SANT GADGE BABA AMRAVATI UNIVERSITY, AMRAVATI

Teaching and Learning Scheme: for the Under Graduate programme of Home Science with the Major/Minor/ Discipline/Subjects

Faculty -Interdisciplinary Studies As Per National Education Policy (NEP)-2020 Syllabus

Major Discipline/Subject-. Food Science and Nutrition/ Resource Management/ Human Development/Textile and Clothing/Communication and Extension

Minor: Food Science and Nutrition/ Resource Management / Human Development/Textile and Clothing/Communication and Extension

SECOND YEAR: SEMESTER-III & IV Level-5

Effective from Academic year 2025-26 Board of Studies- Home Science Faculty-Interdisciplinary Studies

FACULTY-Interdisciplinary Studies

UG Programme B.Sc. HOME SCIENCE: Major III: FOOD SCIENCE AND NUTRITION

Syllabus- SECOND YEAR SEMESTER- III

Theo	Theory: Major III Food Science (T) 806205							
Lev el	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks	
5	III	806205	Food Science (T)	3	3	2 Hrs	External-30 Mark Internal- 20 Mark	

Course Objectives:

- 1. To study the different methods of cooking foods
- 2. To obtain knowledge of different food groups, their composition and nutrients present in the foods
- 3. To understand the vital link between foods, nutrition and health

Course Outcome:

At the end of the course, students will

- 1. Gain knowledge of Nutrition
- 2. Get familiar with different methods of cooking
- 3.Get acquainted with practical knowledge of nutrient rich foods
- 4. Be acquainted with the vital link between foods, nutrition and health

Unit	Content	Hrs	Weight	Incorporation
			age of	of Pedagogy
			Marks	
			Allotted	
Unit-I	A. Introduction to Food Science: Introduction,	7	7	
	Properties and functions of foods			
	B. Cereals, Millets and their products			Demonstration,
	Processed products of wheat and rice.			Class room
	 Millets and its food uses. 			study
	 Germination and Malting of Grains – process, 			 Self-study
	characteristics, Nutritional benefits and uses			 Experiential
	Fermented foods (brief)			learning
	 Mechanism of fermentation and changes occurring 			 Assignment
	during fermentation.			designing
	Beverages – Types (Alcoholic & Non-alcoholic)			 Participative
Unit-	Legumes	8	8	learning
II	 Factors affecting the cooking quality of legumes 			 demonstration
	(soaking, fermentation, extrusion, germination and			s, Exercises
	puffing)			on
	 Anti-nutritional factors 			observation
	Nuts and oilseeds			and follow up
	Oilseeds - Composition, Processing and			with group
	Food uses			with Stoup

Unit-	Vegetables and fruits	7	7	Discussions,
III	 Classification and nutrient composition of fruits 			case studies,
	and vegetables.			ICT enabled
	 Pigments – Types, Effects of cooking media on 			teaching and
	colour, texture and acceptability.			learning
	 Browning reaction and its prevention. 			experiences
	Sweetening Agents (Brief)			in terms of
	 Sugar, Jaggery, Honey etc. 			video Lesson
	 Crystallization of sugar and its application in food 			and
	preparations.			documentary
	 Fortifying Sugars and Candies 			film shows.
	Artificial Sweetening agents – Composition and uses			
Unit-	Milk and milk products	8	8	
IV	 Effect of heat ,acid and enzyme on milk 			
	 Factors affecting the quality 			
	 Processing of milk 			
	Eggs			
	Grading, Factors affecting the quality.			
	 Effect of cooking on eggs and role of egg in 			
	different preparations			
	Meat, poultry and fish			
	 Structure of muscles and meat quality 			
	 Post-mortem changes 			
	Factors to be considered in selection and preparation			
	of meat, poultry and fish			

- 1. Mudambi, S. R. (2018). Fundamentals of food and nutrition diet therapy (6th ed.). New Age International Pvt. Ltd.
- 2. Swaminathan, M. (n.d.). Food and nutrition. The Bangalore Press.
- 3. Sethi, P., & Lakda, P. (2015). Aahar Vigyan, Suraksha evam Poshan. Elite Publishing House.
- 4. e-PG Pathshala, IGNOU, UPRTOU online study material, SWAYAM portal. (n.d.). Retrieved from http://hecontent.upsdc.gov.in/Home.aspx
- 5. Maney, S. (2008). Foods: Facts and principles (3rd ed.). Wiley Eastern.
- 6. Chandrasekhar, U. (2002). *Food science and application in Indian cookery*. Phoenix Publishing House Pvt. Ltd.
- 7. Raina, U., Kashyap, S., Narula, V., Thomas, S., Suvira, V., & Chopra, S. (2010). *Basic food preparation: A complete manual* (4th ed.). Orient Black Swan Ltd.
- 8. Srilakshmi, B. (2017). Nutrition science. New Age International Pvt. Ltd.
- 9. Bamji, M. S., Krishnasamy, K., & Brahmam, G. N. V. (2012). *Textbook of human nutrition* (3rd ed.). Oxford & IBH Publishing Co. Pvt. Ltd.
- 10. Roday, S. (2017). Food science and nutrition. Oxford University Press.
- 11. Longvah, T., Ananthan, R., Bhaskarachary, K., & Venkaiah, K. (2017). *Indian food composition tables*. National Institute of Nutrition.
- 12. Hughes, O., & Bennion, M. (1970). Introductory foods. Macmillan & Co.
- 13. Pyke, M. (1974). Catering services and technology. John Mure, London.
- 14. Begum, R. M. (2009). A textbook of foods, nutrition and dietetics. Sterling Publishers.
- 15. Philip, T. E. (1988). Modern cookery for teaching and the trade (4th ed.). Orient Longman.
- 16. Potter, N. N. (n.d.). Food science. CBS Publishers.
- 17. Fitch, J. J., & Francis, C. A. (1953). *Foods and principles of cookery* (1st ed.). Prentice Hall Inc.
- 18. Peckham, G. C. (1969). Foundations of food preparation. Macmillan Company.

	Theory: Major IV Nutrition and Human Physiology(T) 806206							
Le vel	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks	
5	III	806206	Nutrition and Human Physiology (T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark	

- To learn Human physiology to correlate its relevance to nutrition
 To know the various human systems
- **3.** To understand the human anatomy

Course Outcome:

At the end of the course, students will be able to-

- Understand the physiology of human body
 Know the integrated functions of all systems of the body

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	 Nutrition and Human Physiology Human physiology and its relevance to nutrition Introduction to Human body- Definition, Anatomy and Physiology, Cells and tissues in the human body Skeletal system - function, types of bone, classification of bones and calcification of bones Introduction to human system, role of nutrient in immune system 	7	7	Demonstration, Class room study
Unit- II	 Cardiovascular system Blood - Introduction, Composition and functions of blood, RBC, WBC, platelets and plasma Anatomy of Heart and function Blood pressure, types of circulation Role of cardiovascular system in nutrient transport 	8	8	
Unit- III	 Digestive system Introduction to parts of digestive system - teeth and mastication, salivary gland, pharynx, oesophagus, stomach, small and large intestine, duodenum, liver, gall bladder, pancreas Process of digestion Role of digestive system in digestion, absorption and assimilation of nutrient 	7	7	

Unit-	Excretory System and Endocrine System	8	8	
IV	 Structure of kidney and its functions, structure of Nephrons and its functions 			
	(formation of urine) excretion of nitrogenous waste from protein metabolism			
	 Endocrine System- Introduction and function of endocrine glands 			
	 Functions of hormones -Insulin, Glucagon, somatostatin, gastrin, cholecystokinin 			
	(CCK), Cortisol, Adrenaline, TSH t3 and t4			

- 1. Indira Gandhi National Open University. (n.d.). Applied physiology (MFM001). IGNOU.
- 2. Vander, A. J., Sherman, J. H., & Luciano, D. S. (2000). *Human physiology* (7th ed.). McGraw-Hill
- 3. Jain, A. K. (n.d.). Textbook of physiology (Vols. I & II). Avichal Publishing Co.
- 4. Guyton, A. C., & Hall, J. B. (1996). *Textbook of medical physiology* (9th ed.). W.B. Saunders Company / Prism Books Pvt. Ltd.

Leve l	Semester	Course code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Maximum marks
5	III	806207	Food Science (P)	1	2	2Hrs	External- 25 Marks Internal- 25 Marks

Course Objectives:

- 1. To know the chemical composition of m
- 2. To understand the processing of various types of products
- 3. To understand chemical composition of foods

Course Outcome: At the end of the course ,students will

- 1. Understand the processing of food
- 2. Get acquainted with the different chemical methods

-List of Practical in Food Science

- 1. Cereals
- a) Gelatine of cereal flours (compare the time taken for gel formation and consistency).
- b) Observation of cooking time & quality of steamed, aged & par boiled rice.
 - 2. Pulses Effect of soaking, sprouting, addition of acid, alkali on cooking quality (any one or two pulses like green gram, Bengal gram, cowpea etc)
 - 3. Vegetables & Fruits
 - a) Effect of adding acid & alkali on green, red, yellow & white vegetables
 - b) Methods of preventing browning
 - 4. Milk & milk products
 - a) Factors affecting curdling of milk (demonstration)

- 5. Eggs
 - a) Demonstration of grading eggs for quality
 - b) Effects of beating egg white on stiffness of foam & its uses (Custard & Omelette)
- 6. Sugar cookery Determination of stages of crystallization & its uses
- 7. Pre-processing techniques Malting, germination, fermentation

FACULTY-Interdisciplinary Studies

UG Programme B.Sc. HOME SCIENCE

Syllabus- SECOND YEAR

MAJOR: RESOURCE MANAGEMENT

SEMESTER-III

Theory	Theory: Major III Fundamentals of Interior Design (T) 823203								
Level	Level Sem Course Course Name Credits Teaching Hours/ Week Exam Duration Max Marks								
5	III	823203	Fundamentals of Interior Design (T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark		

Course Objectives:

- 1. Understand the basic concepts and scope of interior design
- 2. Gain knowledge of design elements and principles and their application in functional interiors
- 3. Learn about the various components of interior spaces, including colour and colour schemes furnishings, accessories, and finishes

Course Outcome:

At the end of the course, students will:

- 1) Identify different structural and decorative designs
- 2) Justify design concepts and apply appropriate materials
- 3) Propose design solutions based on Form, function, user perception and behaviour

Unit	Content	Hrs	Weight age of Marks Allotte d	Incorporation of Pedagogy
Unit -I	Foundation of Design -Introduction to interior design and decoration-importance scope and Aspects Difference between Interior design and decoration Role of the designer and decorator Definition and classification of design - Structural and decorative, Classification of decorative design: Naturalistic, stylized, geometric	7	7	Demonstration, Class room study
Unit -II	Elements and Principles of Design - Elements of Design - characteristics of each element and their use in designing Principles of Design — Meaning, types and significance in designing	8	8	 Case studies, ICT enabled teaching and learning experiences in terms of video Lessons and documentary film shows
Unit -III	Colour and Colour Application: Psychological impact of colour – warm, cool and neutral colours, Prang and Munsell colour systems Introduction to Concept of colour – Dimensions of colour –Hue, value, intensity, Effects of Hue Effects of light, form, surface qualities, distances and scales on colour Colour Schemes ,Colour Schemes for different residential rooms	7	7	
Unit -IV	Components of Interior Space Furniture: Types, selection criteria, arrangement Furnishings: Curtains, cushions, upholstery, carpets Accessories: Decorative and functional accessories Basic space planning techniques Circulation and functional zoning in residential interiors Design process: Concept development, client needs.	8	8	

- 1. Ramsey, C. G., & Reeve, H. (n.d.). Architectural graphic standards (11th ed.). Paperback
- 2. Drpic, I. D. (1988). Sketching and rendering of interior space. Watson-Guptill.
- 3. Mitton, M. (2007). Interior design visual presentation: A guide to graphics, models and
- presentation techniques (3rd ed.). Wiley.4. Yanes, M. D., & Dominquez, E. R. (2005). Freehand drawing for architects and interior designers. W. W. Norton & Company.

- 5. Kliment, S. (1984). *Architectural sketching and rendering: Techniques for designers and artists*. Watson-Guptill.
- 6. Gandotra, V., Shukul, M., & Jaiswal, N. (2010–2011). *Introduction to interior design & decoration*. Dominant Publishers and Distributors.
- 7. Kasu, A. A. (2005). Interior design. Ashish Book Centre.
- 8. Goldstein, H., & Goldstein, V. (1967). Art in everyday life. Oxford and IBH Publishing Co.
- 9. Mullick, P. (2016). Textbook of home science (4th ed.). Kalyani Publishers.
- 10. Seetharaman, P., & Pannu, P. (2010). *Interior design and decoration*. CBS Publishers & Distributors Pvt. Ltd.

Theory	Theory: Major III Construction Materials (T) 823204							
Level	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks	
5	Ш	823204	Construction Materials (T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark	

- 1. Introduce students to the various materials used in building construction.
- 2. Familiarize learners with natural and manufactured construction materials used in residential and commercial spaces.
- 3. To understand the properties, types, and uses of construction materials .

Course Outcome: At the end of the course, students will:

- 1• Explain the components and materials within the building.
- 2• Analyse the properties of various building materials.
- 3• Develop interior spaces with suitable construction materials.

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	Foundation And Plinth Materials-Types and properties of stone, Steel, Cement, Concrete, blocks, bricks, aggregates, Binding Wire, Wood	7	7	Demonstration, Class room study • Self-study • Experiential learning

Unit-II	Walls & Wall Finishes: types of walls, load bearing walls and non-load bearing walls Different partitions – wood, gypsum, glass, metal and combination. Wall finishes: Wood paneling, plaster, gypsum board, paint, stone wall panels, acoustic panels, upholstered wall	8	8	Assignment designingParticipative learning
	systems, wall coverings- wallpaper			
Unit-III	Uses of stone, deterioration application of stones for construction in India. Stone for finishing, cutting and polishing. Granite & Marble Types of stone masonry. Glass in Interiors— Introduction, types and application Glass and glass products— Composition and fabrication of glass, classification, types of glass- wired glass, rock wool, laminated glass, Glass concrete blocks— their properties and uses in buildings.	7	7	
Unit- IV	Flooring– Introduction, Different types of flooring and its usage in interiors Types of paints –oil and water-based paints. Different Polishes, Wall papers and finishes and its applications.	8	8	

Practical: Major III Fundamentals of Interior Design (P) 823205

Level	Semester	Course code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Maximum marks
5	III	823205	Fundamentals of Interior Design (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks

Course Objectives:

- 1) Train students in applying principles such as balance, harmony, rhythm, contrast, emphasis, and proportion in design.
- 2)To visually recognize and understand the basic elements of interior design
- 3) To applying principles such as balance, harmony, rhythm, contrast, emphasis, and proportion in design.

