disorders.
2. Macro minerals – Calcium, sodium, potassium & phosphorus -functions, source, requirements and deficiency disorders.

UNIT-V -10 hours

1. Water Balance – Functions of water, water distribution, maintenance of water and regulation of acid-base balance in the body
2. Disturbances in fluid balance – Dehydration, oedema and water toxicity

BASIC NUTRITION (PRACTICAL)

Learning Outcomes: To enable to learn

1. Skills on selection of seasonal foods for planning of nutrient foods
2. Planning sessions for different combinations of foods
3. Critical analysis on sensory evaluation
4. Awareness on government schemes on food system.

(PRACTICAL)

1. Menu Planning and preparation of combination foods for different age groups
2. Plan and calculate one recipe mentioning the portion size and nutritive value of each.
3. Study of the nutritive foods supplied by the government through ICDS projects during the current 5 year plan.
4. Preparation and calculation of nutritive values of low-cost weaning foods.

Reference Books:

1. Essential of food & Nutrition –Vol. 1 M. Swaminathan, Bappco,Bangalore.
2. Human Nutrition and Dietetics –Davidson S. Passmore
3. Normal and Therapeutic Nutrition- Corinne. H.Robinson & Marilyn Lawler
4. Contemporary Nutrition - Gordon M. Wardlaw, Paul Insel et, al., (2000) Mosby,Chicago.
5. Nutrition- concepts and controversies- Eleanor Whitney –Eighth Edition (2000)
6. Basic principles of Nutrition- Seema Yadav, First edition (1997)

Co-Circular activities:

1 Student seminars on different nutrients.

2 Preparation of posters, charts, flashcards etc. related to different nutrients – Functions, RDA dietary sources, nutrient content of foods and deficiency symptoms.

3 Collections of food samples rich in particular vitamins and minerals like calcium, iron etc.

4 Visit to food stores, vegetable and fruit markets to study locally available foods.

5 Study projects to collect the data from people. Eg. Foods avoided or given in specific conditions.

6 Celebration of Important Days (National and International)

7 World's Breast Feeding Week(August 1st - 7th)

8 Nutrition Week – September 1st - 7th

9 Nutrition Month – September month

10 Hand Washing Day – October 15th

11 World Food Day – October 16th

III SEMESTER

LIFE SPAN DEVELOPMENT-I

Credits -3

Objectives: To enable students to learn:

1. Scientific knowledge about child-development, and Developmental tasks at various stages of child development.
2. Use basic principles for assessment of various developments during childhood.
3. Observation of neonatal characteristics by visiting a maternity hospital.
4. Familiarize with problems of elderly through case studies and institutional visits.

Learning outcomes: To enable students to learn:

1.
2.
3. Explain the fundamental concepts and principles of child development, including the factors influencing growth and development in children.
4. Understand the stages of prenatal development and the key physical, motor, cognitive, and socio-emotional developments during infancy and babyhood.
5. Describe the physical, emotional, social, and cognitive development during early and late childhood, including key theories such as Piaget's preoperational and concrete-operational stages.
6. Understanding of the physical, physiological, cognitive, emotional, and social changes that occur during adolescence, with an emphasis on Piaget's formal-operational stage.
7. Identify and explain the developmental tasks and significant changes during young adulthood, middle adulthood, and late adulthood, including physical, cognitive, and socio-emotional aspects, as well as coping strategies for the challenges of old age.

Unit I Introduction to Growth and Development

1. Understanding the terms Child, Growth, Development, Child Development, Human Development, and Developmental tasks.
2. Principles of Child Development and Factors influencing growth and Development of Children.
3. Determinants of Development - Heredity Vs. Environment - Maturation Vs. Learning
4. Stages of Development across lifespan

Unit II Prenatal and Early Years of Development

1. Stages of Prenatal development - Physical and Physiological changes during pregnancy- - Complications during pregnancy. Importance of Placenta, Amniotic Fluid, Role of Hormones during Pregnancy
2. Stages of birth and Types of Birth
3. Infancy – Characteristics -Physical proportions, Physiological functions, Motor activities.
4. Babyhood – Developmental Tasks and Characteristics, Physical-motor development, Cognitive development - Piaget's Sensorimotor stage, Language, Socio-emotional development.

Unit III Development during Early and Late Childhood

1. Early Childhood Period –Characteristics -Physical, Emotional, Social and Cognitive development-Piaget's Preoperational stage -Social stages in play.
2. Late Childhood Period – Characteristics, Physical, Emotional, Social and Cognitive development-Piaget's Concrete-operational stage.

Unit IV Development during Adolescence

1. Adolescence – Definitions by WHO, UNICEF, NCERT- Characteristics of Adolescence
2. Physical and physiological Changes during puberty for Boys and girls
3. Developments during adolescence – Cognitive-Piaget's Formal-operational stage, Emotional and Social development

Unit V Development during AdultHood

1. Young Adulthood - Definition, Development tasks, significance of the period, Adjustments during young adulthood period
2. Middle adulthood – Definition, physical, physiological and Psychological changes during middle age, preparation for retirement.
3. Late adulthood –Sub groups and definitions, Characteristics of old age – Physical and physiological changes during old age, cognitive and memory changes. Problems of old age and coping up strategies

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Practical

Course Objectives

1. Proficiency in Observing Developmental Milestones
2. Analysis of Social and Emotional Adjustments across Life Stages
3. In-Depth Case Studies in Adulthood Stages

Course Outcomes

1. Identification and Interpretation of Developmental Characteristics
2. Assessment of Social Development and Adjustment Issues
3. Documentation and Analysis of Lifespan Development through Case Studies

Credits -1

1. Observation of characteristics of an infant
2. Observation of different Developments of pre-school children –

-Physical development
-Language development
-Concept development.

3. Assessment of social Development among elementary school children
4. Study of adolescent adjustment problems
5. Case study of man and woman during Middle adulthood
6. Case study of elderly man and woman.

REFERENCES

1.Berk, L. E. (2007). Child Development. Prentice-Hall of India Pvt.Ltd, New Delhi.
2. Feldman, R.S. (2011).Understanding Psychology, Tenth Edition, Tata MC Graw Hill Education Private Limited, McGraw- Hill, New Delhi.
3. Hurlock – E.B. (1990) Child Development, Tata McGraw Hill Company Ltd, New York. McGraw- Hill, New Delhi.
4. Santrock, J. W. (2013). Child Development. Tata McGraw Hill Company Ltd, New Delhi.
5. Singh, A.(2015). Foundations of Human Development: A life span approach, 1st edition Orient Black Swan Pvt. Ltd., New Delhi.

CO-CURRICULAR ACTIVITIES

1. Observation of neonatal characteristics by visiting a maternity hospital.
2. Observation of a pre-school child
3. Visit to Old age home
4. Celebration of Important Days (National and International): -

● International day of elderly-October 1st
● Children's Day (Nov 14th)

III SEMESTER
FUNDAMENTALS OF TEXTILES
Credits -3

Objectives: To enable student to learn

1. To introduce students to the fundamental concepts, classifications, and properties of various textile fibers.
2. To enable students to understand the production processes, characteristics, and care requirements of natural, synthetic, and mineral fibers.
3. To provide knowledge about yarn types, spinning methods, and their importance in fabric construction and design.

Learning Outcome: To enable student to learn

1. Define textiles and explain the importance of studying textile fibers in daily life and professional practice.
2. Classify textile fibers into natural, manmade, synthetic, and mineral categories with examples.
3. Describe the production process, properties, uses, and care of cotton, linen, silk, wool, nylon, polyester, acrylic, fiber glass, and asbestos.
4. Explain the concept, advantages, and applications of blends and mixtures in textiles.
5. Differentiate between types of yarns and describe methods of mechanical and chemical spinning.

THEORY

Unit-I Introduction to Textiles

- Introduction to textiles - Importance of study of textiles.
- General properties of a Textile Fiber - Primary and Secondary.
- Classification of textile fibers – Natural and manmade; cellulose, protein, synthetic and mineral

Unit-II Natural Fibers

- Cellulose fibres – Cotton and Linen - Production, properties, use and care
- Minor cellulose fibres
- Protein fibers – Silk and wool - Production, properties, use and care.

Unit-III Synthetic Fibers

- Nylon – Production, properties use and care
- Polyester – Production, properties use and care
- Acrylic fibres – Production, properties use and care

Unit – IV Mineral Fibers

- Mineral fibres – Fibre glass and Asbestos Production, properties and Uses
- Mixtures and Blends – Importance and advantages of Blending
- Blends of Natural cellulose fibers, protein fibers and manmade fibers.

Unit – V Yarns

- Yarns – Types of Yarns - Staple and Filament
- Methods of spinning – Mechanical process
- Methods of spinning – Chemical process - Wet , Dry

- Classification of yarns – simple, novelty and textured yarns

PRACTICAL

Objectives

1. To develop skills for identification and classification of textile fibers using different testing methods.
2. To provide hands-on experience in recognizing types of yarns including simple and novelty yarns.
3. To equip students with basic analytical skills through microscopic examination, texture analysis, and burning tests for fiber identification.

Learning Outcomes

After completing the practical component, students will be able to:

1. Identify and differentiate plant, animal, and synthetic fibers by their physical properties.
2. Collect and classify various textile fibers and yarns for documentation and further study.
3. Conduct microscopic examinations and burning tests to confirm fiber types effectively.

Credits -1

1. Identification and collection of Textile Fibres
- Plant Fibres – Cotton, Linen, Jute
- Animal Fibres – Silk, Wool
- Synthetic Fibres – Polyester, Nylon, Acrylic

2. Identification and collection of Yarns
- Simple Yarns
- Novelty Yarns

3. Tests to identify textile fibers
- Texture
- Microscopic examination and
- Burning test.

REFERENCES

1. DeepaliRastogi and Sheetal Chopra (2017). Textile Science, 1st edition, Orient Black Swan Pvt. Ltd.

2. KanwarVarinder Pal Singh. (2014). Introduction to Textiles, 1st edition, Kalyani Publishers.

3. Seema Sekhri. (2017). Text book of Fabric – Fundamentals to Finishing, 2nd edition, PHI Learning Pvt. Ltd.

4. Sushma Gupta, NeeruGarg, Renu Saini. (2018). Text book of clothing, textiles and laundry, 8th edition, Kalyani publishers.