Course Outcome:

- 1. Appreciate growth and development of interior design and decoration in India
- 2. Enabling students distinguish between Interior decoration and Interior design
- 3. Analyse place of elements and principles in interior designing

List of Practical in Fundamentals of Interior Design (P)

- 1. Basic Application of Design Structural and decorative design Basic Application of principles of design in interior Design. Balance, rhythm, emphasis, harmony, proportion.
- 2. Basic Application of elements of Design in interior Design- Line, form and shape, size, colour, light, pattern, texture and space.
- 3 Dimensions of colour –, Colour Wheel, Colour Schemes: Harmonious Colour Schemes: Monochromatic and analogous, Triad, Complementary, Spilt Complementary, Double Complementary,
- 4 Visit to a Residential or Commercial Interior Space

UG Programme B.Sc. HOME SCIENCE Major III : HUMAN DEVELOPMENT

Syllabus- SECOND YEAR SEMESTER- III

Theory: Major III Life Span Development I (T) 827203									
Level	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks		
5	III	827203	Life Span Development- I (T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark		

Course Objectives:

- 1. To understand the characteristics in various stages of life span
- 2. To learn the development tasks in late child hood and adolescence
- 3. To gain knowledge about the transition period from adolescence to adulthood

Course Outcome:

At the end of the course, students will

- 1. Understand and apply key concepts related to human development across the life span.
- 2. Understand the different domains of development
- 3. Explain and critically analyse different perspectives on lifespan development

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	 Late childhood Years Physical, Motor development, Cognitive & Language development Socio- emotional development School, peers & Media 	7	7	Demonstration, Class room study • Experiential learning • Assignment • Participative learning
Unit -II	Puberty Meaning, characteristics, development tasks • Age of puberty; precocious puberty and delayed puberty • Physical development & emotion change • Parental role in understanding pubescent	8	8	 Exercises on observation and follow up Group discussions Case studies ICT enabled
Unit III	Adolescence Definition and Developmental Tasks • Physical and physiological changes • Cognitive and language development • Socio-emotional and moral development	7	7	teaching and learning video Lessons and

Unit	Early Adulthood	8	8	documentary
-IV	Transition from adolescence to adulthood			film shows
	 Developmental tasks of adulthood 			
	 Socio-emotional development 			

- 1. Berk, L. E. (2007). *Development through the lifespan*. Pearson Education.
- 2. Rice, F. P. (1998). Human development: A lifespan approach. Prentice Hall.
- 3. Santrock, J. W. (2007). A topical approach to life-span development. Tata McGraw-Hill.
- 4. Singh, A. (Ed.). (2015). Foundations of human development: A lifespan approach. Orient BlackSwan.

	Theory: Major IV Life Span Development II (T) 827204							
Le vel	Sem	Course Code	Course Name	Credits	Teaching Hours/Wee k	Exam Duration	Max Marks	
5	III	827204	Life Span Development II (T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark	

Course Objectives:

- 1. To learn the developmental tasks of different stages of adulthood
- 2. To understand the complexities of human development throughout adulthood stage
- 3. To study physical, cognitive, social and emotional changes and to apply this knowledge in various contexts

Course Outcome:

At the end of the course, students will be able to-

- 1. Use their knowledge of lifespan development to understand and analyse human behaviour and interactions in various contexts.
- 2. Understand how different processes interact to influence development across the lifespan.

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	 Middle Adulthood Developmental tasks of middle adulthood Parenting growing children Changes in Interest 	7	7	Demonstration, Class room study • Self-study • Experiential learning
Unit-II	 Late Adulthood Developmental tasks of middle adulthood Physical and physiological changes and aging Social role in solving the problems of old age people 	8	8	 Assignment designing Participative learning

Unit III	Adulthood Activities	7	7
	 Cognition and creativity: Work, Vocation and leisure 		
	 Diversity in roles and relationships 		
	 Social/Cultural perspective on aging 		
Unit-IV	Issues related to old age	8	8
	Adjustment to physical & mental changes		
	 Problem of old age 		
	 Psychological and sociological aspect of 		
	aging		

- 1.Rice. F. P. (1998). Human Development: A lifespan approach. New Jersey: Prentice Hall.
- 2.Rutter, M. and Rutter, M. (1992) Developing Minds. Challenge and continuity across the life span
- 3.Santrock, J. W. (2007). A topical approach to life-span development. New Delhi: Tata McGraw-Hill.
- 4.Singh, A. (Ed). 2015. Foundations of Human Development: A life span approach. New Delhi: Orient Black Swan.

Practical: Major III Life Span Development -I (P) 827205								
Level	Semester	Course code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Maximum marks	
5	III	827205	Life Span Development- I (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks	

Course Objectives:

- 1. To learn the methods of child study
- 2. To develop activities to understand different aspects of development

Course Outcome:

At the end of the course, students will

- 1. Use various methods for child study
- 2. To apply activities to facilitate development in different domains

-List of Practical in Life Span Development I

- 1. Methods of child study and their use:
 - Interview
 - Observations
 - Checklist
- 2. Plan and develop activities to facilitate development in different domains
- 3. Case profile to study adolescence/ young adulthood

UG Programme B.Sc. HOME SCIENCE

Major: TEXTILE AND CLOTHING Syllabus- SECOND YEAR SEMESTER- III

Theory: Major III Basics of Design (T)831204							
Level	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks
5	III	831204	Basics of Design (T)	3	3	2Hrs	External-30 Mark Internal-20 Mark

Course Objectives:

- 1. To understand the basics of design in textile and apparel designing
- 2. To understand the importance of art elements in garment selection

Course Outcome:

At the end of the course, students will

- 1. Apply the elements and principles of design in garment making and selection
- 2. Develop skills in garment selection
- 3. Understand basic silhouettes

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit -I	 Design-Definition, meaning, Classification of design Structural and Decorative Natural, Abstract, Geometric, Stylised, etc Motif, Layout, Repeat in design 	7	7	Demonstration, Class room study, Experiential learning,
II	Essentials of design Elements of design- line, colour, texture, space, pattern, shape	8	8	Assignments, Participative learning, Regular lectures, skill
Unit- III	Principles of design-balance, rhythm, proportion, harmony, emphasis	7	7	workshops Case studies, ICT use
Unit- IV	Basic silhouettes	8	8	teaching and learning experiences in terms of video Lessons and documentary film shows.

- 1. Sumathi, G. J. (n.d.). *Elements of fashion and apparel design*. New Age International Publishers.
- 2. McKelvey, K. (n.d.). Fashion source book. Blackwell Publishing.

- 3. Mills, J., & Smith, J. K. (n.d.). Design concept. Fairchild Publications.
- 4. Rasband, J. (n.d.). Wardrobe strategies for women. Delmar Publishers.
- 5. Jarnow, J. A., Fuerrior, M., & Judelle, B. (n.d.). *Inside fashion business* (4th ed.). Macmillan Publishing Company.

Theory: Major IV Textile Science (T) 831205								
Lev el	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks	
5	III	831205	Textile Science (T)	3	3	2 Hrs	External-30 Mark Internal- 20 Mark	

- 1.To understand natural and manmade fibres
- 2. To gain knowledge of yarn and its use in various applications.
- 3. To understand fabric making methods

Course Outcome:

At the end of the course, students will be able to

- 1. Understand the manufacturing processes of fibre and yarn.
- 2. Get acquainted with the different fabric construction methods

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporationof Pedagogy
Unit-I	Natural fiber- History ,composition ,types, production, properties and uses of -Cotton, linen, Silk, wool	7	7	Demonstration, Class room study
Unit- II	Manmade fibers- History ,composition ,types, production, properties and uses of Rayon, Polyester, Acrylic	8	8	Experiential learningAssignment
Unit- III	 Study of yarns Classification of yarn-Staple and Filament yarn, Basic and Novelty Yarn count, Yarn twist, Yarn crimp, Yarn numbering system 	7	7	designing • Participative learning
Unit- IV	Methods of fabric construction • Weaving-method, Handloom and Power loom, Basic and Novelty weaves • KnittingHand knitting, Machine knitting • Felting	8	8	

- 1. Sekhri, S. (n.d.). Textbook of fabric science: Fundamentals to finishing (4th ed.).
- 2. Deulkar, D. (1976). Household textiles and laundry work. Atmaram and Sons.
- 3. Joseph, M. L. (1981). *Introductory textile science*. Rinehart and Winston.

Practica	Practical: Major III Basics of Design (P) 831206								
Level	Semester	Course code	Course Name	Credits	Teaching Hours/week	Exam Duration	Maximum marks		
5	Ш	831206	Basics of Design (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks		

- 1. To develop skills in designing
- 2. To sketch basic silhouettes
- 3. To understand Layout and Repeat in design

Course Outcome: At the end of the course ,students will

- 1. Develop various prints for designing
- 2. Illustrate basic silhouettes of outfit

-List of Practical in Basics of Design

- 1. Creating motif design
- 2. Using motifs for different placements, repeats and usage for surface enrichment of fabric
- 3. Illustration of Basic silhouettes
- 4. Collection of swatches of different fabric textures and rendering

UG Programme B.Sc. HOME SCIENCE

Major: COMMUNICATION AND EXTENSION Syllabus- SECOND YEAR SEMESTER- III

Theory: Major III			Extension for Development (T) 802203					
Level	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks	
5	III	802203	Extension for Development	3	3	2Hrs	External-30 Mark Internal- 20 Mark	

Objectives:

- 1. To attain knowledge and resources to improve lives
- 3. To nurture leadership to address community challenges
- 4. To understand community development programs

Course Outcome:

At the end of the course, students will

- 1.Understand and participate in community development programs for improved quality of life
- 2. To enhance leadership to build trust and positive relationships

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	Extension for Development Role of Extension education in community development Qualities, role and functions of extension worker	7	7	Demonstration, Class room study
Unit-II	Need & Significance State and National development programmes related to health, education and economic development ICDS, IRDP, DWCRA, TRYSEM ICAR, NIN, CFTRI, ICMR	8	8	observation and follow up with group Discussions, case studies, ICT enabled teaching and

Unit-	Leadership	7	7	learning
III	Meaning, Definition, Importance			
	Types of Leaders			
	 Role of leaders in Home Science 			
	Extension			
Unit-	Selection of Leaders for extension work	8	8	
IV	 Qualities of leader 			
	Need, importance of leadership training			
	Methods of leadership training			

- 1. Chandra, A., Shah, A., & Joshi, U. (1989). Fundamentals of teaching home science. Sterling Publishers Pvt. Ltd.
- 2. Chandra, S. P. (Ed.). (2001). Private extension: Indian experiences. National Institute of Extension Management.
- 3. Dahama, O. P., & Bhatnagar, O. P. (2003). Education and communication for development. Oxford and IBH Publishing Co. Pvt. Ltd.
- 4. Government of India. (1961). Extension education in community development. Ministry of Food and Agriculture.
- 5. Green, R. R. (2007). Social work practices. Thomson Corporation.
- 6. Kotwal, P. (2011). Community work and social action. Adhyayan Publishers and Distributors.
- 7. Pankajam, G. (2000). Extension: Third dimension of education. Gyan Publishing House.
- 8. Ray, G. L. (1999). Extension communication and management. Naya Prokash.
- 9. Reddy, A. (1999). Extension education. Sree Lakshmi Press.
- 10. Singh, A. K. (2012). Working with communities and societies. Centrum Press.

	Theory: Major IV Extension Programme Planning (T) 802204							
Le vel	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks	
5	III	802204	Extension Programme Planning (T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark	

Course Objectives:

- To get acquaint with the Programme planning process in extension
 To understand the importance of Programme Planning To understand the importance of Programme Planning, and implementation
- 3. To design and administer tools for collection and analysis of data

Course Outcome:

At the end of the course, students will be able to-

- 1. Develop effective program planning leading to improved outcomes
- 2. Make informed decisions, ensuring that the program is on track to achieve its goals

Unit	Content	H r s	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	Programme Planning	7	7	Demonstration, Class room study • Self-study • Experiential
Unit- II	Programme Planning Process	8	8	learning • Assignment designing
Unit- III	Programme Evaluation	7	7	Participative learning
Unit- IV	Data collection for programme planning • Types and methods	8	8	

- 1. Dahama, O. P., & Bhatnagar, O. P. (1995). *Education and communication for development*. Oxford and IBH Publishing Co.
- 2. Dale, R. (2000). *Organization and development: Strategies, structures and processes*. Sage Publications.
- 3. Gupta, D. (2007). Development communication in rural sector. Abhijeet Publications.
- 4. Nisha, M. (2006). Understanding extension education. Kalpay Publications.

Practic	Practical: Major III Extension for Development (P) 802205								
Leve l	Semester	Course code	Course Name	Credits	Teaching Hours/w eek	Exam Duration	Maximum marks		
5	III	802205	Extension for Development (P)	1	2	2Hrs	External- 25 Marks Internal- 25 Marks		

Course Objectives:

- 1.To promote collaboration and address shared needs
- 2. To help others to make a difference to boost self-esteem and confidence

Course Outcome: At the end of the course ,students will

- 1. Meet people, build relationships, and strengthen social bonds.
- 2. Develop a sense of accomplishment and purpose, boosting self-worth and confidence

-List of Practical in Extension for Development

- 1. Working with local community groups (Report writing)
- 2. Volunteer with charities or community centers to gain hands-on experience (Report writing)
- **3.** Visit to community development programs

AEC- IKS Indian knowledge system and traditions for life skill (838202) is common for all major subjects

28 002	is common for an major subjects								
AEC- I	AEC- IKS Indian knowledge system and traditions for life skill 838202								
Level	Semester	Course code	Course Name	Credits	Teaching Hours/ week	Exam Duration	Max marks		
5	III	AEC 838202	IKS -Indian Knowledge System and Traditions for Life Skills (T)	1	2	2Hrs	External-30 Marks Internal- 20 Marks		

Course Objectives:

- 1.To understand the importance of IKS for better home making
- 2. To know the core areas of life skills

Course Outcome:

At the end of the course, students will

- 1.Incorporate the source of knowledge encompassing various aspects of life
- 2.Be inclined towards a sustainable and holistic living

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	IKS - Meaning, Scope, Significance	7	7	Demonstration,
	 IKS in Home Science 			Class room study
	 Integration of IKS into Home Science 			 Self-study
				 Experiential
				learning
Unit-II	Home science- Meaning, Origin and	8	8	• Assignment
	Development			designing
	 Home science and Life skills- core areas and skills developed 			Participative learning

- 1. Mahadevan, B., et al. (n.d.). *Introduction to Indian knowledge system: Concepts and applications*.
- 2. IKS: The knowledge system of Bharata. (n.d.). Garuda Prakashan.
- 3. Kapoor, K., & Singh, A. (Eds.). (n.d.). Indian knowledge systems (Vol. 2).

Choose any one of the following Minor stream from the table given below excluding the stream of the Major $\,$

(Resource Management / Food Science and Nutrition / Human Development / Textile & Clothing / Communication & Extension)

Sr.	Vertical	NEP	Resource	Food Science	Human	Textile&	Communication
No	No	Vertical	Management	and	Development	Clothing	& Extension
		Type		Nutrition			
3*	В	Minor	Course Code-	Course	Course	Course	Course Code-
		(Theory)	823206	Code-	Code-	Code-	802206
			Basics of	806208	827206	831207	Basics of
			Interior Design	Principles of	Stages of life	Fibre to	Extension
				food Science	span – I	Fabric	Education
	В	Minor	Course Code-	Course	Course	Course	Course Code-
		(practical	823207	Code-	Code-	Code-	802207
		/laborato	Basics of	806209	827207	831208	Basics of
		ries)	Interior Design	Principles of	Stages of life	Fibre to	Extension
				food Science	span – I	Fabric	Education

Minor subjects Syllabus

Food Science and Nutrition

Semester - III

Theo	Theory: Minor III Principles of Food Science (T) 806208							
Level	Sem	Course Code	Course Name	Credit s	Teaching Hours/	Exam Duration	Max Marks	
		Coue		3	Week	Duration		
5	III	806208	Principles	3	3	2Hrs	External-30 Mark	
			of Food				Internal- 20 Mark	
			Science (T)					

- 1.To study the different methods of cooking foods
- 2. To obtain knowledge of different food groups, their composition and nutrients present in the foods
- 3.To understand the vital link between foods, nutrition and health

Course Outcome:

At the end of the course, students will

- 1. Gain knowledge of Nutrition
- 2. Get familiar with different methods of cooking
- 3.Get acquainted with practical knowledge of nutrient rich foods
- 4. Be acquainted with the vital link between foods, nutrition and health

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	A. Introduction to Food Science: Introduction and functions of foods B. Cereals, Millets and their products Processed products of wheat and rice. Millets and its food uses. Germination and Malting of Grains – process, characteristics, Nutritional benefits and uses Fermented foods (brief) Mechanism of fermentation and changes occurring during fermentation. Beverages – Types (Alcoholic & Nonalcoholic)	7	7	Demonstration, Class room study
Unit- II	Legumes ■ Factors affecting the cooking quality of legumes (soaking, fermentation, extrusion, germination and puffing) ■ Anti-nutritional factors Nuts and oilseeds Oilseeds – Composition, Processing and Food uses	8	8	

		_	
Unit-	Vegetables and fruits	7	7
III	 Classification and nutrient composition of 		
	fruits and vegetables.		
	 Pigments – Types, Effects of cooking media 		
	on colour, texture and acceptability.		
	 Browning reaction and its prevention. 		
	Sweetening Agents (Brief)		
	 Sugar, Jaggary, Honey etc. 		
	 Crystallization of sugar and its application in 		
	food preparations.		
	 Fortifying Sugars and Candies 		
	Artificial Sweetening agents – Composition and		
	Uses		
Unit-	Milk and milk products	8	8
IV	 Effect of heat ,acid and enzyme on milk 		
	 Factors affecting the quality. 		
	Processing of milk		
	Eggs		
	Grading, Factors affecting the quality.		
	 Effect of cooking on eggs and role of egg in 		
	different preparations		
	Meat, poultry and fish		
	 Structure of muscles and meat quality 		
	 Post-mortem changes 		
	Factors to be considered in selection and		
	preparation of meat, poultry and fish		

- 1. Bamji, M. S., Krishnaswamy, K., & Brahmam, G. N. V. (2012). *Textbook of human nutrition* (3rd ed.). Oxford and IBH Publishing Co. Pvt. Ltd.
- 2. Begum, R. M. (2009). A textbook of foods, nutrition and dietetics. Sterling Publishers.
- 3. Chandrasekhar, U. (2002). *Food science and application in Indian cookery*. Phoenix Publishing House Pvt. Ltd.
- 4. Fitch, J. J., & Francis, C. A. (1953). Foods and principles of cookery (1st ed.). Prentice Hall Inc.
- 5. Hughes, O., & Bennion, M. (1970). Introductory foods. Macmillan & Co.
- 6. Kapoor, P. M. (1974). Catering services and technology. John Mure Pub.
- 7. Longvah, T., Ananthan, R., Bhaskarachary, K., & Venkaiah, K. (2017). *Indian food composition tables*.
- 8. Maney, S. (2008). Foods, facts and principles (3rd ed.). Wiley Eastern.
- 9. Mudambi, S. R. (2018). Fundamentals of food and nutrition: Diet therapy (6th ed.). New Age International Pvt. Ltd.
- 10. Pechkham, G. C. (1969). Foundations of food preparation. The Macmillan Company.
- 11. Philip, T. E. (1988). Modern cookery for teaching and the trade (4th ed.). Orient Longman.
- 12. Potter, N. N. (n.d.). Food science. CBS Publishing.
- 13. Raina, U., Kashyap, S., Narula, V., Thomas, S., Suvira, S., Vir, S., & Chopra, S. (2010). *Basic food preparation: A complete manual* (4th ed.). Orient Black Swan Ltd.
- 14. Roday, S. (2017). Food science and nutrition. Oxford University Press.
- 15. Sethi, P., & Lakda, P. (2015). Aahar Vigyan, Suraksha Evam Poshan. Elite Publishing House.
- 16. Srilakshmi, B. (2017). Nutrition science. New Age International Pvt. Ltd.
- 17. Swaminathan, M. (n.d.). Food and nutrition. The Bangalore Press.
- 18. Various Authors. (n.d.). Suggestive digital platform study materials. *e-PG Pathshala, IGNOU, UPRTOU, and Swayam portal*. http://hecontent.upsdc.gov.in/Home.aspx

Prac	Practical: Minor III Principles of Food Science (P) 806209								
Level	Semester	Course code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Maximum marks		
5	III	806209	Principles of Food Science (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks		

- 1To know the chemical composition of nutrients
- 2.To understand the processing of various types of products
- 3.To understand chemical composition of foods

Course Outcome: At the end of the course ,students will

- 1.Understand the process sing of food
- 2. Get acquainted with the different chemical methods

-List of Practical in Food Science

- 1. Cereals
 - a) Gelatine of cereal flours (compare the time taken for gel formation and consistency)
 - b) Observation of cooking time & quality of steamed, aged & parboiled rice.
- 2. Pulses Effect of soaking, sprouting, addition of acid, alkali on cooking quality (any one or two pulses like green gram, Bengal gram, cowpea etc).
- 3. Vegetables & Fruits
 - a) Effect of adding acid & alkali on green, red, yellow & white vegetables
 - b) Methods of preventing browning
- 4 Milk & milk products
 - c) Factors affecting curdling of milk (demonstration
- 5. Eggs
 - a) Demonstration of grading eggs for quality
 - b) Effects of beating egg white on stiffness of foam & its uses (Custard & Omelette)
- 6. Sugar cookery Determination of stages of crystallization & its uses
- 7. Pre-processing technique
- uses Malting, germination, fermentation

Minor subjects Syllabus

Resource Management

Semester III

Mino	Minor III (Theory) Basics Of Interior Design 823206								
Leve l	Sem	Course Code	Course Name	Credits	Teachin g Hours/ Week	Exam Duration	Max Marks		
5	III	823206	Basics of Interior Design (T)	3	3	2Hrs	50		

Course Objective:

- 1) Introduce students to the fundamental concepts of interior design
- 2) Develop understanding of design elements and principles
- 3) Understand space planning and furniture arrangement techniques

Course Outcome: At the end. of the course, students will be able to:

- 1)Explain the basic principles and elements of interior design
- 2) Apply design principles in creating balanced and functional interior layouts
- 3) Use symmetry, emphasis, contrast, and unity in the planning of interior spaces

Unit	Contents	Hrs	Weightage of	Incorporation
			Marks Allotted	of Pedagogy
Unit 1	Introduction to Interior Design	7	7	
	Definition and scope, History and			Demonstration,
	evolution, Role and responsibilities			Class room
	of an interior designer,			study,
	Difference between interior			Experiential
	decoration and interior design,			learning,
	Elements and principles of design			Assignment,
Unit II	Space Planning and Design Process	8	8	Participative
	Understanding space and function,			learning, skill
	Types of spaces: Residential,			workshops
	Commercial, Institutional			Case studies
	Ergonomics and anthropometry in			
	space planning, Zoning and			
	circulation			
	Design process: Concept			
	development, Mood board, Material			
	selection			
	Furniture layout and planning			
Unit III	Materials and Finishes	7	7	
	Classification of materials: Natural,			
	Synthetic, Composite, Common			
	interior materials and their			
	properties-Wood, Glass, Metal,			
	Fabric, Plastic, Stone, Tiles			
	Wall finishes: Paint, Wallpaper,			
	Cladding, Textures			

	Floor finishes: Vitrified tiles, Marble, Wood, Carpet, Vinyl Ceiling finishes: POP, Gypsum, Wood, Modular ceilings			
Unit 1V	Colour, Lighting and Accessories Basics of colour theory: Colour wheel, schemes Lighting in interiors: Types, sources, fixtures Importance of natural and artificial light Use of accessories in interiors: Rugs, Artworks, Plants, Curtains Styling techniques for different spaces	8	8	

- 1. Box, R. (2004). Basic drawing techniques. Search Press Limited.
- 2. Duggal, S. K. (n.d.). *Building materials*. New Age International Publishers.
- 3. Jain, A. K. (n.d.). Fundamentals of interior design. Khanna Publishers.
- 4. O'Shea, L., & Grimley, C. (n.d.). *The interior design reference & specification book: The new smart approach to home decorating*. Creative Home Owner.
- 5. PrathapRao. (2016). *Interior design principles and practice*. Standard Publishers and Distributors.
- 6. Seetharaman, P., & Pannu, P. (2005). *Interior design and decoration*. CBS Publishers and Distributors Pvt. Ltd.
- 7. Sharma, S. (n.d.). Interior design. Kalyani Publishers.
- 8. Sethi, P. K. (n.d.). Interior design: Principles and practice. Standard Publishers Distributors.
- 9. Walton, S. (2002). Colour your home. Parragon Books.

Practic	al: Minor III	Basics of	Interior Design (F	P) 823207			
Level	Semester	Course code	Course Name	Credits	Teaching Hours/ week	Exam Duration	Maximum marks
5	Ш	823207	Basics of Interior Design (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks

Course Objectives:

- 1. To understand the fundamentals of colour theory
- 2. Apply various colour schemes in interior design.
- 3. To plan functional furniture layouts considering space utilization and human movement patterns.

Course Outcome: At the end of the course, students will

- 1. Be able to create a colour wheel and apply colour harmony principles to interior spaces
- 2. Explain the basic principles and elements of interior design
- 3. Apply design principles in creating balanced and functional interior layouts

List of Practical in Basics of Interior Design (P)

- 1. Colour Wheel and Colour Schemes
- 2. Draft a scaled furniture layout plan for a living room or bedroom, considering traffic flow and ergonomics
- 3. Prepare reports based on actual visits to homes, showrooms, or public spaces with design evaluations
- 4. Collect and present samples or images of materials used for flooring, wall finishes, ceiling, upholstery, and cabinetry

Minor subjects Syllabus

Human Development

Semester - III

Mino	Minor -III (T) Stages of Life Span 1- 827206									
Level	Semester	Course code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max marks			
5	III	827206	Stages of Life Span I (T)	1	2	2Hrs	External-30 Marks Internal- 20 Marks			

Course Objectives:

- 1. To understand the characteristics in various stages of life span
- 2. To learn the development tasks in late child hood and adolescence
- 3. To gain knowledge about the transition period from adolescence to adulthood

Course Outcome:

At the end of the course, students will

- 1. Understand and apply key concepts related to human development across the life span.
- 2. Understand the different domains of development
- 3. Explain and critically analyse different perspectives on lifespan development

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	 Late childhood Years Physical, Motor development, Cognitive & Language development Socio- emotional development School, peers & Media 	7	7	Demonstration, Class room study • Experiential learning • Assignment • Participative learning
Unit -II	Puberty Meaning, characteristics, development tasks • Age of puberty; precocious puberty and delayed puberty • Physical development & emotion change • Parental role in understanding pubescent	8	8	 Exercises on observation and follow up Group discussions Case studies ICT use
Unit III	Adolescence Definition and Developmental Tasks • Physical and physiological changes • Cognitive and language development • Socio-emotional and moral development	7	7	• video Lessons and documentary film shows
Unit -IV	Early Adulthood Transition from adolescence to adulthood • Developmental tasks of adulthood • Socio-emotional development	8	8	

- 1. Berk, L. E. (2007). Development through the lifespan. Pearson Education.
- 2. Rice, F. P. (1998). Human development: A lifespan approach. Prentice Hall.
- Santrock, J. W. (2007). A topical approach to life-span development. Tata McGraw-Hill.
 Singh, A. (Ed.). (2015). Foundations of human development: A lifespan approach. Orient Black Swan.

-Practic	-Practical in – Minor III (P) Stages of life span 1 – 827207								
Level	Semester	Course code	Course Name	Credits	Teaching Hours/w eek	Exam Duration	Maximu m marks		
5	III	827207	Stages of Life Span 1 (P)	1	2	2Hrs	External -25 Marks Internal - 25 Marks		

- To learn the methods of child study
 To develop activities to understand different aspects of development
 Course Outcome: At the end of the course ,students will

- Use various methods for child study
 To apply activities to facilitate development in different domains

-List of Practical

- 1. Methods of child study and their use:
- Interview
- Observations
- Checklist
- 2. Plan and develop activities to facilitate development in different domains
- 3. Case profile to study adolescence/ young adulthood

Minor subjects Syllabus

Textile and Clothing

Semester - III

Theory	Theory Minor -III (T) Fibre to Fabric 831207									
Level	Semester	Course code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max marks			
5	III	831207	Fibre to Fabric (T)	1	2	2Hrs	External-30 Marks Internal- 20 Marks			

Course Objectives:

- 1. To understand natural and manmade fibres
- 2. To gain knowledge of Yarn and its use in various applications.
- 3. To understand fabric making methods.

Course Outcome:

At the end of the course, students will

- 1. Understand the manufacturing processes of fibre and yarn.
- 2. Get acquainted with the different fabric construction methods.

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	Natural fibres- History ,composition ,types, production, properties and uses of -Cotton, linen, Silk, wool	7	7	Demonstration, Class room study
Unit-II	Manmade fibres- History ,composition ,types, production, properties and uses of Rayon, Polyester, Acrylic	8	8	 Self-study Experiential learning Assignment
Unit- III	 Study of yarns Classification of yarn-Staple and Filament yarn, Basic and Novelty Yarn count, Yarn twist, Yarn crimp, Yarn numbering system 	8	8	designing • Participative learning
Unit- IV	Methods of fabric construction • Weaving-method, Handloom and Power loom, Basic and Novelty weaves • KnittingHand knitting, Machine knitting • Felting	7	7	

- 1. Sekhri, S. (n.d.). Textbook of fabric science: Fundamentals to finishing (4th ed.).
- 2. Deulkar, D. (1976). Household textiles and laundry work. Atmaram and Sons.
- 3. Joseph, M. L. (1981). Introductory textile science. Rinehart and Winston.