5. Vastala, R. (2013) .Text book of Textiles and Clothing, 1st edition, Published by ICAR.

CO- CURRICULAR ACTIVITIES

1. Seminar/Assignment/Quiz/Group Discussion
2. Use of ICT in Class reports and Seminars.
3. Project Work
4. Construction of garments and their exhibition.
5. Visit to nearby weaving, dyeing units and printing.

Semester- III
EXTENSION EDUCATION AND COMMUNITY DEVELOPMENT
Credits -3

THEORY

Objectives:**To enable student to learn**

1. To impart knowledge of program planning principles, steps, and evaluation methods for effective extension work.

2. To develop an understanding of the characteristics of rural, urban, and tribal communities to design relevant developmental programs.

3. To familiarize students with government, non-governmental, and international agencies involved in community development and welfare initiatives.

Learning Outcomes: **To enable student to learn**

1. Define program planning in extension and explain its objectives, principles, and evaluation methods.

2. Develop effective lesson plans for various target groups including women, adolescents, and children on relevant community topics.

3. Differentiate the features of rural, urban, and tribal communities and analyze their unique developmental needs.

4. Describe the structure and functions of the Panchayati Raj system at village, mandal, and district levels.

5. Identify the roles and contributions of government, voluntary, and international agencies such as WHO, UNICEF, ICDS, and PASS in community development.

PRACTICAL

Objectives:**To enable student to learn**

1. To enable students to plan and implement need-based awareness activities in the community.

2. To provide field exposure to various government and voluntary organizations involved in community welfare.

3. To develop skills in interacting with community functionaries and self-help group members to understand grassroots-level issues and development processes.

Learning Outcomes:**To enable student to learn**

1. Plan and conduct awareness activities for women and children based on identified community needs and interests.
2. Prepare and present lesson plans and method demonstrations effectively for community education.
3. Gain firsthand experience by visiting mandal offices, ICDS centers, NGOs, and tribal areas to observe their functioning and services.
4. Interact with village-level functionaries and self-help group members to understand the impact of welfare programs.
5. Compile detailed reports on field visits, community interactions, and group projects to reflect their understanding of extension and development work.

EXTENSION EDUCATION AND COMMUNITY DEVELOPMENT

Credits -3

Unit 1 Program Planning

1. Definition, Objectives and Principles of Program Planning in Extension
2. Steps in Program Planning
3. Evaluation – Principles, methods of evaluating individual and group performances.

Methods to find out felt and unfelt needs of the community.

Unit-II Lesson Planning

1. Characteristics of good lesson plan – Pre-requisites and components of lesson planning.
2. Planning lessons for specific groups – Women, adolescents and Children
3. Different topics for lesson plans – Swatcha Bharath, Swaasthya Bhaarat, Energy Conservation, Stress Management, Millets for Health, health education (Any FOUR).

Unit-III Community Types and Their Characteristics

1. Features of Rural community
2. Features of Urban community
3. Features of Tribal community

Unit-IV Community Development

1. Community Development – Definition , Scope, objectives – Role of Functionaries
2. Panchayat Raj Systems in India (brief) – Meaning, Definition, Democratic Decentralization
3. Three tier system of Panchayat Raj – Village Panchayath –Functions
4. Mandal Parishath – Seven Committees (Planning, Production etc.,) Functions
5. ZillaParishath – Commitees, Functions- District, State and central level
6. Extension organization in Panchayath raj set-up
7. Concept of Welfare State, Directive Principles

Unit- V Government and Non-Governmental Organizations

1. Government and Non- Governmental Organizations-Meaning and definition
2. Role of organizations (Government and Voluntary) for the development of people
3. International Agencies – WHO, CARE, UNICEF,

4. National and Voluntary Agencies – ICDS, RASS, KVK, DWCRA, MEPMA
5. Local Level Voluntary Agencies, people's organizations at grass roots – PASS

PRACTICAL

Credits -1

1. Plan an activity to create awareness among women and children of community surveyed according to their needs and interests - Lecture cum group discussion
2. Field Visits – Mandal Office, ICDS, Mahila Pranganam, PASS organization
3. Community development – Need based group project work.
4. Field Visit to Voluntary Organizations to know functioning
5. Interaction with village level functionaries to understand issues at grassroot level.
6. Interaction with women self- helps group leaders/ members to know the impact of welfare programmes.
7. Field visit to a tribal area to know their issues(optional)

REFERENCES

1. A guide book for Anganwadi workers. Published by the department of women & child development. Ministry of Human resource development. Government of India.
2. Doshi, S.L. (2007). Rural Sociology. Delhi Rawat Publishers
3. Dahama.O.P .(1981). Extension and Rural welfare, Ram Prasad and Sons Agra Bhopal.
4. Indhubala9 1980), Gruhavignasastravistarana , Telugu academy text book publications
5. Adivi Reddy (1985). ExtensionEducation, Sreelakshmi press, Bapatla,
6. Dubey,V.K.. (2009). Extension Education & Communication, New Age International Ltd
7. Sanths Govind, G. Tamliselvi And J. Meenainbigai. (2011). Extension Education and Rural Development .Agroblos (India) Chopasani Road Jodhpur- 342002 (Raj.)

CO- CURRICULAR ACTIVITIES

1. Prepare a model lesson plan to create awareness among women and children in the community surveyed.
2. Execute the lessons in the community.
3. Prepare a model/ method demonstration to educate the women on nutritious locally available foods and demonstrate in the community.
4. Visit to the ICDS office to acquaint with the services rendered and submit the report.
5. Visit to local NGO (Eg: PASS) organization to know the functions.
6. Visit to KVK, Mahila praganam to have awareness on different training programs given by the Government to the needy women.
7. Plan, organize and execute awareness program in the community at the end of the SEMESTER on nutrition, environment, energy conservation and health education

ST. JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

III SEMESTER **HOME SCIENCE**

RESOURCE MANAGEMENT Time 3 Hrs/Week

SYLLABUS Max Marks 100

THEORY

Objectives: To enable the students to

1. To enable students to understand fundamental concepts, processes, and tools of home management for effective family resource utilization.
2. To develop analytical skills in decision-making, problem-solving, and conflict resolution within home and family contexts.
3. To provide knowledge about time, energy, and work simplification techniques to enhance family well-being and quality of life.

Learning Outcomes: To enable the students to

1. Define home management and explain the roles, responsibilities, and challenges faced by homemakers including role overload and conflict.
2. Describe the management process, its steps, and apply the system's approach to various household management situations.
3. Illustrate the decision-making process, types of decisions, and construct decision trees for family management.
4. Explain the interrelationship between values, goals, and standards and classify household resources based on their characteristics.
5. Discuss the significance, tools, and techniques of time and energy management, fatigue reduction, and work simplification for better resource utilization.

COURSE:

UNIT-I:
Home Management-definition, types of management situations in family; characteristics of a good manager-roles played by homemaker, role overload, role conflict.
UNIT-II:
Management Process- steps-planning, controlling, evaluating, system's approach - components, changing concept of management.
UNIT - III:
A. Decision making - Process steps, types of decisions, decision tree.
B. Conflict resolution-types, importance.
UNIT-IV:
A. Motivating factors in management - Values - types, sources, Goals - types, characteristics, Standards-types, characteristics; Inter-relationship between values, goals and standards.
B. Resources-classification, characteristics.
UNIT-V:

A. Time management-significance, tools of time management-time cost, time norm, work norm, work curve, peak load; Process of time management.
B. Energy management - significance, energy cost, factors affecting energy cost, Fatigue -types, methods of reducing.
C. Work simplification- techniques to study, Mundel's classes of changes

REFERENCES:

1. Management in family living, (1980) Nickell& Dorsey, Wiley Eastern Pvt Ltd., New Delhi.
2. Management for Modern Families, (1970) Gross & Crandall, Appleton - century crafts, I.N.C., New York.
3. Management for Modern Families, (1970) Gross, Crandall & Knoll, Appleton - century crafts, I.N C. New York
4. Textbook of household arts, (1985) Soundaraj. S, Orient Longman, Bombay
5. Home furnishings, A. H. Rutt, (1969) Wiley eastern pvt ltd., New Delhi.
6. Management for Indian families, (1976) Mann. K.M., Kalyani Publishers, Delhi.
7. Varghese, M.A., Ogale, N.N &Srinivasan, K (1985) Home management, Wiley Eastern Pvt Ltd., New Delhi.

ST. JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

III SEMESTER **HOME SCIENCE** Time: 2 Hrs/Week

RESOURCE MANAGEMENT Max. Marks 50

OBJECTIVES: To enable the students to

1. To become better managers.
2. Understand the meaning and implementation of management with special reference to house.
3. Recognize and utilize resources available to them to achieve better quality of life.
4. Management of time, energy and other resources .

COURSE:

UNIT-I: Decision making planning for specific occasions/purpose-with decision tree
UNIT II: Preparing time schedule for Home science/ Non- Home science students and evaluating it.
UNIT-III: Making Household accessories (Optional)
a) Braiding-door mat
b) Patchwork-place mat
c) Quilting-cushion cover
d) Kitchen accessories (Apron or Bag)
UNIT-IV: Tools of time management-work norm
UNIT-V: Tools of time management - work curve

UNIT-VI: Tools of time management-peak load
UNIT-VII: Tools of time management-time cost of household activities
UNIT-VIII: Pathway and process chart
UNIT-IX: Survey for use of resources.

REFERENCES:

1. Management in family living. (1980) Nickell& Dorsey, Wiley Eastern Pvt Ltd., New Delhi.
2. Management for Modern Families, (1970) Gross & Crandall, Appleton - century crafts, I.N.C., New York.
3. Management for Modern Families, (1970) Gross. Crandall & Knoll, Appleton-century crafts, I.N.C., New York.
4. Textbook of household arts, (1985) Soundaraj. S, Orient Longman, Bombay.
5. Home furnishings. A.H. Rutt, (1969) Wiley eastern pvt ltd, New Delhi.
6. Management for Indian families, (1976) Mann. K.M., Kalyani Publishers, Delhi.
7. Varghese, M.A., Ogale, N.N. &Srinivasan, K (1985) Home management. Wiley Eastem Pvt Ltd., New Delhi.