-Practic	-Practical in – Minor III (P) Fibre to Fabric 831208								
Level	Semester	Course code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Maximum marks		
5	III	831208	Fibre to Fabric (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks		

- 1.To identify yarn properties
- 2. To prepare fabric weaves
- 3. To understand knitting manually

Course Outcome: At the end of the course ,students will

- 1. Understand Yarn count and yarn twist
- 2. Adopt skill in knitting1.Determination of Yarn Count, Yarn Twist, Fabric Count
- 2.Preparation of weaves
- 3.Knitting

Preparation of knitted samples

4.Knitted articles (any two)

Minor subjects Syllabus

Communication and Extension

Semester - III

Theory: Minor III Course Code- 802206 Basics of Extension Education							
Level	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks
5	III	802206	Basics of Extension Education	3	3	2Hrs	External-30 Mark Internal- 20 Mark

Objectives:

- To attain knowledge and resources to improve lives
 To nurture leadership to address community challenges
 To understand community development programs

Course Outcome:

At the end of the course, students will

- 1.Understand and participate in community development programs for improved quality of life
- 2. To enhance leadership to build trust and positive relationships

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy	
Unit-I	Extension for Development Role of Extension education in community development Qualities, role and functions of extension worker	7	7	Demonstration, Class room study • Self-study • Experiential learning	
Unit-II	Community development programme Need & Significance State and National development programmes related to health, education and economic development ICDS, IRDP, DWCRA, TRYSEM ICAR, NIN, CFTRI, ICMR	8	8	 Participative learning Demonstrations, Exercises on observation and follow up 	
Unit-III	Leadership Meaning, Definition, Importance Types of Leaders Role of leaders in Home Science Extension		7	with group Discussions, Case studies, ICT enabled	

Unit-IV	Selection of Leaders for extension work	8	8	teaching and
	 Qualities of leader 			learning
	 Need, importance of leadership training 			
	 Methods of leadership training 			

- 1. Chandra, A., Shah, A., & Joshi, U. (1989). Fundamentals of teaching home science. Sterling Publishers Pvt. Ltd.
- 2. Chandra, S. P. (Ed.). (2001). *Private extension: Indian experiences*. National Institute of Extension Management.
- 3. Dahama, O. P., & Bhatnagar, O. P. (2003). *Education and communication for development*. Oxford and IBH Publishing Company Pvt. Ltd.
- 4. Government of India. (1961). *Extension education in community development*. Ministry of Food and Agriculture.
- 5. Green, R. R. (2007). Social work practices. Thomson Corporation.
- 6. Kotwal, P. (2011). Community work and social action. Adhyayan Publishers and Distributors.
- 7. Pankajam, G. (2000). Extension: The third dimension of education. Gyan Publishing House.
- 8. Ray, G. L. (1999). Extension communication and management. Naya Prokash.
- 9. Reddy, A. (1999). Extension education. Sree Lakshmi Press.
- 10. Singh, A. K. (2012). Working with communities and societies. Centrum Press.

Practical: Minor III Basics of Extension Education (P) 802207								
Leve l	Semester	Course code	Course Name	Credits	Teaching Hours/w eek	Exam Duration	Maximum marks	
5	III	802207	Basics of Extension Education (P)	1	2	2Hrs	External- 25 Marks Internal- 25 Marks	

Course Outcome: At the end of the course, students will

- 1. Meet people, build relationships, and strengthen social bonds.
- 2. Develop a sense of accomplishment and purpose, boosting self-worth and confidence

-List of Practical in Extension for Development

- 1. Working with local community groups (Report writing)
- 2. Volunteer with charities or community centres to gain hands-on experience (Report writing)
- **3.** Visit to community development programs

The distribution of marks for the examination shall be as follows:

Internal Assessment	20 Marks
1.Class tests–Assessment on any two(Open Book Test/Objective type	10 Marks
Test/Descriptive Test)	
2.Assignment/Seminar/Group Discussion/ Case studies/ field wok /Visit Report	10 Marks
External Evaluation and Examination system	30 marks

The distribution of marks for the practical examination shall be as follows:

External Evaluation	on	Internal Evaluation		
Performance of any two Experiments 20M		Students performance	10M	
Viva-voice	05M	Practical Record Book	05M	
		Assignment on practical	10M	
Total	25M	Total	25M	

SECOND YEAR: SEMESTER- IV Level-5

Syllabus

Major Discipline/Subject-. Food Science and Nutrition/ Resource Management Human Development/Textile and Clothing/ Communication and Extension

Minor: Food Science and Nutrition/ Resource Management/ Human Development/Textile and Clothing/ Communication and Extension

> Effective from Academic year 2025-26 Board of Studies- Home Science Faculty-Interdisciplinary Studies

UG Programme B.Sc. HOME SCIENCE Syllabus

Major Discipline/Subject-. Food Science and Nutrition

SECOND YEAR: SEMESTER- IV Level-5

Theory; Major V Nutrition during life cycle (T) 806211								
Level	Sem	Course Code	Course Name	Credits	Teaching Hours/Week	Exam Duration	Max Marks	
.5	IV	806211	Nutrition During Life Cycle (T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark	

Course Objectives:

- .1 To understand the basics of recommending the dietary allowances
- 2. To study the nutritional needs at different stages of life span
- 3. To assess nutritional requirements and nutritional status of an individual

Course Outcome:

At the end of the course, students will

- 1. Understand the basics of recommending the dietary allowances
- 2. Recommend nutritional needs at different stages of life span
- 3. Assess nutritional requirements and nutritional status of an individual

Unit	Content	Hrs	Weight age of	Incorporation of Pedagogy	
			Marks Allotted		
Unit-I	Adequate diet and meal planning-Concept, Meaning and importance • Factors affecting meal planning – nutritional, socio –cultural, religious, geographic, economic	7	7	Demonstration, Class room study • Self-study • Experiential learning	
Unit- II	 Nutrition through life cycle Nutrition and diet during pregnancy-importance, requirements, food Selection and menu planning Nutrition and diet during lactation-importance, requirements, food selection and diet 	8	8	 Assignment designing Participative learning 	
Unit- III	Nutrition and diet during infancy- importance, requirements, food selection. Breastfeeding, weaning food, artificial feeding • Nutrition and diet during preschool, childhood importance, requirements, food selection and diet	7	7		
Unit- IV	Nutrition and diet during adolescent periodimportance, requirement, food selection and diet Nutrition and diet during adulthoodimportance, requirements for different work pattern, food selection and diet according to socio economic level Nutrition during old age- importance, requirements, food selection and diet	8	8		

- 1. Antia, F. P., & Abraham, P. (2001). Clinical nutrition and dietetics. Oxford Publishing Company.
- 2. Srilakshmi, B. (2007). Dietetics. K.K. Gupta for New Age International Pvt. Ltd.
- 3. Benion, M. (n.d.). Clinical nutrition. Harper and Row Publishing.

- 4. Escott-Stump, S., & Mahan, L. K. (2000). *Krause's food, nutrition, and diet therapy* (10th ed.). W.B. Saunders Company.
- 5. Passmore, P., & Eastwood, M. A. (n.d.). Human nutrition and dietetics. Churchill Livingstone.
- 6. Begum, R. M. (1989). A textbook of foods, nutrition, and dietetics. Wiley Eastern Ltd.
- 7. Robinson, C. M. B., Lawlea, W. L., Chenoweth, A. E., & Carwick, A. (n.d.). *Normal and therapeutic nutrition*. Macmillan Publishing Company.
- 8. Williams, S. R. (1993). *Nutrition, diet therapy* (7th ed.). W.B. Saunders Company.
- 9. Shils, M., & Wohl, R. (n.d.). *Modern nutrition in health and disease*. McGraw-Hill and Ubran, Philadelphia.

Theor	ry :VI T	herapeutic N	Nutrition (T) 80	6212			
Lev el	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks
5	IV	806212	Therapeutic Nutrition (T)	3	3	2 Hrs	External-30 Mark Internal- 20 Mark

- 1. To gain knowledge about diet therapy
- 2. To understand the role of dietician in maintaining good nutritional status.
- 3. Design or formulate different therapeutic diets for various disease conditions

Course Outcome:

At the end of the course, students will

- 1. Manage diet in maintaining good nutritional status.
- 2.Gain knowledge of the principles of diet therapy

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I Unit-II	Diet therapy: objectives of diet therapy, modification of normal diet through consistency: clear liquid diet, full liquid diet and soft diet • Nutrients: high protein and low protein, high calorie and low calorie • Texture: high fibre, low fibre diet Nutritional management in common nutritional problems	7 8	7 8	Demonstration, Class room study • Self-study • Experiential learning • Assignment
	Protein calorie malnutrition, Nutritional anaemia, Goitre, vitamin A deficiency and vitamin D deficiency			designing • Participativ e learning
Unit- III	Nutritional management in common ailments requirement and diet planning - diarrhoea, gastritis ,constipation, typhoid and tuberculosis	8	8	
Unit- IV	Nutritional management in common disorders Requirement and diet planning- Diabetes, Peptic ulcer, Arthrosclerosis, Jaundice	7	7	

- 1. Antia, F. P., & Abraham, P. (2001). *Clinical nutrition and dietetics*. Oxford Publishing Company.
- 2. Srilakshmi, B. (2007). Dietetics. K.K. Gupta for New Age International Pvt. Ltd.
- 3. Benion, M. (n.d.). Clinical nutrition. Harper and Row Publishing.
- 4. Escott-Stump, S., & Mahan, L. K. (2000). *Krause's food, nutrition, and diet therapy* (10th ed.). W.B. Saunders Company.
- 5. Passmore, P., & Eastwood, M. A. (n.d.). Human nutrition and dietetics. Churchill Livingstone.
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- 7. Robinson, C. M. B., Lawlea, W. L., Chenoweth, A. E., & Carwick, A. (n.d.). *Normal and therapeutic nutrition*. Macmillan Publishing Company.
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- 9. Shils, M., & Wohl, R. (n.d.). *Modern nutrition in health and disease*. McGraw-Hill and Ubran, Philadelphia.
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Practical: Major V- Nutrition during Life Cycle (P) 806213

Leve 1	Semester	Course code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Maximum marks
5	IV	806213	Nutrition During Life Cycle (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks

Course Objectives:

- 1) To understand the importance of diet.
- 2) To understand the role of food in health.
- 3) To know about the functions, deficiency and requirements of nutrients in diet

Course Outcome: At the end of the course ,students will

- 1. Gain experience in planning adequate diets for different age groups and for different income groups
- 2. Assess nutrition issues and support to promote the health

-List of Practical in Nutrition during life cycle (P)

1	Introduction to practical outline use of food value
2	Planning and preparation of diet for pregnant women and lactating women
3	Planning and preparation of diet for infancy - 0to3 months, 3to 6 months and 6 to 12 months
4	Planning and preparation of diet for childhood and adolescent
5	Planning and preparation of diet for adulthood- sedentary ;middle and heavy activity and old age

Practical: Major V - Therapeutic Nutrition (P) 806214

Level	Semester	Course code	Course Name	Credits	Teaching Hours/week	Exam Duration	Maximum marks
5	IV	806214	Therapeutic Nutrition (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks

Course Objectives:

- 1. Develop skill to plan and prepare therapeutic diets for prevention of disease conditions
- 2. Design or formulate different therapeutic diets for various disease conditions

Course Outcome: At the end of the course ,students will

- 1. Understand the role of dietician in maintaining good nutritional status.
- 2 .Gain knowledge of the principles of diet therapy
- 3. Design or formulate different therapeutic diets for various disease conditions

-List of Practical in Therapeutic Nutrition 806214

- Planning and preparation of therapeutic modified diets- fluid diet, high protein diet, low protein diet, high fibre diet, low fibre diet, calorie restricted diet
- 2 | Modification of diets in obesity
- 3 Modification of diets in underweight
- 4 Planning and preparation of diet in following conditionsprotein calorie malnutrition, anaemia, goitre, vitamin A deficiency
- Planning and preparation of diet in following ailmentsdiarrhoea- low fibre diet ,constipation -high fibre diet, typhoid and tuberculosis

UG Programme B.Sc. HOME SCIENCE

SECOND YEAR: SEMESTER- IV Level-5 Major: Resource Management

Theory; Major V			Housing and Space M	lanagemen	t (T) 82320	9	
Level	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks
5	IV	823209	Housing and Space Management(T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark

Course Objectives:

- 1) Understand the fundamental concepts of housing and its role in family well-being.
- 2) Train students in efficient space utilization and storage techniques .

 Create awareness about housing maintenance, safety, and eco-friendly practices

Course Outcome:

At the end of the course, students will

- 1. Analyze housing needs based on socio-economic and cultural factors
- 2. Plan functional and well-zoned residential spaces
- 3. Implement space-saving and storage strategies effectively

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	Introduction to Housing	7	7	
	Meaning, and importance of housing Housing standards – Government housing			Demonstration,
	schemes and policies in India ,Role of housing			Class room study
	in family well-being			• Self-study
	Need of housing for family-Protection. Stability,			• Experiential
	Favourable atmosphere Social, Prestige,			learning
	Expression, Entertainment, Rest, Development			 Assignment
	of social qualities ,Storage ,Culture, and			designing
	protection			 Participative
Unit-II	House Planning-	8	8	learning
	Types of house plans			
	Principles of house Planning-Grouping of			
	rooms, Orientation, Circulation, Flexibility, Privacy, Spaciousness. ,Services, Aesthetics			
	Economy, Light and ventilation			
	Leonomy, Eight and Ventration			
	Planning different Residential Spaces-			
	Living Room, Dining Room, Bedroom			
	Kitchen, Store Room, Toilet, Passage, Staircase			
Unit-	Planning of Residential Spaces	8	8	
III	Principles of planning residential units			
	Minimum space requirements for different			
	rooms Types of housing independent enertments			
	Types of housing – independent, apartments, row houses			
	Zoning and flexibility in layout design			
	Zoming and nexionity in layout design			1

Unit-IV	Housing Maintenance and Safety	7	7	
	Basic maintenance of building structure and			
	services (electrical, plumbing, sanitation)			
	Common household repairs and remedies			
	Safety considerations in housing – fire,			
	electricity, gas, children, and elderly.			
	Sustainable and eco-friendly practices in			
	housing			
	Waste management and hygiene in housing			

- 1. Goldstein, S., & Goldstein, V. (n.d.). Art in everyday life.
- 2. Rutt, A. (n.d.). Home furnishing.
- 3. Deshpande, R. S. (n.d.). Build your own home. United Book Co.
- 4. Deshpande, R. S. (n.d.). Modern ideal home for India. United Book Co.
- 5. Bhatt, P. D., & Goyenka, S. (n.d.). Foundation of art and design. S. Lakhani Book Depo.
- 6. Faulkner, W. (n.d.). Inside today's home.
- 7. Statet, (n.d.). *Introduction to home furnishing*. Macmillan.
- 8. Agrawal, S. C. (n.d.). Interior decoration. J.C. Kapoor & Dhanpath & Sons.

Theory:	VI Home	Appliances (T)	823210				
Level	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duratio n	Max Marks
5	IV	823210	Home Appliances (T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark

Course Objectives:

- 1.To understand the function and classification of various home appliances
- 2. To identify components and basic principles of common home appliances
- 3.To develop skills in use and maintenance of home appliances

Course Outcome: At the end of the course, students will

- 1.Recognize base materials, finishes, and insulating materials used in the construction of household Equipment
- 2. Analyse principles underlying the operation, use, care, and storage of household equipment.
- 3 Choose criteria for the selection and buying of appropriate equipment for the home and suitable material for functionality.

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	Materials used for household appliances Importance of learning household appliances Material used for household equipment. Base materials: Aluminium, Iron, Steel, Copper, Brass, Glassware, Plastic & Potteries Finishes: Mechanical and Applied Insulating, materials: Mica, Fiberglass, Puff, Mineral, wool, Rock wool, Plastic, foam, Rubber, etc.	7	7	Demonstration, Class room study
Unit-II	Selection, use, care, and maintenance of various appliances Electrical and non– electrical appliances Classification of household equipment in terms of-Portable and Non-Portable Electrical-Motor driven and heating Food-related-(cooking, cleaning, serving, preparation)	8	8	

Unit-III	Kitchen Appliances:	8	8
	Refrigerators – Freezer, Ovens (Electric, Gas,		
	Microwave) Cooktops (Electric, Gas -		
	Dishwashers - Food Processors - Blenders,		
	Coffee Makers, Toasters, Rice Cookers, Mixers,		
	Juicers		
	Laundry Appliances: Washing Machine, Dryers,		
	Irons		
	Cleaning Appliances: Vacuum Cleaners, Carpet		
	Cleaners, Air Purifiers		
Unit-IV	Heating and Cooling Appliances: Air	7	7
	Conditioners, Ceiling Fans, Space Heaters		
	Entertainment Appliances: - Televisions, Home		
	Theatre Systems, DVD, Sound Systems		
	Personal Care Appliances: Hair Dryers, Hair		
	Straighteners/Curlers		
	Miscellaneous Appliances: Water Heaters, Water		
	Purifier, Sewing Machines, Home Security		
	Systems		

- 1. Bhargava, S. C. (n.d.). Household electricity and appliances. BS Publications / BSP Books.
- 2. Adams, J. T. (1980). Home appliances: Selection, use, and repair (Hardcover). Import.
- 3. Jain, S. K., & Aggarwal, A. (n.d.). *Electrical home appliances with electric wiring* (in Hindi). Bhartiya Technical Publications (India).
- 4. Theraja, B. L. (n.d.). A textbook on electrical technology. S. Chand & Co.
- 5. Theraja, A. K. (n.d.). A textbook on electrical technology.
- 6. Say, M. G. (n.d.). Performance and design of AC machines. ELBS Ed.
- 7. (n.d.). Handbook of repair & maintenance of domestic electronics appliances. BPB Publications.
- 8. Bali, S. P. (n.d.). Consumer electronics. Pearson.
- 9. Anwer, K. P. (n.d.). *Domestic appliances servicing*. Scholar Institute Publication.

Level	Semester	Course code	Course Name	Credits	Teaching Hours/week	Exam Duratio n	Maximum marks
5	IV	823211	Housing and Space Management (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks

Course Objectives:

- 1) To understand the principles of functional planning in residential layouts
- 2)To plan efficient storage in various rooms of the house
- 3)To observe real-life application of housing and space management concepts

Course Outcome: At the end of the course ,students will

- 1)Prepare a report and suggest improvements in space management and organization
- 2)Assess and critique a house layout based on family needs and efficiency

List of Practical in Housing and Space Management Drawing house plans with Standard Specification Prepare storage plans for kitchen, bedroom, and bathroom using creative and space-saving ideas (e.g., vertical storage, modular storage) Visit a residential apartment or housing colony and observe design, planning, space utilization, and storage practices

Practical: Major VI: Home Appliances (P) 823212

Level	Semester	Course code	Course Name	Credits	Teaching Hours/week	Exam Duratio n	Maximum marks
5	IV	823212	Home Appliances (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks

Course Objectives:

- 1) To identify and demonstrate the use of common home appliances
- 2)To practice routine cleaning and basic maintenance of appliances
- 3)To compare and evaluate brands, models, and energy ratings of appliances

Course Outcome: At the end of the course, students will .

- 1) Repair and maintenance of the basic electrical appliances.
- 2. Identification of protective devices.
- 3 Able to do domestic wiring and maintenance

List of Practical in Home Appliances (P) 823212

1	Market survey of household equipments- identify and list down various base materials
	Write merits and demerits
2	Community survey of various household equipment used in terms of design, selection, cost, usage,
	care and maintenance, time and energy saving value, storage, quality and their brands or
	manufacturers
3	Replacement of damaged switches, MCB, regulator, and lighting points i.e. holder, choke, starters,
	water coolers, and their pump & motor
4	Basic maintenance and repair of Sewing Machine
5	Maintenance of electrical equipment like- iron, induction plate and cooker

Syllabus Major Discipline/Subject-. **Human Development**

UG Programme B.Sc. HOME SCIENCE

SECOND YEAR: SEMESTER- IV Level-5

Major \	Major V: Early Childhood Care and Education (T) 827208								
Level	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks		
5	IV	827208	Early Childhood Care and Education (T)	3	3	2 Hrs	External-30 Mark Internal- 20 Mark		

Course Objectives:

- 1.To enhance knowledge and skills for planning program and its execution in ECE centres
- 2. To understand the significance of inclusive ECCE
- 3. To relate the involvement of parents and community in ECE program

Course Outcome:

At the end of the course, students will

- 1. Gain knowledge and skills to support children's holistic development
- 2. Understand the preschool programme structure of India

3. Be prepared for careers in early childhood settings.

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	Early Childhood Education – Meaning, characteristics and significance of early childhood education • History of its evolution, abroad and in India • Types of preschool programmes in India: Balwadi, anganwdi, nursery, kindergarten, montesory • National ECCE policy 2020	7	7	Demonstration, Class room study
Unit- II	 Significance of Play way method in ECE Theory of play, Development of play Stages Importance of play Steps and types of program planning, 	8	8	learning
Unit- III	Developing key characters in children: Empathy, Adaptation, Boldness, Creativity, Diligence, Patience, Responsibility, Self-reliance, Resilience, Resourcefulness, Positive Self-esteem, Integrity, Humility, Tolerance, punctuality etc. • Role, qualities and responsibilities of an early childhood personnel • Involvement of parents and community in ECCE	7	7	

Unit-	Observation and recording of activities in ECE	8	8	
IV	centre			
	 Developing and conducting activities to promote all round development Preparation of suitable creative/innovative teaching learning material used for preschool children Application of theories of classroom teaching, different methods of evaluating performance and interpretation 			

- 1. Catherine E. Snow and Susan B. Van Hemel, eds.; Early Childhood Assessment: Why, What, and How by the National Research Council. The National Academies Press, 2008.
- 2. Early chidhood Care and Education (ecce): Foundations of Learning NEP, 2020, Department of Elementary Education, NCERT, New Delhi
- 3. Early Childhood Care and Education, Senior Secondary Course, 376, National Institute of Open Schooling ISO9001:2000 Certified (An autonomous organisation under MHRD, Govt. of India) A-24-25, Institutional Area, Sector-62, NOIDA-201309 (U.P.)
- 4. Website: www.nios.ac.in, Toll Free No: 18001809393
- 5. Eliason, C. and Jenkins, L. (1990). A Practicum Guide to Early Childhood Curriculum, 4th edition, London: Merrill Publishing Company
- 6. Grewal, J.C. (2000). Methods and Materials of Nursery Education, 4th edition revised, Delhi: Doaba House, Book Sellers and Publishers
- 7. Grewal, J.S. (1984). Early Childhood Education, Foundations and Practice, Agra: National Psychological Corporation, Modern Printers.
- 8. Human development and Family studies, Unit III, NCERT, New Delhi
- 9. http://ncert.nic.in/textbook/pdf/lehe107.pdf.
- 10. Kostelnik, M.J., Soderman, A.K., and Whiren, A.P. (2007). Developmentally Appropriate Curriculum, Best Practices in Early Childhood Education, 4 th Edition (pp. 13-29). New
- 11. Jersy: PEARSON, Merrill Printice Hall.
- 12. Mohanty, J. and Mohanty, B. (2000). Early Childhood Care and Education, New Delhi: Deep and Deep Publications Pvt. Ltd.
- 13. National early childhood care and education (ecce) Curriculum framework, ministry of Women and child development.
- 14. Programmes, http://ecoursesonline.iasri.res.in/course/index.php?categoryid=100

Theor	Theory: VI Families And Communities (T)			827209			
Level	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks
5	IV	827209	Family and Communities (T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark

- 1. To foster understanding of diverse structures and roles of family
- 2. To emphasize the importance of social units in individual development and societal well-being
- 3. To understand the social changes in family

Course Outcome:

At the end of the course, students will

- 1. Understand the complexities of families and communities
- 2. Appreciate diverse perspectives of family structures
- 3. Apply knowledge to support individuals and families in various settings

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	Family Definition, functions	7	7	Demonstration, Class room study • Self-study • Experiential
Unit-II	 Dimensions of family Society and culture, cultural stereotypes Customs, belief and folklore in everyday life 	8	8	 learning Assignment designing Participative learning
Unit-III	 Family Life Cycle Stages of Family life cycle Developmental tasks of each stage 	8	8	
Unit-IV	 Social changes in Family Industrialization, Urbanization and Modernization Social mobility and social change Contemporary issues- Family Violence, Child maltreatment, Divorce 	7	7	

- 1. Abhraham, M. F. (2006). Contemporary Sociology: An introduction to concepts and theories: New York: Oxford University Press.
- 2. Beattie, J. (1964). Other cultures. Cohen and West.
- 3. Das, V. (Ed.) (2003) The Oxford companion to sociology and social anthropology: volume 1 and 2.New Delhi: Oxford University Press.
- 4. Johnson, M.H. (2001). Sociology: A systematic introduction. New Delhi: Allied Publishers Limited.
- 5. Rawat, H.K. (2007). Sociolgy: Basic concepts. New Delhi: Rawat Publications.

Practio	Practical: Major V Early Childhood Care & Education (P) 827210									
Level	Sem	Cours	Course	Credits	Teaching	Exam	Maximum			
		e code	Name		Hours/	Duratio	marks			
					Week	n				
5	IV	827210	Early	1	2	2Hrs	External-25			
			Childhood Care				Marks			
			and Education				Internal- 25			
			(P)				Marks			

- 1. To facilitate activities that promotes gross and fine motor skills, coordination, and healthy habits.
- 2. To learn to develop playful activities for child development
- 3. To understand the importance of creating a safe and supportive environment for children

Course Outcome: At the end of the course, students will

1. Create stimulating learning environment for children

2. Develop activities that promote language development, listening skills, and pre-reading skills

-List of Practical in Early Childhood Care & Education (P)

- 1 To identify appropriate features of physical, social environments that will promote all round development in young children
- 2 Identify, plan and record activities and methods of playful interactions to foster development in children -birth to two years
- Identify, plan and record activities and methods of playful interactions to foster development in children- Two to six years
- 4 Workshops in any two of the following
 - Understanding childhood nutrition and health
 - Developing work sheets to teach concepts
 - Enhancing social and language skills
 - Music, movement and drama for children

Practical Major VI: Families & Communities (P) 827211

Leve l	Semester	Course code	Course Name	Credits	Teachin g Hours/w eek	Exam Duration	Maximum marks
5	IV	827211	Families and Communities (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks

Course Objectives:

- 1. To foster understanding of family dynamics
- 2. To understand community involvement and social realities in development
- 3. To equip individuals with skills and knowledge for effective participation in both

Course Outcome: At the end of the course ,students will

- 1.Develop cooperation and respect skills
- 2. Explore different types of families
- 3. Think critically and reflect on their own experiences

-List	t of Practical in Families & Communities.
1	Seminar and Discussion
2	Organize family activities to strengthen family bonds
3	Visit to Family Welfare organization
4	Visit to Family court
5	Resource file to be maintained related to family relationship

Syllabus

Major Discipline/Subject-. Textile and Clothing

UG Programme

B.Sc. HOME SCIENCE

SECOND YEAR: SEMESTER- IV Level-5

Theory	Theory; Major V Fundamentals of Clothing Construction(T) 831210								
Level	Sem	Course Code	Course Name	Credits	Teaching Hours/Week	Exam Duration	Max Marks		
5	IV	831210	Fundamentals of Clothing Construction (T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark		

Course Objectives:

- 1. To study the Anthropometry for garment construction
- 2. To gain knowledge in pattern making
- 3. To understand the garment details for clothing construction

Course Outcome:

At the end of the course, students will

- 1. Know the clothing construction basics
- 2. Understand darts and its manipulation for fitting and designing
- 3. Learn the application of garment details for clothing construction

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	Clothing construction	7	7	
	 Anthropometry (Men, Women and Child's body) Importance and method of taking body measurement Fabric preparation- Fabric grain, preparatory steps (preshrinking, straightening, truing) Pattern layout, pinning, marking and cutting 			Demonstration, Class room study

Unit-	Importance of pattern	8	8	
П	 Methods of making patterns-Draping, Drafting , Flat pattern (application, principles and limitations) Pattern making terms and symbols 			
Unit- III	Darts: types, functions, darts manipulation • Design and Fit-Fit area, fitting guidelines, fitting procedure	7	7	
Unit- IV	Construction details- Introduction and types of Seams, Tucks and Pleats, Neck line, Collars, Sleeves, Plackets, Pockets	8	8	

- 1. Goldstain, S. (n.d.). Art in everyday life. McMillan Co.
- 2. Gupta, S., Garg, N., & Sai, R. (n.d.). Textbook of clothing and textiles. Kalyani Publishers.
- 3. Devdas, R. P. (n.d.). Textbook of home science.
- 4. Mullick, P. (n.d.). Garment construction skills. Kalyani Publishers.

Theory	Theory: Major VI Traditional Textiles (T) 831211										
Level	Sem	Course Code	Course Name	Credits	Teaching Hours/Week	Exam Duration	Max Marks				
5	IV	831211	Traditional Textiles (T)	3	3	2 Hrs	External-30 Mark Internal- 20 Mark				

Course Objectives:

- 1. To learn the characteristic features/designs of the traditional textiles of India
- 2. To understand the rich heritage of Indian traditional textiles
- 3. To develop an understanding of the techniques of traditional embroideries, prints and woven designs

Course Outcome:

At the end of the course, students will

- 1. Classify and understand the categories of traditional textiles of India
- 2.Preserve and use traditional Indian textiles for sustainable life style

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit- I	 Indian traditional textiles Origin and importance. Socioeconomic significance Dyed textiles Tie and dye of Gujarat, Rajasthan, Tamilnadu Ikkat of Gujrat, Orisa, Pochampalli 	7	7	Demonstration, Class room study • Self-study • Experiential learning
Unit- II	Painted and printed textiles- Kalamkari, Dabu printing, Madhubani painting, Pichhvai, Ajrakprinting,etc	8	8	Assignment designingParticipative learning
Unit -III	Woven textiles- Dacca Mulmul, Chanderi ,Paithani, Pitambari, Banarasi brocade, Himru, Amru ,Balucharbuttedar, etc.		8	Carming
Unit -IV	Regional embroidery- Punjab, Kashmir, Uttar Pradesh, Karnataka, Gujarat, Rajasthan, Himachal Pradesh, West Bengal, Bihar, etc	7	7	

- 1. Ministry of Textiles, Government of India. (n.d.). A compendium of Indian handicrafts and handlooms covered under geographical indications (GI). New Delhi.
- 2. Bhatnagar, P. (2004). *Traditional Indian costumes and textiles*. Abhishek Publications.
- 3. Bhatnagar, P. (2005). Decorative design history in Indian textiles and costumes. Abhishek Publications.
- 4. Bhatnagar, P. (2006). Traditional Indian costumes and textiles. Abhishek Publications.
- 5. Chisti, R. K. (2013). Sari tradition and beyond. Roli Books Pvt. Ltd.
- 6. Gillow, J., & Barnard, N. (2014). Indian textiles (1st ed.). Thames & Hudson.
- 7. Gosh, G., & Shukla, G. (2014). Ikat textiles of India. A.P.H. Publishing.
- 8. Karolia, A. (2019). *Traditional Indian handcrafted textiles: History, techniques, processes, design* (Vol. I & II, 1st ed.). Niyogi Books Pvt. Ltd.
- 9. Mehta, R. J. (1970). Masterpieces of Indian textiles. D. B. Taraporevale Sons and Co. Pvt. Ltd.
- 10. Treasures of Indian textiles. (1980). Calico Museum Ahmedabad, Marg Publication.