PRACTICAL

Objectives: To enable the students to

1. To provide hands-on experience in decision-making, time management, and resource utilization through practical exercises.
2. To enhance skills in preparing time schedules, pathway charts, and process charts for efficient household management.
3. To develop creativity and application skills through the preparation of household accessories and surveys on resource use.

Learning Outcomes: To enable the students to

1. Prepare decision trees and make effective plans for specific occasions and purposes in home management.
2. Develop and evaluate time schedules for both Home Science and Non-Home Science students for effective time utilization.
3. Create household accessories such as braided door mats, patchwork place mats, quilted cushion covers, or kitchen aprons/bags using learned techniques.
4. Apply tools of time management like work norms, work curves, peak loads, and time cost analysis in household contexts.
5. Conduct surveys to assess resource use in households and compile findings systematically for analysis and presentation.

IV SEMESTER
INTERIOR DESIGN AND DECORATION
Credits -3

Objectives: To enable students to learn

1. To enable students to understand the fundamental concepts, principles, and elements of interior design and decoration for application in home and professional settings.
2. To develop knowledge of color theories, furniture, furnishings, lighting, and accessories for effective interior planning.
3. To inculcate skills in selecting and arranging interior elements aesthetically, functionally, and economically.

Learning Outcomes: To enable students to learn

1. Define interior decoration, explain its objectives, and identify characteristics of good taste in designing interiors.
2. Classify types of designs and describe the elements and principles of design applied in interior decoration.
3. Explain the importance, characteristics, and classification of color schemes for different rooms and areas.
4. Describe furniture selection, arrangement, furnishings, lighting types, fixtures, and their role in enhancing interiors.
5. Identify types, styles, and materials of flower arrangements and discuss selection, care, and placement of accessories and window treatments.

PRACTICAL

Objectives: To enable students to learn

1. To provide hands-on experience in applying elements and principles of design in drawing, sketching, and decorating interiors.
2. To develop skills in preparing color charts, flower arrangements, table settings, and furniture layouts effectively.
3. To enhance creativity and observation through practice of different art forms and interior decoration techniques.

Learning Outcomes: To enable students to learn

1. Demonstrate drawing and sketching of elements, types, and modifications of designs effectively.
2. Apply principles of art such as harmony, balance, rhythm, emphasis, and proportion in room planning and interior decoration.
3. Prepare and present color value charts, intensity scales, and Prang’s color wheel accurately for application in interiors.
4. Arrange furniture appropriately in different room layouts and demonstrate formal and informal table settings confidently.
5. Create different types and styles of flower arrangements using proper materials, equipment, and techniques.

THEORY

Unit-I Interior Design & Decoration – Elements of Design
a) Interior Decoration – Meaning, objectives of Interior decoration. Good taste – Meaning, development of good taste
b) Design – Definition, Classification of design – structural and decorative designs, Types of Decorative Design.
c) Elements of design – Line, Form, Texture, Colour, Value

Unit-II Interior Design- Principles of Art- Harmony, Proportion, Balance, Emphasis, Rhythm-methods of obtaining in interiors, importance.

Unit- III Interior Design- Colour
a) Colour – its importance and effect; Prang's colour system – Primary, Secondary, tertiary and quaternary colours, characteristics of colour- Hue, Value and Intensity

b) Colour schemes, classification of colour schemes and their use in interior decoration;

c) Factors affecting choice of colour schemes for different rooms and different areas in the house.

Unit-IV Interior Decoration- Furniture & Furnishings
a) Furniture Arrangement – Selection of furniture and considerations in arranging the furniture, Furniture arrangement in different rooms.

b) Furnishings – Classification, Factors in Selection.

c) Lighting – Types of light- Natural and Artificial ; Lighting Fixtures – Types and their use in Interior Decoration

Unit-V Interior Decoration -Accessories
a) Accessories – Functions, classification, selection and care of accessories

b) Window Treatments – Types of windows and window treatments; Factors to be considered in the selection of curtains and draperies

c) Flower Arrangement- Types, Styles– Traditional, oriental (Japanese) and modern. Materials and equipment used in flower arrangement. Points to be considered while selecting, storing and making flower arrangements.

PRACTICAL
Credits -1
1. Interior Design – A) Elements of Design, B) Types of Design – Natural,

Decorative, Types of Decorative Design - Naturalistic, Stylized, Geometric and Abstract – Drawing/ Sketching , Design Modification

2. Application of Principles of art in different rooms- a) Harmony b) Balance c) Rhythm d) Emphasis and e) Proportion – Drawing/ painting/sketching

3. Colour – Value chart, Intensity scale, Prang's colour wheel and six standard colours, Application of colour harmonies.

4. Different types of flower arrangement- Demonstration.

5. Furniture arrangement in different rooms – Room plans- pasting furniture

6. Table setting – Formal and informal table setting. (Optional)- Demonstration

7. Window treatments – Types (Optional)

REFERENCES

1. Bela Bhargava (2016). Family resource Management & Interior Decoration, 1st edition reprint, University Book House Pvt Ltd. Jaipur.

2. Parimalam, Andal, & Premalatha (2015). A Textbook of Interior Decoration, 1st edition reprint, Satish Serial Publishing Home.

3. Premavathy Seetharaman & ParveenPannu (2014). Interior Design and Decoration, CBS Publishers.

4. Premlata Mullick (2016). Textbook of Home Science, 4th edition , Kalyani Publishers

5. Stella Soundara raj (2009). A Text book of Household Arts, 4th edition, Orient Black Swan Ltd.

6. SubasiniMohapatra (2010). Home Management and Household Economics, 1st edition Kalyani Publishers.

7. Sushma Gupta, Neeru Garg &Renu Saini (2018). Text book of Family Resource Management, Hygiene and Physiology, 11th edition, Kalyani Publishers.

8. Verghese, M.A. & Oagle, M.N. (2005). Home Management, New Age International Publishers.

CO- CURRICULAR ACTIVITES

1. Drawing, colouring, and painting using principles of art, Interior designing & Decoration

2. Modelling- clay, chart, cardboard etc.

3. Quiz, Seminars , debates and Group discussion

4. Chart and Poster Presentations

5. Organizing exhibitions

6. Flower Arrangements

7. Table Settings

8. Furniture arrangement

IV SEMESTER
TEXTILE DESIGN
Credits -3

Objectives: To enable students to learn

1. To enable students to understand the basic concepts, elements, principles, and methods of textile design and their applications.
2. To impart knowledge about structural and surface designs, traditional textiles, and costumes and jewellery of different Indian states.
3. To develop analytical skills to assess the suitability of various dyeing, printing, and finishing techniques for different fibers and fabrics.

Learning Outcomes: To enable students to learn

1. Define textile design and classify various methods by which designs are obtained in fabrics.
2. Explain basic and decorative weaves, knitting, braiding, felting, bonding, crochet, and tatting with their applications in textiles.
3. Describe different dyeing and printing techniques, classifications of dyes, and their mode of action on various fibers and fabrics.
4. Identify traditional textiles and describe costumes and jewellery of different regions of India.
5. Explain various fabric finishes such as scouring, bleaching, mercerizing, calendaring, embossing, and their importance in textile enhancement.

PRACTICAL

Objectives: To enable students to learn

1. To provide hands-on experience in construction and identification of basic and decorative weaves and knitted samples.
2. To develop practical skills in various printing techniques and preparation of dyed, printed, and painted fabric samples.
3. To enhance creativity and technical application in designing surface ornamentation through traditional and contemporary methods.

Learning Outcomes: To enable students to learn

1. Construct and identify various basic and decorative weave structures confidently.
2. Prepare knitted samples demonstrating different knitting techniques.
3. Apply different methods of printing including block, stencil, spray, vegetable printing, fabric painting, tie and dye on fabric samples effectively.
4. Analyze and select appropriate techniques for surface ornamentation to enhance textile aesthetics.

5. Compile and present practical work systematically with proper labelling, observation, and evaluation for academic and professional purposes.

THEORY

UNIT - I: Introduction to Textile design,
classification of methods by which design is obtained in fabrics

UNIT - II: Structural Design in fabrics-
(a) Weaving: Basic weaves, Decorative weaves
(b) Knitting, braiding, felting, bonding, crochet and tatting.

UNIT - III: Surface design on fabrics. Preparation of fabric for dyeing and printing
a) Dyeing: i) classification of dyes. ii) mode of action and application for various fibers and fabrics.
b) Printing: Block, Roller, Screen, Stencil, Tie and Dye and Batik.
c) Finishes: Scouring, Bleaching, singeing, weighing, tentering, mercerising, starching, calendaring, embossing, moireing, napping, crepe effect.

UNIT - IV: Costumes and Jewellery of men and women of India.
a) Northern states: Kashmir, Punjab
b) Southern states: Tamil Nadu, Kerala, Karnataka and Andhra Pradesh
c) East: Assam, West Bengal d) West: Maharastra

UNIT V: Traditional Textiles- Dacca Muslin, Banarasi brocade, Chanderi, Bandhini,
Patola, Pochampalli, Kalamkari.

PRACTICAL

Credits -1
1.Construction and identification of various weaves .
2. Construction of knitted samples
3. Different methods of printing (Preparation of fabric samples)
i). Block
ii) Stencil
iii) Spray
iv) Vegetable
v). Fabric painting
vi) Tie and dye

REFERENCES:

1. Jwekar.M.D&Jwekar.V.B, (1962), "Easy Knitting Instruction", Ball Co, Bombay.
2. Mathew.M, (1979), "Practical clothing construction", Reliance Printers, Madras.
3. Greiser.H.E&Stroom.M.M, (1962), "Guide to modern clothing", Mc Grew Hill, New York. 4. Daniel.H, (1974), "Printing", Hawlin Publishers Ltd, London.