Practio	Practical: Major V Fundamentals of Clothing Construction (P) 831212									
Level	Semester	Course code	Course Name	Credits	Teaching Hours/ week	Exam Duration	Maximu m marks			
5	IV	831212	Fundamentals of Clothing Construction (P)	1	2	2Hrs	External- 25 Marks Internal- 25 Marks			

- 1. To learn basic sewing techniques
- 2. To understand types and Application of Trims
- 3. To handle and maintain sewing tools and machine

Course Outcome: At the end of the course ,students will

- 1. Apply hand and machine sewing techniques
- **2.** Apply and use various Trims

-List of Practical in Fundamentals of Clothing Construction (P)

- 1. Introduction to pattern cutting tools, sewing machine and care
- 2. Understanding and developing the basic hand and machine sewing techniques—Machine exercises, clipping, notching, stay stitching, under stitching, hemming, basting, piping, trimming, mitered corner, gathering, shirring and applying cross way strips, etc
 - 4. Applying trims for eg. Frills, fringes and piping, etc.

Praction	Practical Major VI :Traditional Textiles (P) 831213										
Level	Semester	Course code	Course Name	Credits	Teaching Hours/week	Exam Duration	Maximum marks				
5	IV	831213	Traditional Textiles (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks				

Course Objectives:

- 1.To develop the skill of identifying Indian traditional textiles
- 2. To Classify traditional textiles
- 3. To design products using traditional textiles

Course Outcome: At the end of the course, students will

- 1. Identify and categories traditional textiles of India
- 2.Design and contemporise traditional textiles for various end use

-List	t of Practical in Traditional Textiles
1	Portfolio development of the traditional textiles of India
	Woven textiles
	Painted and Printed textiles
	Embroidered textiles
2	Preparation of samples of any two traditional textiles and its application for value added products

${\bf Syllabus} \\ {\bf Major\ Discipline/Subject-.\ Communication\ and\ Extension} \\$

UG Programme B.Sc. HOME SCIENCE

SECOND YEAR: SEMESTER- IV Level-5

Theor	Theory; Major V Extension work and Communication- I (T) 802208										
Lev el	Se m	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks				
5	IV	802208	Extension work and Communication- I (T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark				

Course Objectives:

- 1. To understand the importance of communication for extension
- 2. To develop skills in communication
- 3. To understand feedback for effective results

Course Outcome:

At the end of the course, students will

- 1. Be equipped with the skills to effectively share knowledge and empower communities
- 2. Clearly and concisely convey information, ensuring that messages are understood and acted upon

Unit	Content	Hrs	Weight age of Marks Allotted	Incorporation of Pedagogy
Unit-I	Communication & Extension	7	7	Demonstration, Class room study • Self-study • Experiential
Unit- II	 Communication Process Meaning and Process Elements of Communication Process Models of communication 	8	8	learning • Assignmen t designing

Unit-	Barriers in communication Process	7	7	 Participative
III	Meaning			learning
	 Types of barriers and their solution 			
Unit-	Feed Back in communication	8	8	
IV	 Need, importance of Feed Back 			
	 Role of Feed Back in communication 			
	 Problems in getting feed Back 			

- 1. Dr.JitendraChauhan, Communication And Extension Management, Publisher: Kushal Publications and Distributors, 2nd Edition, 2016
- 2. B.KuppuSwamy, Communication and social development in India, Sterling publication
- 3. Dahama, O.P and Bhatnagar O.P. (1995). Education and Communication for Development. New Delhi: Oxford and IBH Co

Theo	heory :VI Extension work and Communication II (T) 802209						
Lev el	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks
5	IV	802209	Extension work and Communicati on II (T)	3	3	2 Hrs	External-30 Mark Internal- 20 Mark

Course Objectives:

- 1. To effectively convey information to encourage participation
- 2. To build trust and rapport between extension workers and the target audience
- 3. To learn effective communication strategies for positive change in development

Course Outcome:

At the end of the course, students will

- 1. Develop communication strategies to empower communities
- 2.Create message appropriate to the audience, target and context

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	 Mass communication Meaning, Importance Function of Mass communication Types of Mass Communication 	7	7	Demonstration, Class room study • Self-study • Experiential
Unit-II	Communication strategies	8	8	 learning Assignment designing Participative learning
Unit III	Visual communication Media and Technology	8	8	
Unit IV	 Communication for development Applying communication principles to promote social change Relationship between, Communication, Extension and Development 	7	7	

- 1.Barker, L. (1990). "Communication", New Jersey: Prentice Hall, Inc; 171.
- 2. Devito, J. (1998) Human Communication. New York: Harper & Row.
- 3. Patri and Patri (2002); Essentials of Communication. Greenspan Publications
- 4. Baran, S. (2014) Mass Communication Theory. Wadsworth Publishing
- 5. Stevenson, D. (2002) Understanding Media Studies: Social Theory and Mass Communication, Sage Publications

Practical: Major V- Extension Work and Communication I (P) 802210

Level	Semester	Course code	Course Name	Credits	Teaching Hours/week	Exam Duration	Maximu m marks
5	IV	802210	Extension work and Communic ation- I (P)	1	2	2Hrs	External -25 Marks Internal- 25 Marks

Course Objectives:

- 1. To develop communication skills
- 2. To facilitate dialogue, encourage participation

Course Outcome: At the end of the course ,students will

- 1. Develop confidence to build trust and positive relationships
- 2. Understand ways to get feedback for effective output

-List of Practical in Extension Work and Communication I (P)

1	Activities to develop communication skills (interview, seminar, speech)
2	Organizing role play for extension work
3	Developing feedback for effective extension work

Practical: Major VI - Extension Work and Communication II (P) 802211

Level	Semester	Course code	Course Name	Credits	Teaching Hours/ week	Exam Duration	Maximum marks
5	IV	802211	Extension work and Communication II (P)	1	2	2Hrs	External- 25 Marks Internal- 25 Marks

Course Objectives:

- 1. To develop skills in communication for development
- 2.To use Media and Technology for communication

Course Outcome: At the end of the course ,students will

- 1.Design and use of media and technology for effective communication
- 2. Plan and conduct small group communication

-List of Practical in Extension work and Communication II

1	Developing skills in planning and conducting small group communication
2	Review of media on selected issues
3	Design and use of graphic media for extension

AEC: IKS Indian knowledge system and traditions for life skill (T) (838203) is common for all major subjects

Level	Sem	Course Code	Course Name	Credits	Teaching Hours/week	Exam Duration	Max Marks
.5	IV	838203	IKS (T) Indian Knowledge System and Traditions for Life Skill (T)	1	2	2Hrs	External-30 Mark Internal- 20 Mark

Course Objectives:

- 1. To understand traditional Indigenous knowledge systems,
- 2. To integrate the knowledge to address contemporary and emerging life skills
- 3. To preserve and promote India's intellectual and cultural heritage

Course Outcome:

At the end of the course, students will

- 1. Develop an increased cultural awareness
- 2. Follow a sustainable and holistic living
- 3. Find solutions to real situations.

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	Indigenous knowledge systems in * Resource Management * Food and Nutrition	7	7	Demonstration, Class room study, Self-study, Experiential learning,
Unit-II	Indigenous knowledge systems in * Human Development *Textile and Clothing * Communication and Extension	8	8	Assignment designing, Participative learning

- 1. Jha, A. (n.d.). Traditional knowledge system in India.
- 2. Mishra, S., Behera, S. K., & Bhui, S. (n.d.). *Indigenous knowledge system: Traditions and transformations*.
- 3. Ministry of Education. (n.d.). Indian knowledge systems. Government of India.
- 4. Iter, U. (n.d.). Indian knowledge systems (IKS): A family and community sciences perspective.
- 5. Pati, R. (n.d.). Indigenous food and nutrition system.
- 6. Pillai, J. (n.d.). The Indian textile: An insight into the rich history and diversity of Indian textile traditions.

Choose any one of the following Minor stream from the table given below excluding the stream of the ${\bf Major}$

(Resource Management / Food Science and Nutrition / Human Development / Textile & Clothing / Communication & Extension)

Semester IV

Sr. No	Vertical No	NEP Vertical Type	Resource Management	Food Science and nutrition	Human Development	Textile & Clothing	Communication & extension
3*	В	Minor (Theory)	Course Code-823213 Colour Concept in Interior(T)	Course Code- 806215 Nutrition Through Life Span (T)	Course Code- 827212 Stages of Life span- II (T)	Course Code-831214 Apparel Designing (T)	Course Code- 802212 Dynamics of Communication and Extension (T)
	В	Minor (practical /laborato ries)	Course Code-823214 Colour Concept in Interior(P)	Course Code- 806216 Nutrition Through Life Span (P)	Course Code- 827213 Stages of Life Span- II (P)	Course Code-83125 Apparel Designing (P)	Course Code- 802213 Dynamics of Communication and Extension (P)
6	В	Minor Elective (Theory)	Course Code-823215 A-Home Decor (T)	Course Code- 806217 A-Dietetics (T)	Course Code- 827214 A-Education for Child Care (T)	Course Code- 831216 A-Basics of Garment Construction (T)	Course Code- 802214 A-Program Planning for Extension (T)
			Course Code-823216 B- Accessories used in Interior (T)	Course Code- 806218 Food Chemistry (T)	Course Code-827215 B- Child Care and Gender Empowerment (T)	Course Code-831217 B-Textile Chemistry (T)	Course Code- 802215 B-Social Entrepreneurship (T)
7*	В	Minor Elective (practical /laborato ries)	Course Code-823217 A-Home Decor (P)	Course Code- 806219 A- Dietetics (P)	Course Code- 827216 A- Education for Child Care (P)	Course Code-831218 A-Basics of Garment Construction (P)	Course Code- 802216 A-Program Planning for Extension (P)
			Course Code-823218 B- Accessories used in Interior (P)	Course Code- 806220 B-Food Chemistry (P)	Course Code- 827217 B-Child Care and Gender Empowerment (P)	Course Code -831219 B-Textile Chemistry (P)	Course Code - 802217 B-Social Entrepreneurship (P)

Minor subjects Syllabus

Food Science and Nutrition

Semester - IV

Theory: Minor IV Nutrition Through life Span (T) 806215									
Lev el	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks		
5	IV	806215	Nutrition Through Life Span (T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark		

Course Objectives:

- .1 To understand the basics of recommending the dietary allowances
- 2. To study the nutritional needs at different stages of life span
- 3. To assess nutritional requirements and nutritional status of an individual

Course Outcome:

At the end of the course, students will

- 1.Understand the basics of recommending the dietary allowances
- 2. Recommend nutritional needs at different stages of life span
- 3. Assess nutritional requirements and nutritional status of an individual

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	Adequate diet and meal planning-Concept, Meaning and importance Factors affecting meal planning –nutritional, socio –cultural, religious, geographic, economic	7	7	 Demonstration Class room study
Unit- II	Nutrition through life cycle Nutrition and diet during pregnancy- importance, requirements, food selection and menu planning Nutrition and diet during lactation- importance, requirements, food selection and diet	8	8	 Experiential learning Assignments Participative learning Regular lectures skill
Unit- III	Nutrition and diet during infancy- importance, requirements, food selection. Breastfeeding, weaning food, artificial feeding Nutrition and diet during preschool, childhood importance, requirements, food selection and diet	7	7	workshops
Unit- IV	Nutrition and diet during adolescent period- importance, , requirement ,food selection and diet Nutrition and diet during adulthood- importance, requirements for different work pattern, food selection and diet according to socio economic level Nutrition during old age- importance, requirements, food selection and diet	8	8	

- 1. Antia, F. P., & Abraham, P. (2001). Clinical nutrition and dietetics. Oxford Publishing Company.
- 2. Srilakshmi, B. (2007). Dietetics. K.K. Gupta for New Age International Pvt. Ltd.
- 3. Benion, M. (n.d.). Clinical nutrition. Harper and Row Publishing.
- 4. Mahan, L. K., & Sylvia Escott-Stump. (2000). *Krause's food, nutrition and diet therapy* (10th ed.). W.B. Saunders Company.
- 5. Passmore, P., & Eastwood, M. A. (n.d.). Human nutrition and dietetics. Churchill Livingstone.
- 6. Begum, R. M. (1989). A textbook of foods, nutrition and dietetics. Wiley Eastern Ltd.

- 7. Robinson, C., Lawlee, M. B., Chenoweth, W. L., & Carwick, A. E. (n.d.). *Normal and therapeutic nutrition*. Macmillan Publishing Company.
- 8. Williams, S. R. (1993). *Nutrition, diet therapy* (7th ed.). W.B. Saunders Company.
- 9. Shils, M., & Goodhart, R. (n.d.). Modern nutrition in health and disease. McGraw-Hill, Ubrman.

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Practical:	Wilnor I V	Nutrition I h	rough Life Span	(P) 806216

Level	Semester	Course code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Maximum marks
5	IV	806216	Nutrition Through Life Span (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks

- 1) To understand the importance of diet.
- 2) To understand the role of food in health.
- 3) To know about the functions, deficiency and requirements of nutrients in diet

Course Outcome: At the end of the course ,students will

1. Gain experience in planning adequate diets for different age groups and for different income groups

2. Assess nutrition issues and support to promote the health

-List of Practical in: Minor IV Nutrition Through Life Span

1	Introduction to practical outline use of food value
2	Planning and preparation of diet for pregnant women and lactating women
3	Planning and preparation of diet for infancy - 0to3 months, 3to 6 months and 6 to 12 months
4	Planning and preparation of diet for childhood and adolescent
5	Planning and preparation of diet for adulthood- sedentary ;middle and heavy activity and old age

	Minor Elective										
Theory	Theory: VI A- Dietetics (T) 806217										
Level	Sem	Course	Course Name	Credits	Teaching	Exam	Max				
		Code			Hours/Week	Duration	Marks				
5	IV	806217	Dietetics (T)	3	3	2Hrs	External-30				
							Mark				
							Internal-				
							20 Mark				

Course Objectives:

- 4. To gain knowledge about diet therapy
- 5. To understand the role of dietician in maintaining good nutritional status.
- 6. Design or formulate different therapeutic diets for various disease conditions

Course Outcome:

At the end of the course, students will

- 1. Manage diet in maintaining good nutritional status.
- 2 .Gain knowledge of the principles of diet therapy

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	Diet therapy: objectives of diet therapy, modification of normal diet through consistency: clear liquid diet, full liquid diet and soft diet Nutrients: high protein and low protein, high calorie and low calorie Texture: high fibre, low fibre diet	7	7	Demonstration, Class room study
Unit-II	Nutritional management in common nutritional problems Protein calorie malnutrition, Nutritional anaemia, Goitre, vitamin A deficiency and vitamin D deficiency	8	8	designing • Participative learning
Unit- III	Nutritional management in common ailments requirement and diet planning - diarrhoea, gastritis ,constipation, typhoid and tuberculosis	8	8	
Unit- IV	Nutritional management in common disorders Requirement and diet planning- Diabetes, Peptic ulcer. Arthrosclerosis, Jaundice.	7	7	

- 1. Antia, F. P., & Abraham, P. (2001). Clinical nutrition and dietetics. Oxford Publishing Company.
- 2. Srilakshmi, B. (2007). Dietetics. Published by K.K. Gupta for New Age International Pvt. Ltd.
- 3. Benion, M. (n.d.). Clinical nutrition. Harper and Row Publishing.
- 4. Mahan, L. K., & Sylvia Escott-Stump. (2000). *Krause's food, nutrition and diet therapy* (10th ed.). W.B. Saunders Company.
- 5. Passmore, P., & Eastwood, M. A. (n.d.). *Human nutrition and dietetics*. Churchill Livingstone.
- 6. Begum, R. M. (1989). A textbook of foods, nutrition and dietetics. Wiley Eastern Ltd.
- 7. Robinson, C., Lawlee, M. B., Chenoweth, W. L., & Carwick, A. E. (n.d.). *Normal and therapeutic nutrition*. Macmillan Publishing Company.
- 8. Williams, S. R. (1993). Nutrition, diet therapy (7th ed.). W.B. Saunders Company.
- 9. Shils, M., & Goodhart, R. (n.d.). Modern nutrition in health and disease. McGraw-Hill.
- 10. National Institute of Nutrition. (2015). Dietary guidelines for Indians: A manual. Hyderabad.

	Minor Elective									
Theor	Theory: VI B: Food Chemistry (T) 806218									
Level	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks			
5	IV	806218	Food Chemistry (T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark			

Course Objectives:

- 1. Understand food composition.
- 2. Understand chemistry of food

Course Outcome: At the end of the course ,students will

- 1. Gain knowledge of food composition.
- 2. Students understood chemistry of food

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	Definition of Food Nutrients: Food Composition - Nutrients: Macro Nutrient, Micro Nutrient Chemistry of Carbohydrates- Monosaccharide, polysaccharides, disaccharides Proteins -Simple proteins, conjugated proteins and derived proteins.	7	7	Demonstration, Class room study • Self-study • Experiential learning
Unit-II	Chemistry of Vitamins: (in brief) Lipids - Simple lipids, compound lipids. Water Soluble Vitamins- Vitamin C, Thiamine, Riboflavin, Niacin, Pyridoxine, Vit.B12, Folic Acid Fat Soluble Vitamins - Vitamin A, Vitamin D, Vitamin E and Vitamin K	8	8	Assignment designingParticipative learning
Unit- III	Chemistry of Minerals: (in brief) Minerals: Calcium, Phosphorous, Sulphur, Potassium, Chlorine, Sodium and Magnesium. Trace Elements: Iron, fluorine, zinc, copper, iodine, chromium and cobalt	8	8	
Unit- IV	Chemistry of non-nutrients: Water-pH, turbidity, hardness, dissolved gases. Fibre.	7	7	

- 1. Potter, N., & Hotchkiss, J. H. (1996). Food science. C.B.S. Publishers and Distributors.
- 2. Duckworth, R. B. (1978). Water retention in foods. Academic Press.
- 3. Peckham, G. G. (1969). Foundations of food preparation. Macmillan Co.
- 4. Fox, B. A., & Cameron, A. G. (1970). *Food science: A chemical approach*. University of London Press.
- 5. Kramer, A., & Twigg, B. A. (1966). Fundamentals of quality control for the food industry. The AVI Publishing Co.
- 6. Gopalan, C., Rama Sastri, B. V., & Balasubramanian, S. C. (2004). *Nutritive value of Indian foods*. National Institute of Nutrition, Indian Council of Medical Research.

Minor Elective Practical: A: Dietetics (P) 806219

Level	Semester	Course code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Maximum marks
5	IV	806219	Dietetics (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks

Course Objectives:

- 1. Develop skill to plan and prepare therapeutic diets for prevention of disease conditions
- 2. Design or formulate different therapeutic diets for various disease conditions

Course Outcome: At the end of the course ,students will

- 1. Understand the role of dietician in maintaining good nutritional status.
- 2 .Gain knowledge of the principles of diet therapy
- 3. Design or formulate different therapeutic diets for various disease conditions

-Lis	t of Practical in Dietetics (P) 806219
1	Planning and preparation of therapeutic modified diets- fluid diet, high protein diet, low protein diet, high fibre diet, low fibre diet, calorie restricted diet
2	Modification of diets in obesity
3	Modification of diets in underweight
4	Planning and preparation of diet in following conditions protein calorie malnutrition, anaemia, goitre, vitamin A deficiency
5	Planning and preparation of diet in following ailments diarrhoea- low fibre diet ,constipation -high fibre diet, typhoid and tuberculosis

Minor Elective Practical B: Food Chemistry (P) 806220

Level	Semester	Course code	Course Name	Credits	Teaching Hours/ week	Exam Duration	Maximum marks
5	IV	806220	Food Chemistry (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks

Course Objectives:

- 1. Understand food composition.
- 2. Understand chemistry of food

Course Outcome: At the end of the course ,students will

1. Understand food composition.

2. Un	derstand chemistry of food
-Lis	t of Practical in Minor Elective B: Food Chemistry (P) 806220
1	Detection of carbohydrates in a given sample - Molish test
2	Estimation of the concentration of reducing sugar -Benedict's Test.
3	Demonstration of breakdown of starch to monosaccharide with Hydrochloric acid.
4	Detection of proteins using colour reactions.
	Burette test
	Xanthoproteic test
	Million's test
5	Detection of fats using-
	Solubility Test
	Emulsification
	Bromine Water Test
	Saponification
6	Detection of iodine from salt
7	Estimation of Vitamin C in a given sample
8	Estimation of Iron in a given sample.

SECOND YEAR: SEMESTER IV Level- 5 Minor subjects Syllabus

Semester – IV Resource Management

Minor IV Colour Concept in Interior (Theory) 823213							
Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks		
823213	Colour Concept in Interior- (T)	3	3	2Hrs	50		

Course Objective:

- 1) The role of the colour wheel in interior design
- 2) Impact of colours in various interior spaces
- 3) Implement appropriate colour schemes based on lighting, room function, and user needs

Course Outcome: At the end. of the course, students will be able to:

- 1) Understand the elements of hue, value, chroma, and create accurate colour wheels and charts.
- 2)Analyze the psychological impact of colours in interior environments
- 3) Use different colour combinations (monochromatic, complementary, analogous, etc.) to suit the mood and function of various rooms

Unit	Contents	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit 1	Introduction to Colour Theory Definition and significance of colour in interior design Historical overview of colour use in interiors, Components of colour: Hue, Value, intensity The colour wheel – Warm and cool colours Tint, tone, and shade	7	7	 Demonstration Class room study Experiential learning Assignment
Unit II	Colour Schemes and Psychology Types of colour schemes: Colour psychology: Emotional and psychological impact of colours Colour preferences and cultural symbolism Colour and mood in interiors (living room, bedroom, workspace, etc.)	8	8	 Participative learning Regular lectures Skill workshops
Unit III	Application of Colour in Interior Spaces Principles of colour application in interior design Factors influencing colour selection Natural light, artificial lighting, space size, function, Colour planning for residential, commercial, and institutional spaces	7	7	
Unit 1V	Tools, Trends, and Techniques Use of colour swatches, paint charts, digital tools (e.g., Pantone, Adobe Color) Introduction to colour forecasting and trends Sustainable and eco-friendly colour choices	8	8	

- 1. Faulkner, R. and Faulkner's. (1987), Inside Today's Home, Rine hart publishing company, New York.
- 2. Judy. (1994), How to see, how to paint it, Harpencolling publishers, London.
- 3. Pratap R.M (1988) Interior Design Principles and practice, Standard publishers" distribution, Delhi.
- 4. Seetharam, P and Pannu, P. Interior Design and Decoration, CBS publishers and distributors, New Delhi
- 5. Stewart and Sally. W, (1997), The Complete Home Decorator, Annes publishers Ltd., New York
- 6. Faulkner, R. and Faulkner's. (1987), Inside Today "s Home, Rine hart publishing company, New York.
- 7. Judy. (1994), How to see, how to paint it, Harpencolling publishers, London.
- 8. Pratap R.M (1988) Interior Design Principles and practice, Standard publishers" distribution, Delhi.
- 9. Seetharam, P and Pannu, P. Interior Design and Decoration, CBS publishers and distributors, New Delhi.
- 10. Stewart and Sally. W, (1997), The Complete Home Decorator, Annes publishers Ltd., New York

Practic	cal: Minor l	IV (P) Colou	r Concept in In	823214			
Level	Semester	Course code	Course Name	Credits	Teaching Hours/week	Exam Duration	Maximum Marks
5	IV	823214	Colour Concept in Interior	1	2	2Hrs	External- 25 Marks Internal- 25 Marks

Course Objectives:

- 1) To understand the fundamentals of the colour wheel and colour theory
- 2) To apply various colour schemes in interiors
- 3) To visually communicate interior concepts using colour and material inspirations

Course Outcome: At the end of the course ,students will

- 1) Accurately represent colour relationships and develop a base for using colour schemes
- 2) Identify and use appropriate colour schemes based on space function and mood.3)earn to use colours effectively to evoke a specific mood or style

List of Practical in Colour Concept in Interior

- 1.Create a 12-part colour wheel showing primary, secondary, and tertiary colors using paints
- 2. Create colour boards for various schemes: monochromatic, complementary, analogous, triadic, and split-complementary using colour chips and images.
- 3. Select and present a complete colour scheme (walls, furniture, fabrics) for a bedroom
- 4. Develop a colour schemes for living, kitchen, and bathroom

Minor IV A- Home Décor (Theory) 823215							
Course Code	Course Name	Credits	Teaching Hours/week	Exam Duration	Max Marks		
823215	Home Décor (Theory)	3	3	2Hrs	50		

Course Objective:

- 1)To introduce the fundamentals of home décor
- 2) To familiarize with décor elements and accessories
- 3) Enhance ability to plan and style living spaces thematically

Course Outcome: At the end. of the course, students will be able to:

- 1)Understand the principles and scope of home décor
- 2)Identify and use various home décor elements effectively
- 3)Design thematic and personalized décor for different spaces

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit 1	Introduction to Home Décor- Meaning and scope of home décor, Importance of aesthetics, functionality, and personal expression Elements and principles of design in décor Difference between home décor and interior design	7	7	 Demonstration Class room study Experiential learning Assignments Participative learning Regular
Unit II	Décor Elements and Accessories Types and uses of décor accessories: Wall art, paintings, sculptures, indoor plants, rugs, vases, etc. Role of textiles in décor: curtains, cushions, upholstery, carpets, Role of mirrors, clocks, lighting, and decorative objects Indian traditional vs. modern décor styles	8	8	lectures • skill workshops
Unit III	Space Styling and Thematic Décor Styling techniques for various areas of the home: Living room, bedroom, kitchen, bathroom, foyer Thematic décor: Traditional Indian And Types Use of focal points, layering, and zoning in space styling Seasonal and festive décor (e.g., Diwali, Christmas, etc.)	7	7	
Unit 1V	DIY and Sustainable Décor Practices Do-It-Yourself (DIY) décor ideas and techniques Use of recycled and up cycled materials for décor, Sustainable and eco-friendly decorating choices, Budget planning for home décor projects	8	8	

References -

- 1. Mullick, P. (n.d.). Home management and interior decoration. Kalyani Publishers.
- 2. Sethi, P. K. (n.d.). *Interior design: Principles and practice*. Standard Publishers Distributors.
- 3. Chakrabarti, S. (n.d.). Art and science of home management. Orient BlackSwan.
- 4. Srinivasan, R. (n.d.). Textbook of interior decoration. Anmol Publications.
- 5. Leighton, A. W. (1997). *The encyclopaedia of home furnishing techniques*. Headline Book Publishing Limited.
- 6. Clifton-Mogg, C. (1997). The curtain design source book. Ryland Peters and Small.
- 7. Bullis, J. (1996). Quick and easy soft furnishings. Readers Digest Association Limited.
- 8. Britain, J. (1986). Home furnishings. Little Brown and Company.
- 9. Lawrence, M. (2001). The complete decorating and home improvement book. Hermes House.

Minor IV B- (Theory) Accessories Used in Interior 823216							
Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks		
823216	823216 Accessories Used in 3 3 2Hrs 50 Interior (T)						

- 1)Introduce students to the concept and significance of interior accessories
- 2) Familiarize students with different types of accessories used in interior
- 3) Develop styling and arrangement skills for different home and commercial spaces

Course Outcome: At the end. of the course, students will be able to:

- 1)Identify and classify various types of interior accessories
- 2)Apply principles of design in the selection and arrangement of accessories
- 3)Create aesthetically pleasing and theme-based interior setups

Unit	Content	Hrs	Weightage of Marks	Incorporation of Pedagogy		
		<u> </u>	Allotted			
Unit 1	Introduction to Interior Accessories Definition and importance of accessories in interior design, Classification of accessories: functional vs. decorative, Role of accessories in enhancing aesthetics and ambience, Factors to consider while selecting accessories: style, theme, budget, scale	7	7	 Demonstration Class room study Experiential learning Assignments Participative learning Regular lectures skill workshops 		
Unit II	Types of Interior Accessories Wall accessories: Wall art, clocks, mirrors, wall panels, Table top accessories: Vases, candles, photo frames, bowls, sculptures, Soft accessories: Cushions, throws, rugs, curtains, table linens. Green accessories: Indoor plants, terrariums, vertical gardens Lighting accessories: Lamps, fairy lights, pendant lights	8	8			
Unit III	Placement and Arrangement Techniques- Principles of accessory arrangement (balance, rhythm, scale, harmony)Focal point creation and accenting with accessories, Zoning spaces using décor elements. Styling techniques for: Living room, bedroom, kitchen, bathroom, entryway Minimalist, maximalist, and theme-based arrangement styles	7	7			
Unit 1V	DIY & Sustainable Accessories Introduction to Do-It-Yourself (DIY) accessories Upcycling and eco-friendly accessory creation, Culturally inspired and traditional Indian décor items, Planning, budgeting, and sourcing accessories Seasonal and festive décor ideas.	8	8			

- 1. Mullick, P. (n.d.). Home management and interior decoration. Kalyani Publishers.
- 2. Srinivasan, R. (n.d.). Interior design and decoration. Anmol Publications.
- 3. Chakrabarti, S. (n.d.). Art and science of home management. Orient BlackSwan.

- 4. Leighton, A. W. (1997). *The encyclopaedia of home furnishing techniques*. Headline Book Publishing Limited.
- 5. Clifton-Mogg, C. (1997). The curtain design source book. Ryland Peters and Small.
- 6. Bullis, J. (1996). Quick and easy soft furnishings. Reader's Digest Association Limited.
- 7. Britain, J. (1986). *Home furnishings*. Little, Brown and Company.
- 8. Lawrence, M. (2001). The complete decorating and home improvement book. Hermes House.