Co-curricular Activities: a). Mandatory: (Training of students by teacher on field related skills: 15 hrs)
For Teacher: Training of students by teacher in laboratory and field for a total of 15 hours on visit to dyeing, printing and embroidery units etc. to demonstrate the process.
For Student:
1. Visiting nearby hand embroidery units and observing different traditional embroidery techniques.

2. Visiting nearby textile emporiums and observing the fabrics of different states.

3. Preparing/Making of Hand and Traditional embroidery samples.

4. Preparing/Making of Dyed, printed and painted textile samples.

5. Max marks for Field Work Report: 05.

Suggested Format for Field work: Title page, student details, content page, introduction, work done, findings, conclusions and acknowledgements.

Suggested Co-Curricular Activities

1. Training of students in Dyeing, Painting and Printing various fabrics.
2. Assignments, Seminars, Group discussions, Quiz, Debates etc. (on related topics).
3. Drawing sketches, Paintings using various colour harmonies.
4. Video show and films on Interior design works and decoration of Interiors.
5. Preparation of resource files by collecting the history, process, application and typical designs of different states.
6. Invited lectures and presentations on related topics by Textiles experts

Minor-IV Semester
HUMAN PHYSIOLOGY (THEORY)

Objectives: To enable students to learn

- Understand the structure and functions of various organs of the body.
- Learn the physiology of various organ systems in the human body.
- Explain the structure and function of various animal tissues and the process of digestion, absorption, and assimilation of nutrients within the digestive system.

Learning outcomes: To enable students to learn

1. Describe the structure, types, and functions of cells and animal tissues, as well as understand the structure and functions of the digestive system and its associated organs, including the liver, gallbladder, and pancreas.
2. Gain knowledge of the composition and functions of blood, including the roles of RBCs, WBCs, and platelets, and understand the structure and functions of the heart and blood vessels, as well as the mechanisms regulating blood pressure and circulation.
3. Comprehend the structure and function of the respiratory system, including the process of gas exchange, and understand the structure and function of the excretory system, focusing on the kidneys and the formation and composition of urine.
4. Explain the physiology of the male and female reproductive systems, including the menstrual cycle and changes during pregnancy, and understand the structure and function of the primary sense organs: eyes, ears, nose, tongue, and skin.
5. Understand the physiology of nerve cells and the central nervous system's parts and functions, and be able to describe the structure and function of major endocrine glands, including the pituitary, thyroid, parathyroid, islets of Langerhans, and adrenal glands.

UNIT-I -8 hours

1. Cell - Definition, Types and Characteristics of cell, Functions of cell
2. Tissues - Classification and Functions of animal tissue- Epithelial, connective, nervous and muscle tissues.
3. Digestive system -– structure & functions of digestive system, Digestive juices, digestion, absorption and assimilation of carbohydrate, protein and fat. Structure & functions of liver, gallbladder and pancreas

UNIT-II-10 hours

1. Blood and its composition, functions RBC,sWBC, Platelets
2. Clotting factor, blood grouping and Rh factor.
3. Circulatory system - Heart structure and functions, blood vessels, types of circulation. Cardiac cycle and cardiac output, Blood pressure and its factors affecting blood pressure.

UNIT-III -10 hours

1. Respiratory system - Structure of the respiratory system, process of respiration, mechanism of transport and exchange of oxygen and carbon dioxide in the body. Oxygen dissociation curve, tidal values

2. Excretory system - Excretory organs - structure of kidney and functions, formation of urine, composition of urine.

UNIT-IV -12 hours

1. Reproductive system - Physiology of the male and female reproductive organs. Menstrual cycle. Pregnancy and associated changes.
2. Sense organs - Structure and function of eye, ear, nose, tongue and skin.

UNIT-V -10 hours

1. Central nervous system - Physiology of the nerve cell, parts of the central nervous system and function.
2. Endocrine glands - function of pituitary, thyroid, parathyroid, islets of Langerhans and adrenal gland.

Reference Books:

1. Chaterjee, C.C., Human Physiology, Vol-I&II Medical allied agency, Calcutta 1981.
2. Best and Taylor, Living body. Mc.Graw hill company, Newyork.
3. Sathya Narayana, Essentials of Biochemistry (2000).
4. SarathaSubramanian,Text of Human Physiology(2000).
5. Stuart Ira Fox,Human Physiology(2003)

Co-Circular activities

1. Preparation of posters, charts, ppt of different organs
2. Model making of different mechanisms of organs
3. Visits to different lab to learn the techniques of blood samples
4. Seminar, quiz, JAM and games for improving knowledge
5. Week celebration related to human organs- Heart day, Aids day, Hypertension week, Diabetes week

Minor-IV Semester

FAMILY AND COMMUNITY NUTRITION(THEORY)

Objectives: To enable students to learn

1. Understand the nutritional demands in various stages of the life cycle.
2. Acquire skills in planning adequate meals in different stages of life cycle to maintain health.

Learning Outcomes: To enable students to learn

1. Apply the principles of meal planning and understand the nutritional requirements for adults, pregnant, and lactating women, considering factors such as physiological changes and recommended dietary allowances (RDA).
2. Explain the nutritional requirements for infants, early childhood, and late childhood, including the importance of breastfeeding, weaning practices, and the impact of traditional and junk foods on health
3. Identify the nutritional requirements and challenges during adolescence and old age, including eating disorders in adolescents and nutrition-related problems in the elderly, and develop appropriate diet management strategies.
4. Assess the nutritional status of a community using both direct and indirect methods, including anthropometry, biochemical analysis, clinical examination, diet surveys, and ecological factors.
5. Describe the major nutritional problems prevalent in India, evaluate community nutrition programs, and understand the role of national and international organizations in combating malnutrition, as well as the methods used in nutrition education.

Unit-I Meal Planning – Nutrition during Adulthood, Pregnancy and Lactation

- Principles of meal Planning, Factors to be considered for meal planning
- Nutrition for Adults – Reference man and Reference women – Nutritional requirements for adult man and woman of different physical activities (Sedentary, Moderate and Heavy work).
- Pregnancy – Physiological changes, symptoms and complications, Nutritional requirement with RDA
- Lactation – Physiology, Galactogogues food, Nutritional requirement with RDA

Unit-II Nutrition during Childhood

- Infancy – Nutritional requirements – Importance of colostrum, Breast feeding and its advantages; Artificial/bottle feeding; Weaning Practices, Supplementary foods.
- Early childhood – Nutritional requirements – RDA, Factors to be considered while planning meals for pre-school children. Eating problems of children and their management
- Late childhood – Nutritional requirements – RDA, Food habits, Importance of breakfast and packed lunch. Eating problems.
- Traditional foods and Junk foods – Impact on health

Unit-III Nutrition during Adolescence and Old age

- **Adolescence-**Nutritional requirements –RDA, Nutritional problems and Eating Disorders-Anorexia, Bulimia and binge eating
- **Geriatric Nutrition**- Physiological changes in elderly, Factors affecting food intake, Nutrient needs and Requirements, Nutrition related problems and their diet management

Unit-IV Nutritional Status Assessment

- Assessment of the Nutritional Status of the Community – Need and objectives
- Direct methods – Anthropometry, Biochemical Analysis, Clinical Examination, Diet Surveys, Functional assessment and Biophysical or Radiological examination.
- Indirect methods – Ecological factors and Vital Health Statistics

Unit –V Nutritional Problems, Programs and Education

- Nutrition problems prevalent in India – Under nutrition – PEM and deficiencies of Vitamin A, Iron and Iodine; Over nutrition
- Community Nutrition Programmes to combat malnutrition – Supplementary Feeding Programmes – ICDS, School lunch programme; Prophylactic Programmes to prevent Vitamin A, Iron, Iodine deficiencies
- Role of National and International Organizations in combating malnutrition – NIN, CFTRI, NNMB, WHO, FAO, CARE and UNICEF
- Nutrition Education – Definition, methods used in nutrition education to improve nutritional and health status of people.

Minor-IV Semester

FAMILY AND COMMUNITY NUTRITION (PRACTICAL)

Learning Objectives: To enable students to learn

1. Standardization of Portion Sizes for Nutritional Consistency
2. Development of Low-Cost, Balanced Menus for Different Life Stages
3. Calculation and Analysis of Nutritive Values in Planned Diets

Learning Outcomes: To enable students to learn

1. Skills in preparation of different menu plans for different age groups
2. Acquire knowledge on meal planning, meal management and portion sizes
3. Application of variety of food according to age group and nutritional requirement

1. Standardization of portions for cooked food.
2. Preparation and serving the planned menu for men and women of different occupations.
3. Planning a low-cost balanced menu for a pregnant mother and display.

4. Planning a low-cost balanced menu for a lactating mother and display. Calculation of nutritive value for the prepared menu.
5. Planning and preparing diet for infants and preschool children
6. Packed lunch planning for school going children.
7. Menu planning for and adolescent girls and boys.
8. Menu planning for adult Man and Woman (moderate man and sedentary woman).
9. Preparation of diet for old age.

Reference Books:

1. Nutrition Trends in India -Vinodhini Reddy, Prahlad Rao, GovmthSastry and Kashinath, NIN, Hyderabad, 1993.

2 Modern Nutrition in Health and Diseases- Shills, E.M. Olson, A.J. and Shike, Lea and Febiger

3. Dietetics -B. Srilakshmi, New Age International Pvt. Ltd, 2003.

4.NutritionScience-B.Srilakshmi,NewAgeInternationalPvt.Ltd., 2003.

5.Food,nutrition and diet therapy -Krause, Eleventh edition

6. Human Nutrition and Dietetics- Davidson S Passmore R, Brock JP, ELBS and Churchill, Livingstone.

7.Fundamentals of foods and Nutrition - Mudambi SR and Rajagopal M Y, Wiley Eastern Ltd. 8.ICMR- Nutritive value of Indian Foods, 1989.

9.Nutrition throughout the life cycle, Bonnie S.Worthinton, Roberts, Sue Rod well Williams.,The McGraw- Hill company,1996.

10.Nutrition in the life span- Virginia Beal, John Wiley & sons New York.

Co-Circular activities:

1. Academicbased:-
    - PreparationofchartsandpostersforNutritioneducation
    - Essaywritingcompetitions
    - Groupdiscussionsontopicsrelevanttocommunitynutrition
    - Exhibitiononlowcostnutritiousfoodsandbalanceddiet
1. Lab/Researchbased:-
    - VisittoAnganwadicentre
    - Visittoschoollunchprograms
    - Visittovillageandurbanslumareaforassessingthenutritionalstatusof ruralandurbanslumpopulation
2. Valuebased:-
    - NutritionandHealthawarenesscamp
    - Posterandpuppetshowregardingnutritioneducationandimportanceofc ommunityparticipation
3. CelebrationofImportantDays(NationalandInternational):-
    - Breastfeedingweek-August1to7th

- InternationalWomen’sday-March8th
- WorldHealthday-April7th
- Internationaldayofelderly-October1st

Major-IV Semester-Set A

NUTRITIONAL BIOCHEMISTRY (THEORY)

Objectives: To enable students to learn

1. Understands the metabolism of different macro and micro nutrients in human physiology.
2. Acquires knowledge on factors affecting digestion, absorption of nutrients.
3. Knowledge on enzymes and its role in nutrient metabolism.

Learning Outcomes: To enable students to learn

1. Able to understand biochemistry, describe its objectives and scope, understand its inter-relationship with other biological sciences, and explain the classification, functions, and properties of carbohydrates.
2. Knowledge on lipids, proteins, and amino acids, classify them, and describe their physical and chemical properties, including the processes of denaturation, coagulation, and precipitation for proteins and the significance of fatty acid characteristics such as acid value, iodine value, and saponification value.
3. classify enzymes and coenzymes, explain the mechanisms of enzyme action, identify factors affecting enzyme activity, and understand the roles of enzymes and vitamins in biochemical processes.
4. Describe the key metabolic pathways for carbohydrates and proteins, including glycolysis, gluconeogenesis, the Krebs cycle, the urea cycle, and the metabolism of amino acids, as well as understand the role of the liver and hormones in regulating blood glucose levels..
5. Explain the processes involved in fatty acid synthesis and lipid metabolism, including the role of adipose tissue and the liver, the formation of ketone bodies, and the causes and implications of ketosis.

UNIT 1: 10 hours

1. **Introduction to Biochemistry:** Definition, objectives, scope and inter-relationship between biochemistry and other biological sciences.
2. **Carbohydrates;** Definition, role of carbohydrates, Classification and functions of carbohydrates-Monosaccharides, disaccharides, polysaccharides, physical and chemical properties of carbohydrates

UNIT 2: 10 hours

1. **Lipids:** Definitions, role of lipids, classification of lipids, properties of fatty acids, Physical and Chemical properties of fats, Characteristics of fat- acid value, iodine value and saponification value. Classification of fatty acid and its functions.
2. **Proteins:** Definition, functions, classification, structure of proteins, Physical and Chemical properties of protein, denaturation, coagulation and precipitation of proteins.
3. **Amino acids**; Definition, classification-Essential and non-essential amino acids, Physical and Chemical properties of amino acids

UNIT 3: 10 hours

1. **Enzymes**- Classification, mechanism of enzyme action, factors affecting enzyme activity, role of enzymes
2. Coenzymes- Definition, classification and functions, Vitamins and their coenzymes

UNIT 4: 10 hours

1. Introduction to Metabolism – Catabolism and anabolism.
2. Energy pathways carbohydrates: Glycolysis, Gluconeogenesis, Kreb Cycle, Role of liver and Hormones in regulation of blood glucose level, Glucose Tolerance Test.
3. Protein pathway: Urea Cycle, Metabolism of Amino acids – Deamination, Transamination, Decarboxylation.

UNIT 4: 10 hours

1. Fatty acid pathway: Fatty acid Synthesis, Biosynthesis of fatty acid
2. Metabolism of Lipids – Role of Adipose tissue and Liver in Lipid metabolism
3. Formation of ketone bodies, ketosis, causes of ketosis

Major-IV Semester-Set A
BIOCHEMISTRY-1 PRACTICAL

Objectives: To enable students to learn

1. To develop practical skills in performing qualitative and quantitative analysis of carbohydrates, proteins, fats, minerals, and vitamins.

2. To enable students to understand and apply biochemical methods for the estimation of nutrients in various samples.

3. To equip students with laboratory competencies essential for careers in nutrition, dietetics, and biochemical research.

Learning outcomes: To enable students to learn

1. Gain in- depth knowledge on human metabolism.
2. Understand and experiment on the principles of bio-chemical methods.
3. Be able to demonstrate through scientific experiments chemistry of nutrients.
4. Be qualified to take up career relating bio-chemistry with nutrition for extensive application

Practical:

1. **Carbohydrates:** Quantitative estimation of glucose, sucrose and lactose by titrimetric method
2. **Fats** Qualitative tests for Fats
3. **Proteins** Qualitative tests for proteins

4. **Minerals** Estimation of calcium using EDTA by titration
5. **Vitamins** Estimation of ascorbic acid by using 2, 6 dichlorophenol indophenols method
6. Estimation of Reducing sugars by titration

References:

1. Lehninger A L, Nelson D L and Cox M M (2009). Principles of Biochemistry, 6th Ed. CBS Publishers and Distributors.
2. Murray R.K, Granner D K, Mayes P A and Rodwell V W (2009). Harper's Biochemistry, 28th Ed, Lange Medical Book.
3. Hawk PB, Oser BL and Summerson WH (1954). Practical Physiological Chemistry, Mcgraw Hill, New York.
4. Sundararaj P and Siddhu A (2006). Qualitative Tests and Quantitative Procedures in Biochemistry. Elite Publishing House Pvt. Ltd., New Delhi.

Co-Circular Activities:

- Preparation of charts,models,posters etc.on topics like structures,tests for identification and metabolic cycles of carbohydrates,proteins and lipids.
- Fieldsurveytocollectdataonmetabolicdisorderslikediabetesmellitus in the community
- Visit to hospitals/private laboratories to observe analysis methods
- Seminar presentation, quiz, JAM.

ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

Home Science-V-VI Semester Syllabus

Time:3 Hrs/Week **Food Quality Control And Assurance** **Max.Marks: 100**

Objectives: After successful completion of the course, the students will be able to

- Describe and introduce the principles and methods of food quality control and assurance
- Understand the methods of quality control and assurance in foods.
- Apply and use the principles and selection of panelists for sensory evaluation and quality management system.

Course Outcomes:

- Identify and examine the methods for measuring food attributes.
- Understand and estimate the principles of sensory evaluation of food products.
- Acquire skills in selection and training of sensory panel.

Unit–I: Food Quality – Definition- Food Quality and its need in food industry - Food Quality control objectives- Importance – Functions of quality control – Stages of quality control in Food industry- Methods of quality control – Quality attributes- Classification of quality attributes.

Unit–II: Food quality assurance: Theoretical and practical considerations, description of different systems: GAP, GMP, TQM, ISO, Indian Food Standards – Voluntary and Obligatory Standards (PFA, FPO, MMPO, BIS, AGMARK etc) Codex Alimentations, WHO, Worldwide Food Safety issues. Fair Average Quality (FAQ) specification for food grains, ISO 9000series.

Unit – III Sensory evaluation: Requirements and methods –Sensory parameters: Color, flavor, texture, Taste, aroma, general and overall acceptability –Subjective and objective test of sensory parameters (Differential test, Rating test, Sensory threshold test)

Unit – IV Quality assessment of Food materials i.e. Cereals, Pulses, Fruits, Vegetables products – selection method, Food Standards- Food packaging and labeling methods – Recent trends

Unit – V Quality assessment of Food materials i.e. Meat, Poultry, Egg, Processed food products- selection method, Food Standards- Food packaging and labeling methods - Recent trends

I. Reference

1. Manay,S. and shadaksharamasamy, Food Facts and principles, New age International.(p) publishers,Newdelhi.
2. Srilakshmi, B., 2002, Food Science, 2nd edition, New Age International private limited.,NewDelhi.
3. Siva sankar,B.(2013)Food processing and preservation 2nd edition, Prentice Hall,pvt,Ltd.
4. Swaminadhan,M., Food Science, Chemistry and Experimental foods, Bappco publishers,Banglore,2004
5. Ranganna S, Hand book of Analysis and Quality-Fruits and Vegetable products, Tata McGraw Hill, New Delhi,1986.

II. CO-CURRICULAR ACTIVITIES Mandatory

1. Visit to food processing industries to understand the principles and methods of quality control and assurance in foods.
2. Visit to food testing lab or any agency of food standards.

ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

Home Science-V-VI Semester Syllabus

Time:3 Hrs/Week **Food Quality Control And Assurance** **Practical** **Max.Marks: 50**

Objectives: After successful completion of the course, the students will be able to

- Analyses and explain about quality control and common food standards
- Evaluate and assess the techniques of quality assessment of different foods.

Course Outcomes:

- Exhibit skills in quality assessment of food materials.
- Evaluate techniques related to quality assessment of food products.

Practical Syllabus

1. Sensory and instrumental methods for measuring food sensory attributes.
2. Selection and training of sensory panel
3. Assessment of sensory evaluation of foods by Hedonic scale
4. Quality assessment of cereals
5. Quality assessment of fruits and vegetables
6. Quality assessment of meat, poultry and other processed products.
7. Quality assessment of dairy products.
8. Quality assessment of Processed food products
9. Visit to food testing lab and writing report on quality assessment of different foods
10. Visit to food processing industry to study the quality measures undertaken by them.

1. Suggested

1. Market survey of preserved fruits and vegetable products
2. Nutrition labeling requirements and developments
3. Assessment of personal hygiene
4. Assessment of surface sanitation by swab/rinse method
5. Celebration of Important days (National and International) World Food safety day - 7th JUNE
   World Food day - 16th OCT

III. Reference

1. Manay,S. and shadaksharamasamy, Food Facts and principles, New age International.(p) publishers,Newdelhi.
2. Srilakshmi, B., 2002, Food Science, 2nd edition, New Age International private limited.,NewDelhi.
3. Siva sankar,B.(2013)Food processing and preservation 2nd edition, Prentice Hall,pvt,Ltd.
4. Swaminadhan,M., Food Science, Chemistry and Experimental foods, Bappco publishers,Banglore,2004
5. Ranganna S, Hand book of Analysis and Quality-Fruits and Vegetable products, Tata McGraw Hill, New Delhi,1986.

ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

III B.Sc.(H.Sc.) DEGREE EXAMINATION AT THE END OF V SEMESTER

HOME SCIENCE

Food Quality Control and Assurance

Model question paper MARKS: 60M

Answer any TWO, each answer should not exceeding SIX pages.: 2X15=30

I. Explain about the stages and methods of quality control.
II. Explain about the requirements and methods of sensory evaluation?
III. Explain about the Quality assessment of cereals and pulses?
IV. Write in detail about Fair average quality (FAQ) specification for food grains.

Answer any FOUR of the following, each answer not exceeding ONE page. 4X5=20

V. Write about the importance and functions of quality control?
VI. Describe about the Rating and sensory threshold test?
VII. Write in detail about food standards for meat
VIII. Write the description of Agmark
IX. Classification of quality attributes?
X. What are the elements of ISO 9000 series of standards

XI. Answer ALL. Each answer should not exceed two sentences: 5X2=10M

1. Mention the functions of Quality control department.
2. Write about Differential test.
3. What are the principles of GAP
4. Importance of MMPO
5. Objectives of quality control

ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

Home Science-V-VI Semester Syllabus

Time:3 Hrs/Week **FOOD SAFETY, SANITATION AND HYGIENE** **Max.Marks: 100**

Objectives

- Enumerate the various aspects of food safety and to identify the causes and prevention procedures for food borne illness, intoxication and infection
- Understand the need for consumer education and discuss occupational safety and health administration requirements.
- To create awareness regarding sanitation of dishes, equipment and kitchen.

Course Outcomes:

- List out common food adulterants in foods and understand the need for consumer education
- Acquire skills in food handling, solid and liquid waste management and disposal.
- Perform techniques related to food safety and standards.

Unit–I: Food safety- Definition, Meaning - factors affecting food safety - importance of food safety - Risks and hazards - Food related hazards - microbial consideration in food safety- Food safety and standards bill2005

Unit-II: Basic principles of Food hygiene and Sanitation - Personal and environmental Hygiene – Hygiene aspects of Food handlers- Hygiene aspects in preparation and storage of food - dish washing and garbage disposal- Safety of leftover foods Methods of sanitation and hygiene

Unit –III: Food Adulteration and Adulterants: Meaning, Methods to identify the presence of adulterants- Types of adulteration in various foods-Intentional, incidental and metallic contaminants - Consequences of adulteration

Unit – IV: Safety in Food processing –Regulatory compliance requirement for establishment of food outlets - Frame work for enabling environment for serving safe and nutritious food at food establishment or outlets. Sterilization and disinfection using heat and chemicals – Solid and liquid waste management and disposal.

Unit –V: Objectives of developing Food Safety and Standards- Enforcement of structure and procedure - Role of food analyst- good practices- statutory and regulatory requirements - Certification - HACCP, ISO-22000,FSSC-22000

CO-CURRICULAR ACTIVITIES

Mandatory (Training of student by teacher on field related skills)

- Market survey of preserved fruits and vegetable products
- Visit to Food Service Centre-Hotel/Fast food centre to study the food safety measures and report writing

References

1. Manay,S. and shadaksharamasamy, Food;Facts and principles, New age International.(p) publishers,Newdelhi.
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,NewDelhi.
3. Srilakshmi,B.,2002,Food Science,2nd edition, New Age Internationalprivate limited.,NewDelhi.
4. Swaminadhan ,M., Advanced Text book on Food and Nutrition,Vol.1,Second Edition, Bangalore printing and publishingCo.Ltd,Banglore,2012

5. Dietary Guidelines for Indians, ICMR, National Institute ofNutrition
6. Norman Marriott (1999), Principles of Food Sanitation, 4th ed., Sanitation in Food Processing, JohnA.Troller, 1993, Academicpress.

ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

Home Science-V-VI Semester Syllabus

Time:3 Hrs/Week **FOOD SAFETY, SANITATION AND HYGIENE PRACTICAL**
Max.Marks: 50

Objectives

- Analyse food handling procedure, describe food storage and refrigeration techniques.
- Evaluate labelling methods by following the principles of food safety, sanitation and hygiene

Course Outcome:

- Demonstrate good personal hygiene and safe food handling procedures
- Exhibit skills in handling equipment ,describe storage and refrigeration techniques

Practical Syllabus

1. Detection of common adulterants in foods
2. Bacteriological analysis of water
3. Microbiological examination of different food samples.
4. Assessment of personal hygiene
5. Assessment of surface sanitation by swab/ rinse method
6. Scheme for detection of food borne pathogens
7. Market survey of preserved fruits and vegetable products.
8. Demonstration of safe food handling procedure
9. Visit to Food Service Centre-Hotel/Fast food centre to study the food safety measures and report writing
10. Visit to Food service Institution- Hostel /Hospital to study the food safety, hygiene & sanitation measures and report writing.

Suggested

- Visit to Food service Institution - Hostel /Hospital to study the food safety, hygiene & sanitation measures and report writing.
- Group discussion on principles, actions and limitations off safety, sanitation and hygienic procedures.
- Celebration of Important days (National and International)
  World sanitation day - 19th November
- World Hand Hygiene Day - 5th May

References

- Manay,S. and shadaksharamasamy, Food;Facts and principles, New age International.(p) publishers,Newdelhi.
- Mahtab,S,Bamji.S,Kamala Krishnaswamy, Brahmam G.N.V,Text book of Human Nutrition,Third edition, Oxford and IBH publishing co. private limited,NewDelhi.
- Srilakshmi,B.,2002,FoodScience,2nd edition,New AgeInternationalprivate limited.,NewDelhi.
- Swaminadhan ,M., Advanced Text book on Food and Nutrition,Vol.1,Second Edition, Bangalore printing and publishingCo.Ltd,Banglore,2012
- Dietary Guidelines for Indians, ICMR, National Institute ofNutrition
- Norman Marriott (1999), Principles of Food Sanitation, 4th ed., Sanitation in Food Processing, JohnA.Troller, 1993, Academicpress.

ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

III B.Sc.(H.Sc.) DEGREE EXAMINATION AT THE END OF V SEMESTER

HOME SCIENCE

FOOD SAFETY, SANITATION AND HYGIENE

Model question paper MARKS: 60M

Answer any TWO, each answer should not exceeding SIX pages.: 2X15=30

I. Describe about the food related hazards in food safety?

II. Explain about HACCP?

III. Explain about the standards for milk and milk products?

IV. Explain about the personal and environmental hygiene?

Answer any FOUR of the following, each answer not exceeding ONE page. 4X5=20

V. Explain about the importance and factors affecting food

VI. Explain about the intentional, incidental and metallic contaminants in foods?

VII. Describe about the consequences of Food Adult ration

VIII. Discuss the solid and waste disposal.

IX. How do you plan network for creating enabling environment for serving safe and nutritious food at workplace.

X. Write about Certification and ISO22000?

XI. **Answer ALL. Each answer should not exceed two sentences: 5X2=10M**

1. What are the objectives of developing food safety?
2. Describe the role of Food Analyst.
3. What are the different types of adulteration in various foods?
4. What are the methods of sanitation and hygiene?
5. Write the standards for sugar and sugar products

ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

Home Science-V-VI Semester Syllabus

Time:3 Hrs/Week **ORGANIZATION AND MANAGEMENT OF PRE-SCHOOL CENTERS**
Max.Marks: 100

Objectives

- Understand the concepts and importance of preschool
- Learn the resource management, physical structure and facilities of an ECE centre
- Describe the quality of an ideal pre-schoolteacher.

Course Outcome

- Learn techniques in observation of events related to pre-school education.
- Demonstrate skills related to recording of observed programme
- Plan a programme based on theme based approach

Unit – 1: Concept and Organization of Preschool

- Nomenclature of Pre-schools in Indian context- Nursery, Kindergarten and Early Childhood Centres and AnganwadiCentre.
- Expansion from ECE to ECCE toECD.
- Need and Significance of pre-school education
- Objectives of Pre-school education

Unit-2: Resource Management- Location, Site and Building

- Types of rooms, Arrangement of room (activity centers),ventilation, lighting &safety
- Space- Indoor and outdoor -Minimum requirement
- Play Equipment – Types- Principles in selection of equipment and maintenance
- Child friendly environment ,Provision of Safe drinking water and Sanitary facilities

Unit – 3: Personnel Management

- Qualities of an Ideal pre-school teacher – Role of Care taker and other Staff involved in Welfare and Care of Children.
- Teacher – Child Ratio
- Need and Importance of training to personnel
-

Unit – 4: Records and Registers

- Need, Importance and Maintenance of records and registers
- Types of records and Registers – Teacher related, Child related and school related.

Unit – 5: Managing a Pre-school programme

- Pre-school programme- Principles of planning
- Long- and Short-term planning
- Theme based approach in planning.-planning, implementation and evaluation
- Developmentally appropriate programme-planning, implementation and evaluation

Co-curricular Activities:

Mandatory: (Training of students by teacher on field related skills: 15 hrs) Field work and Report Preparation

- Visit to a Pre-school, Anganwadi centre, Nursery school for one day observation of Children and report writing

Max marks for Field Work Report: 05.

- Format for Field work: Title page, student details, content page, introduction, work done, findings, conclusions and acknowledgements.

REFERENCES

1. Pankajam, G. 1994, 'PreSchool Education Philosophy and Practice', TheIndian publications, AmbalaCantt
2. Aggarwal, J.C. 1983 Methods and materials of nursery education, published by DOABA house,Delhi.
3. MujibulHasanSiddiqui 2004-early childhood education, APH publishing corporation, NewDelhi.
4. Crosser, S. (2005). What Do We Know About Early Childhood Education?",Research based Practice (pp. 154-165). U.S.A: THOMSON DelmarLearning.
5. Dorothy, J. S. A., & Dorsey, G.(2003). Developing and Administering", A childcare center, 5th edition (pp. 361-374). U.S.A: Thomson DelmarLearning.
6. Billman., & Sherman, J.A. (1996). Observation and Participation in Early Childhood settings, A Practicum Guide (pp.13-39). U.S.A: Allyn & Bacon.

ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

Home Science-V-VI Semester Syllabus

Time:3 Hrs/Week **ORGANIZATION AND MANAGEMENT OF PRE-SCHOOL CENTERS**

PRACTICAL

Max.Marks: 50

Objectives:

- Plan a programme for preschool children based on theme appropriate
- Plan a programme based on developmentally appropriate programmes

Course Outcome:

- Plan a programme based on developmentally appropriate programme
- Prepare visual aids related to planned programme

Practical Syllabus

1. Field Visit: Observations and recording of early childhood education programmes by different managements
2. Field Visit: Observation and recording of a day's programme in a pre-school, Anganwadi centre, Nursery school and report writing
3. Field Visit: Observation of qualities of a pre-schoolteacher
4. Field Visit: Observation of equipment in ECE centre
5. Planning a day's programme for pre-school children based on theme approach
6. Implementation and evaluation of prepared plans based on theme approach
7. Planning a day's programme for pre-school children based on developmentally appropriate approach
8. Preparing teaching aids related to planned programme

Suggested Co-Curricular Activities

- Training of students to prepare themes & teaching aids for pre-schoolchildren.
- Visit to nearby rural and urban pre-schools to study the resources available and management of pre-schools and preparation of report.

REFERENCES

- Pankajam, G. 1994, 'PreSchool Education Philosophy and Practice', TheIndian publications, AmbalaCantt
- Aggarwal, J.C. 1983 Methods and materials of nursery education, published by DOABA house,Delhi.
- MujibulHasanSiddiqui 2004-early childhood education, APH publishing corporation, NewDelhi.
- Crosser, S. (2005). What Do We Know About Early Childhood Education?",Research based Practice (pp. 154-165). U.S.A: THOMSON DelmarLearning.
- Dorothy, J. S. A., & Dorsey, G.(2003). Developing and Administering", A childcare center, 5th edition (pp. 361-374). U.S.A: Thomson DelmarLearning.
- Billman., & Sherman, J.A. (1996). Observation and Participation in Early Childhood settings, A Practicum Guide (pp.13-39). U.S.A: Allyn & Bacon.

ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

III B.Sc.(H.Sc.) DEGREE EXAMINATION AT THE END OF V SEMESTER

HOME SCIENCE

ORGANIZATION AND MANAGEMENT OF PRE-SCHOOL CENTERS

Model question paper MARKS: 60M

Answer any TWO, each answer should not exceeding SIX pages.: 2X15=30

I. Explain the nomenclature of Pre-schools in Indian context- Nursery, Kindergarten and Anganwadi Centre.

II. Discuss on criteria for selection of Location, Site and Building for preschools

III. Discuss on role of care taker and other staff involved in welfare of children.

IV. Discuss on Theme based approach in programme planning.

Answer any FOUR of the following, each answer not exceeding ONE page. 4X5=20

V. Enumerate on Objectives of Preschool Education

VI. Explain about Principles in selection of play equipment and maintenance

VII. Enumerate on Qualities of an Ideal pre-school teacher

VIII. Explain the Need, Importance in Maintenance of records and registers in preschools

IX. Discuss on different Types of records and Registers maintained in preschools

X. Plan a day plan on any one theme for preschool children.

XII. **Answer ALL. Each answer should not exceed two sentences: 5X2=10M**

1. What is Need and Significance of pre-school education?
2. Why Safe drinking water and Sanitary facilities are important in preschools
3. What is the ideal Teacher – Child Ratio in preschools
4. List out the child related records maintained in preschools
5. Write on Principles of planning in preschool

ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

Home Science-V-VI Semester Syllabus

Time:3 Hrs/Week **MANAGEMENT OF VOLUNTARY ORGANIZATION**
MAX.MARKS: 100

Objectives:

- Acquire specific knowledge of voluntary organization
- Recognize the project management dimensions, planning & its implementation
- Understand Human resource management in voluntary organization

Course Outcomes:

- Learn techniques about SWOC analysis.
- Analyse the requirements of voluntary organizations.
- Promote skill in preparing visual aids related to planned programme

UNIT –I - Conceptual frame work

1. Aims, objectives and functions of NGOs
2. Voluntary organization
3. Non-Governmental organization
4. Management of organizations
5. Changing concepts of voluntary organizations

UNIT -II – Process of formation of organization

1. Structure, goals and functions
2. Establishment and registration
3. Approaches and methodologies of work.
4. Partnership with government, and corporate sector

UNIT -III -Management of voluntary organization

1. Financial resources,
2. Source of finance
3. Organizational budget, Audit
4. Enhancing the involvement of people in organizations- executive boards, committees, professionals and other staff,
5. Team building, supervision and participation in training

UNIT -IV - Developmental Projects

1. Project planning, project selection, Action plan
2. Project formation, Project implementation
3. Management of programs

UNIT-V Administrative requirements

1. Office and maintenance of records
2. Reporting and documentation
3. Evolution and assessment
4. Problems of organizations
5. Emerging challenges and responses

Co-curricular Activities:
Mandatory: (Training of students by teacher on field related skills: 15 hrs) Field work and Report Preparation

- Visit to a Voluntary organization, study the resources & management of the organization and

report writing

Max marks for Field Work Report: 05.

- Format for Field work: Title page, student details, content page, introduction, work done, findings, conclusions and acknowledgements.

References

1. Choudhary D. Paul, 1992 – Social Welfare Administration, Atma Ram and Sons, Delhi Garain. S. 1998 – Organizational Effectiveness of NGOs University. Book House,Jaipur
2. Choudhari D. Paul – Voluntary efforts in social welfare and Development Sidhartha Publishers, NewDelhi.
3. Latith N.V.1984–Voluntary Work in India, a study of volunteers in welfare Agencies, NewDelhi,
4. Gangrade K.D. – Social Work and Social Development, Northern Book Centre, New Delhi Young India foundation New Delhi
5. Kulkarni V.M. – Voluntary Action in a Developing Society, NewDelhi
6. Pathak Shankar 1981 Social Welfare: An Evolution and Development Perspective, McMillanIndia
7. Dr. Koteshwar Raju, - Excellence in NGO

ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

Home Science-V-VI Semester Syllabus

Time:3 Hrs/Week **MANAGEMENT OF VOLUNTARY ORGANIZATION PRACTICAL**

Marks: 50

Objectives:

- Enhance skills & techniques of project evaluation / Resource mobilization
- Analyse the basic concepts & principles involved in managing organizations

Course Outcome:

- Demonstrate skills in preparation of Project proposal.
- Evaluate the implementation of programmes in Voluntary organizations.

Practical Syllabus:

- SWOC analysis (Strengths, Weakness, opportunities, challenges)
- Survey to identify the voluntary organization works
- Assess the voluntary organization in implementing the schemes
- Exploration of various requirements for voluntary organization
- Visit to voluntary organizations & Observation of voluntary organization
- Selection of Locale & Clientele -Children, Youth, Adult, Old age (Different age groups) and Preparation of Project proposal
- a . Input sources - Manpower, Finance, Infrastructure facilities, Scope for implementation,
- Cost benefit analysis
- b. Preparation of project proposal–Vision Mission, Financial support, Monitoring, Evaluation

Suggested Co-Curricular Activities

- Training of students to prepare project proposal to run a Voluntary organization.
- Visit to nearby NGO's and preparation of report.

References

1. Choudhary D. Paul, 1992 – Social Welfare Administration, Atma Ram and Sons, Delhi
   Garain. S. 1998 – Organizational Effectiveness of NGOs University. Book House,Jaipur
2. Choudhari D. Paul – Voluntary efforts in social welfare and Development Sidhartha Publishers, NewDelhi.
4. Latith N.V.1984–Voluntary Work in India, a study of volunteers in welfare Agencies, NewDelhi,
5. Gangrade K.D. – Social Work and Social Development, Northern Book Centre, New Delhi
   Young India foundation New Delhi
6. Kulkarni V.M. – Voluntary Action in a Developing Society, NewDelhi
7. Pathak Shankar 1981 Social Welfare: An Evolution and Development Perspective, McMillanIndia
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ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

III B.Sc.(H.Sc.) DEGREE EXAMINATION AT THE END OF V SEMESTER

HOME SCIENCE

ORGANIZATION AND MANAGEMENT OF PRE-SCHOOL CENTERS

Model question paper MARKS: 60M

Answer any TWO, each answer should not exceeding SIX pages.: 2X15=30

I. Explain the management of Organization

II. Discuss Organizational partnership with Government

III. Explain in detail about Team building

IV. Discuss the emerging challenges in administration

Answer any FOUR of the following, each answer not exceeding ONE page. 4X5=20

V. Write the objectives of Voluntary Organizations

VI. Write the structure of Organization

VII. Explain in detail the Organizational Budget

VIII. Explain the management of programs

IX. Discuss about Project planning.

X. What are the problems of organization

XI. **Answer ALL. Each answer should not exceed two sentences: 5X2=10M**

1. Write the functions of NGO
2. Explain in detail about Audit
3. Write about project implementation
4. Write about Documentation
5. What are the approaches of work?

ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

Home Science-V-VI Semester Syllabus

Time:3 Hrs/Week **INTERIOR DESIGN AND DECORATION**
MAX.MARKS: 100

Objectives:

- Remember and explain in a systematic way the difference between interior design and decoration
- Understand and use the elements and principles to create beautiful designs &interiors
- Critically explain the nuances of Indian interior design work in prescribed areas under co-curricular activity

Course Outcome:

- Identify Elements of Design and types of design.
- Acquire skills in use of Art Principles.
- Perform skills related to application of color and color harmonies.

Unit-1: Introduction to interior design -goals, Design – definition, classification, requirements, elements of design – line, form, texture, value, size, direction, color

Unit-2: Principles of Art – Harmony, Balance, Proportion, Rhythm, Emphasis – methods of obtaining in interiors, importance.

Unit-3: Color in interiors – Importance, Classification, Prang's color system – hue, value and intensity, color harmonies – classification and application

Unit4: Furniture and Furnishings

a. Furniture – styles, selection and arrangements of furniture for interiors.
b. Furnishings – classification, selection of furnishings, window treatment – types of curtains/draperies.

Unit5:

a. Accessories – Importance, classification
b. Flower Arrangement – Importance, styles, classification, care of cut flowers.
c. Plants as accessories – Bonsai, Indoor plants – selection and care.

Co-curricular Activities:
Mandatory: (Training of students by teacher on field related skills: 15 hrs)
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, color harmonies and Art principles in interior decoration.

For Student:

Observing use of color in interiors in different platforms
Making an album of AutoCAD drawings to showcase skill in designing using the software.
Max marks for Field Work Report:05.
Suggested Format for Field work: *Title page, student details, content page, introduction, work done, findings, conclusions and acknowledgements*.
Unit tests(IE).

REFERENCES

1. Faulkner & Faulkner “Inside Today’sHome”
2. Goldstein & Goldstein “Art in EverydayLife”
3. Premavathy Seetharaman & Parveen Pannu “Interior Design &Decoration

ST.JOSEPH’S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

Home Science-V-VI Semester Syllabus

Time:3 Hrs/Week **INTERIOR DESIGN AND DECORATION PRACTICAL**
MAX.MARKS: 50

Objectives:

- Application of the principles and elements in creating beautiful landscape
- Acquire computer skills to be able to render the planned interiors using AutoCAD

Course Outcomes:

- Demonstrate the methods of using AutoCAD
- Exhibit skills in drawing.

Practical Syllabus

a. Elements of Design and types of design – naturalistic, stylized, geometric and abstract
b. Structural and decorative design – requirements and critical evaluation of art objects
c. Art principles – harmony, balance, proportion, rhythm and emphasis – sketching to illustrate application in interiors.
d. Color and color harmonies – application in interior
e. Introduction to AutoCAD
f. Setting up a drawing – tools, commands
g. Isometric drawings
h. Designing using AutoCAD – Furniture, Interiors, Floor plans/layouts/elevations
i. 3D drawing in AutoCAD.

Suggested Co-Curricular Activities

- Training of students by Interior design experts in AutoCAD.
- Assignments, Seminars, Group discussions, Quiz, Debates etc. (on related topics).
- Drawing sketches, Paintings using various color harmonies.
- Video show and films on Interior design works and decoration of Interiors.
- Preparation of resource files by collecting new and innovative designs and models of Interior design.
- Invited lectures and presentations on related topics by Designer experts.

REFERENCES

- Faulkner & Faulkner “Inside Today’sHome”
- Goldstein & Goldstein “Art in EverydayLife”
- Premavathy Seetharaman & Parveen Pannu “Interior Design &Decoration”

ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

III B.Sc.(H.Sc.) DEGREE EXAMINATION AT THE END OF V SEMESTER

HOME SCIENCE

INTERIOR DESIGN

Model question paper MARKS: 60M

Answer any TWO, each answer should not exceeding SIX pages.: 2X15=30

I. Explain briefly about the dimensions of color and its applications.

II. What is flower arrangement? Classify the flower arrangement based on the shape.

III. List out the principles of design and explain any two with suitable diagrams.

IV. Classify home furnishings and its types.

Answer any FOUR of the following, each answer not exceeding ONE page.

4X5=20

II. Explain briefly about prang's color system.

III. Explain the requirements of a good structural design with suitable diagram.

IV. Define Color. Classify the color schemes.

V. Explain the different types of lighting.

VI. What are the factors influencing selection of furniture?

VII. Classify accessories.

Answer ALL. Each answer should not exceed two sentences: 5X2=10M

1. Define design.
2. What is modular furniture?
3. What is meant by law of space relationship?
4. Illustrate a good and bad decorative design.
5. What is a tint and a shade?

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ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

Home Science-V-VI Semester Syllabus

Time:3 Hrs/Week **TEXTILE DESIGN**

MAX.MARKS: 100

Objectives:

- Remember and explain in a systematic way the Principles of design, elements, classification and its importance in textile design.
- Understand the different types of fibers and fabrics.
- Analyse the structure of loom and classification of weaves.

Course Outcomes:

- Demonstrate the embroidery techniques and designs.
- Understand and apply the skills in dyeing, Printing and painting textiles.
- Create awareness by visiting embroidery, dyeing and printing units..

Unit-1: Introduction to textile design

Elements of design, principles of design, classification of methods by which design is obtained in fabric – structural and surface designs

Unit-2: Structural designs in fabric

- Basic weaves – plain weave and variations, twill weave and variations, satin weave and sateen weave – features, identification
- Decorative weaves – jacquard weave, dobby weave, swivel weave, lappet weave, pile weave, leno weave – features, identification

Unit-3: Surface design on fabrics

- Dyeing – preparation of fabric, classification of dyes, mode of action and application for various fibers and fabrics
- Printing – preparation of fabric, printing paste, printing on fabric, painting methods- block printing, screen printing, roller, stencil, spray, digital, tie & dye and batik printing

Unit-4: Traditional textiles of India

Importance, traditional textiles and embroideries of India – origin, fabrics of different states of India – motifs used, typical colors and fabrics used for – Dacca Muslins, Benaras Brocades, Chanderi, Kanthas of Bengal, Kasuti of Karnataka, Chikankari of Lucknow, Kashida of Kashmir, Phulkari of Punjab, Pipli of Orissa.

Unit-5: Traditional Textiles of India

Dyed, Printed and Painted Textiles – History, Significance, Typical designs & fabrics used for

- Bandini/Bandhej of Gujarat & Rajasthan, Patolas, Ikkats, Telia Rumal, Pochampalli
- Kalamkari of Andhra Pradesh
- Block Printing, Stencil printing, Batik.

Co-curricular Activities:

Mandatory: (Training of students by teacher on field related skills: 15 hrs)

For Teacher: Training of students by teacher in laboratory and field for a total of 15 hours on visit to dyeing, printing and embroidery units etc. to demonstrate the process.

For Student:

- Visiting nearby hand embroidery units and observing different traditional embroidery techniques.
- Visiting nearby textile emporiums and observing the fabrics of different states.

- Preparing/Making of Hand and Traditional embroidery samples.
- Preparing/Making of Dyed, printed and painted textile samples.
- Max marks for Field Work Report:05.
- Suggested Format for Field work: *Title page, student details, content page, introduction, work done, findings, conclusions and acknowledgements*.
    - Unit tests (IE).

REFERENCES

1. Chavan,R.B. (1979), Textile Printing (Book of Papers), Department of Textile Technology,IIT, NewDelhi
2. Saraiya,N.S. and Gupta,P.C. Technology and Management ofPrinting
3. Shenai.V.A. (1979), Chemistry of Dyes and Principles of Dyeing, Sevak Publications, Mumbai

ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

Home Science-V-VI Semester Syllabus

Time:3 Hrs/Week **TEXTILE DESIGN PRACTICAL**
MAX.MARKS: 50

Objectives:

- Identify the types of weaves (Basic weaves and decorative weaves.
- Critically explain & judge: The estimation of designs suitable for dyeing and printing, dye paste requirement, and also estimation of suitability of material.

Course Outcomes:

- Analyze the history, process, application and typical designs of different states.
- Evaluate the difference between traditional and modern textiles.

Practical Syllabus:

1. Design Modification to suit different surfaces/uses
2. Preparation of Dye Paste/Dye Solution for Dyeing &Printing
   a. Tie& Dye b. Block Printing c. Batik (Demonstration/Field Visit)
3. Preparation of Samples of Traditional Embroidery -Kanthas, Pipli, Chikankari
4. Study and practice of Typical Designs used in Traditional Embroidery and printing in India
5. Market Survey to know availability of Traditional Textiles in local market
6. Survey to know the Awareness about Traditional Textiles and Embroidery among youth and adults.

Suggested Co-Curricular Activities

- Training of students in Dyeing, Painting and Printing various fabrics.
- Assignments, Seminars, Group discussions, Quiz, Debates etc. (on related topics).
- Drawing sketches, Paintings using various colour harmonies.
- Video show and films on Interior design works and decoration of Interiors.
- Preparation of resource files by collecting the history, process, application and typical designs of different states.
- Invited lectures and presentations on related topics by Textiles experts.

REFERENCES

1. Chavan,R.B. (1979), Textile Printing (Book of Papers), Department of Textile Technology, IIT, NewDelhi
2. Saraiya,N.S. and Gupta,P.C. Technology and Management ofPrinting
3. Shenai.V.A. (1979), Chemistry of Dyes and Principles of Dyeing, Sevak Publications, Mumbai

ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM
III B.Sc.(H.Sc.) DEGREE EXAMINATION AT THE END OF V SEMESTER
HOME SCIENCE

TEXTILE DESIGN
Model question paper **MARKS: 60M**

Answer any TWO, each answer should not exceeding SIX pages. 2X15=30

I. Explain in detail about process, application and typical designs of Bandini of Gujarat.

II. Explain the preparation of fabric, printing paste and the method of Block printing.

III. Write about the motifs, typical colors and fabrics used for Kantas of Bengal and kasuti of karnataka?

IV. Explain in detail about the significance of traditional embroideries and suggest measures to popularize them.

Answer any FOUR of the following, each answer not exceeding ONE page. 4X5=20

II. What is Textile Design? Write about elements of design.
III. Write about plain weave and its variations?
IV. Write about block printing and screen printing.
V. What are the typical motifs and colors used for Dacca Muslins?
VI. Briefly explain the process of Kalamkari of Andhra Pradesh?
VII. Write a note on pipli of Orissa.

Answer ALL. Each answer should not exceed two sentences: 5X2=10M

1. Name the dyes preferred for cotton and silk fabrics.
2. Classify weaves.
3. Pochampalli
4. phulkari of Punjab
5. Any 2 principles of textiles design