Praction	Practical: Major IV A- Home Decor 823217 (P)								
Level	Semester	Course code	Course Name	Credits	Teaching Hours/week	Exam Duration	Maximum marks		
5	IV	823217	Home Decor	1	2	2Hrs	External-25 Marks Internal- 25 Marks		

- 1. Promote creativity and sustainability through handmade decorative items.
- 2. To learn placement and arrangement of decorative elements for visual balance.
- 3. To understand fabric coordination and soft furnishings in home décor.

Course Outcome: At the end of the course ,students will

- 1)Demonstrate the ability to select and classify accessories for different interior spaces
- 2) Apply design principles to arrange accessories effectively
- 3) Showcase balance, harmony, rhythm, and scale while placing accessories in residential or commercial settings.

List of Practical in Home Decor

- 1. Create one functional DIY décor item (e.g., wall hanging, lamp, planter) using recycled or eco-friendly materials.
- 2. Select and present a combination of fabric samples for curtains, cushions, and sofa covers for a specific room.
- 3. Style a corner or table top using items like candles, vases, photo frames, and textiles.
- 4. Choose matching fabrics for curtains, cushions, throws, and rugs for a given theme and display them in a sample board.

Practio	cal: Major I	V-B	Accessories Used in Interior (P)			823218	
Level	Semester	Course code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Maximum marks
5	Ш	823218	Accessories Used in Interior	1	2	2Hrs	External-25 Marks Internal- 25 Marks

Course Objectives:

- 1) Visualize and communicate a décor theme
- 2) Understand the role and placement of wall décor
- 3) Explore indoor plant styling

Course Outcome: At the end of the course ,students will

- 1)Develop mood boards and sample boards to communicate interior accessory concepts
- 2) Apply design elements such as colour, texture, and theme to create visual planning tools.
- 3)Select appropriate accessories for functional and aesthetic enhancement of spaces

List of Practical in Accessories Used in Interior

- 1. Select and arrange wall accessories (mirrors, clocks, frames) for a simulated space, focusing on focal points and balance
- 2. Choose matching fabrics for curtains, cushions, throws, and rugs for a given theme and display them in a sample board
- 3. Arrange live or artificial plants, terrariums, or vertical gardens in a mock space (window sill, corners, tables)
- 4. Design and make one DIY accessory using waste/recycled material (e.g., candle stand, wall art, fabric organizer)

Minor subjects Syllabus

Human Development

Semester - IV

	Theory: Minor IV Stages of Life Span II (T) 827212							
Le vel	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks	
5	III	827212	Stages of Life Span II (T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark	

Course Objectives:

- 1. To learn the developmental tasks of different stages of adulthood
- 2. To understand the complexities of human development throughout adulthood stage
- 3. To study physical, cognitive, social and emotional changes and to apply this knowledge in various contexts

Course Outcome:

At the end of the course, students will be able to-

- 1. Use their knowledge of lifespan development to understand and analyse human behaviour and interactions in various contexts.
- 2. Understand how different processes interact to influence development across the lifespan.

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	 Middle Adulthood Developmental tasks of middle adulthood Parenting growing children Changes in Interest 	7	7	Demonstration, Class room study • Self-study • Experiential learning
Unit-II	 Late Adulthood Developmental tasks of middle adulthood Physical and physiological changes and aging Social role in solving the problems of old age people 	8	8	 Assignment designing Participative learning
Unit III	 Adulthood Activities Cognition and creativity: Work, Vocation and leisure Diversity in roles and relationships Social/Cultural perspective on aging 	7	7	
Unit-IV	Issues related to old age Adjustment to physical & mental changes • Problem of old age • Psychological and sociological aspect of aging	8	8	

- 1. Rice. F. P. (1998). Human Development: A lifespan approach. New Jersey: Prentice Hall.
- 2. Rutter, M. and Rutter, M. (1992) Developing Minds. Challenge and continuity across the life span. London: Penguin.
- 3. Santrock, J. W. (2007). A topical approach to life-span development. New Delhi: Tata McGraw-Hill.
- 4. Singh, A. (Ed). 2015. Foundations of Human Development: A life span approach. New Delhi: Orient BlackSwan.

Practical in – Minor IV(P) Stages of Life Span 1I – 827213

Level	Semester	Course code	Course Name	Credits	Teaching Hours/week	Exam Duration	Maximu m marks
5	III	827213	Stages of Life Span II (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks

Course Objectives:

- 1.To learn activities for better parenting
- 2.To learn to deal with old age people

Course Outcome: At the end of the course ,students will

- 1.Understand and develop activities for parents and understand the involvement of self in parent and child relationship
- 1.Develop activities to facilitate development for elderly care

List of Practical in Stages of life span II

- 1. Visit to old age centre or elderly care centre
- 3. Develop and implement activities for parents to strengthen bonds between parents and growing children/ involvement in household chores/develop skills /reduce screen time
- 4. Develop and implement activities for old age to Socializing/ Physical and Mental Well-being/ volunteering for companionship

	Minor Elective Theory: A- Education For Child Care (T) 827214							
Level								
5	IV	827214	A: Education for Child Care (T)	1	2	2Hrs	External-30 Mark Internal- 20 Mark	

- 1. To enhance knowledge and skills for planning program and its execution in ECE centres
- 2. To understand the significance of inclusive ECCE
- 3. To relate the involvement of parents and community

Course Outcome:

At the end of the course, students will

- 1. Gain knowledge and skills to support children's holistic development
- 2. Understand the preschool programme structure of India
- 3. Be prepared for careers in Early Childhood Education programs

Unit	Content	Hr s	Weig htage of Mark s Allotte d	Incorporati onof Pedagogy
Unit-I	Early Childhood Education – Meaning, characteristics and significance of early childhood education • History of its evolution, abroad and in India • Types of pre school programmes in India : Balwadi, anganwdi, nursery, kindergarten, montesory • National ECCE policy 2020	7	7	Demonstratio n, Class room study Self-study, Experiential learning,
Unit-II	 Significance of Play way method in ECE Theory of play, Development of play	8	8	Assignment designing, Participative learning
Unit- III	Developing key characters in children: Empathy, Adaptation, Boldness, Creativity, Diligence, Patience, Responsibility, Self-reliance, Resilience, Resourcefulness, Positive Self-esteem, Integrity, Humility, Tolerance, punctuality etc. • Role, qualities and responsibilities of an early childhood personnel • Involvement of parents and community in ECCE	7	7	

Unit- Observation ar	d recording of activities in ECE centre	8	8	
IV • Develoround • Preparalearnin • Applica	ping and conducting activities to promote all development tion of suitable creative/innovative teaching g material used for preschool children tion of theories of classroom teaching, at methods of evaluating performance and			

- 1. Snow, C. E., & Van Hemel, S. B. (Eds.). (2008). *Early childhood assessment: Why, what, and how.* National Research Council. The National Academies Press.
- 2. National Council of Educational Research and Training. (2020). *Early childhood care and education (ECCE): Foundations of learning (NEP 2020)*. Department of Elementary Education, NCERT.
- 3. National Institute of Open Schooling. (n.d.). *Early childhood care and education: Senior secondary course (Course 376)*. A-24-25, Institutional Area, Sector-62, Noida 201309 (U.P.).
- 4. National Institute of Open Schooling. (n.d.). Retrieved from http://www.nios.ac.in
- 5. Eliason, C., & Jenkins, L. (1990). *A practicum guide to early childhood curriculum* (4th ed.). Merrill Publishing Company.
- 6. Grewal, J. C. (2000). Methods and materials of nursery education (4th rev. ed.). Doaba House.
- 7. Grewal, J. S. (1984). *Early childhood education: Foundations and practice*. National Psychological Corporation.
- 8. National Council of Educational Research and Training. (n.d.). *Human development and family studies, Unit III.* NCERT. Retrieved from http://ncert.nic.in/textbook/pdf/lehe107.pdf
- 9. Kostelnik, M. J., Soderman, A. K., & Whiren, A. P. (2007). *Developmentally appropriate curriculum: Best practices in early childhood education* (4th ed., pp. 13–29). Pearson Merrill Prentice Hall.
- 10. Mohanty, J., & Mohanty, B. (2000). *Early childhood care and education*. Deep & Deep Publications Pvt. Ltd.
- 11. Ministry of Women and Child Development. (n.d.). *National early childhood care and education (ECCE) curriculum framework*.
- 12. Indian Agricultural Statistics Research Institute. (n.d.). *eCourses Online*. Retrieved from http://ecoursesonline.iasri.res.in/course/index.php?categoryid=100

Mine	Minor Elective Theory: B- Child Rights and Gender Empowerment (T) 827215							
Lev el	Se m	Course Code	Course Name	Cred its	Teaching Hours/wee k	Exam Duration	Max Marks	
.5	IV	827215	Chid Rights and Gender Empowerment (T)	1	2	2Hrs	External- 30 Mark Internal - 20 Mark	

Course Objectives:

- 1.To understand and address systemic inequalities
- 2. To promote human rights and create a more just and equitable world for all
- 3. To focus on the unique needs and vulnerabilities of children and women

Course Outcome:

At the end of the course, students will

- 1. Get the necessary foundation to grow and develop their ideas and understanding about child rights and gender equality
- 2. Realise that they should have equal opportunities
- 3. Participate in creating a fair and inclusive world

Unit	Content	Hrs	Weighta ge of Marks Allotted	Incorporati on of Pedagogy
Unit-I	 Understanding Child Rights Meaning of Child Rights and Convention on Child 	7	7	
	Rights			Demonstratio
	 Knowing disadvantage and exclusion in relation to children 			n, Class room study,
	Demographic profile of the child in India			Self-study,
Unit-II	Children in Difficult circumstances	8	8	Experiential
	• Street children,			learning,
	 working children 			Assignment
	 homeless children 			designing,
	Child Abuse			Participative
	Child Trafficking			learning
Unit-III	Conceptualizing Gender	7	7	
	 Defining terms- sex, gender, masculinity, femininity 			
	 Socialisation for gender- gender roles, gender 			
	stereotypes			
	 Patriarchy and social institutions 			
	Perspectives on feminism			
Unit-IV	Gender Empowerment	8	8	
	Demographic profile			
	Issues and concerns related to girls and women in			
	India			
	Media and gender			

- 1. Agarwal, A. &Rao, B.V. (2007). Education of Disabled Children. New Delhi: Eastern Book Corporation.
- 2. Agnes, F. (1999). Law and Gender Inequality: The politics of Women's Rights in India. Oxford University Press.
- 3. Bajpai, A. (2006). Child Rights in India: Law, Policy and Practice. Oxford University Press.
- 4. Kishwar, M. (1999). Off the Beaten Track: Rethinking Gender Justice for Indian Women. New Delhi: Oxford University Press.
- 5. Satyarthi, K. and Zutshi, B. (Ed) (2006). Globalization, Development and Child Rights. New Delhi: Shipra Publication.
- 6. Saikia, N. (2008). Indian women: A socio-legal perspective. New Delhi: Serials Publication.

Minor E	Minor Elective Practical - A – Education For Child Care (P) 827216						
Level	Semester	Course code	Course Name	Credits	Teaching Hours/ week	Exam Duration	Max marks
5	IV	827216	A- Educatio n for Child Care (P)	1	2	2Hr s	External-25 Marks Internal-25 Marks

- 1. To facilitate activities that promotes gross and fine motor skills, coordination, and healthy habits.
- 2. To learn to develop playful activities for child development
- 3. To understand the importance of creating a safe and supportive environment for children

Course Outcome: At the end of the course ,students will

- 1. Create stimulating learning environment for children
- 2. Develop activities that promote language development, listening skills, and pre-reading skills

-List of Practical in Early Childhood Care & Education (P)

- 1 To identify appropriate features of physical, social environments that will promote all round development in young children
- 2 Identify, plan and record activities and methods of playful interactions to foster development in children -birth to two years
- Identify, plan and record activities and methods of playful interactions to foster development in children- Two to six years
- 4 Workshops in any two of the following
 - Understanding childhood nutrition and health
 - Developing work sheets to teach concepts
 - Enhancing social and language skills
 - Music, movement and drama for children

Leve l	Semeste r	Cour se code	Course Name	Credits	Teaching Hours/ week	Exam Duration	Maximum marks
5	IV	827217	Child Rights and Gender Empowerment (P)	1	2	2Hrs	External- Marks Internal- Marks

- 1. To understand children's well-being and development
- 2. To remove the bias against girl children
- 3. To understand gender as it intersects with sexuality, race, ethnicity, religion, class and other critical variables.

Course Outcome: At the end of the course, students will

- 1. Define and Evaluate gender as a social construct.
- 2. Identify the ways gender, power, privilege, and oppression play out across a range of cultures and human experiences.

List of Practical						
1	Understanding child rights and gender in diverse social groups through visits					
2	Interactions with children in difficult circumstances					
3	Understanding gender realities in different social groups					

Minor subjects Syllabus

Textile and Clothing

Semester - IV

Theor	Theory: Minor IV Apparel Designing (T) 831214								
Leve 1	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks		
5	IV	831214	Apparel Designing (T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark		

Course Objectives:

- 1. To understand the basics of design in textile and apparel designing
- 2. To understand the importance of art elements in garment selection

Course Outcome:

At the end of the course, students will

- 1. Apply the elements and principles of design
- 2. Develop skills in garment selection
- 3. Understand basic silhouettes

Unit	Content	Hrs	Weight age of Marks Allotted	Incorporation of Pedagogy
Unit-I	Design-Definition, meaning, Classification of design -Structural and Decorative -Natural, Abstract, Geometric, Stylised, etc Motif, Layout, Repeat in design	7	7	Demonstration, Class room study,
Unit-II	Essentials of design Elements of design- line, colour, texture, space, pattern, shape	8	8	Self-study, Experiential learning, Assignment
Unit-III	Principles of design-balance, rhythm, proportion, harmony, emphasis	7	7	designing, Participative learning
Unit-IV	Basic silhouettes	8	8	

- 1. Sumathi, G. J. (n.d.). *Elements of fashion and apparel design*. New Age International Publishers.
- 2. McKelvey, K. (n.d.). Fashion source book. Blackwell Publishing.
- 3. Mills, J., & Smith, J. K. (n.d.). *Design concept*. Fairchild Publications.
- 4. Rasband, J. (n.d.). Wardrobe strategies for women. Delmar Publishers.
- 5. Jarnow, J. A., Guerreiro, M., & Judelle, B. (n.d.). *Inside fashion business* (4th ed.). Macmillan Publishing Company.

Practical: Minor IV Apparel designing (P) 831215

Level	Semester	Course code	Course Name	Credits	Teaching Hours/week	Exam Duration	Maximum marks
5	IV	831215	Apparel Designing (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks

Course Objectives:

- 1. To apply elements of art for Apparel designing
- 2.To practice sketching and drawing Apparel designing
- 3.To draw various silhouettes

Course Outcome: At the end of the course ,students will

- 1. Apply elements of art for creating illusion in dress
- 2. Develop skills in illustrating various silhouettes

-List of Practical in Apparel designing (P)

Practice principles of illusion dressing :Create different designs for self, using elements of design (Use figure templates)

2 Illustration of Basic silhouettes

	Minor Elective Theory: A- Basics of Garment Construction (T) 831216								
Level	Sem	Course Code	Course Name	Credits	Teaching Hours/ week	Exam Duration	Max Marks		
5	IV	831216	A - Basics of Garment Construction (T)	1	2	2Hrs	External-30 Mark Internal- 20 Mark		

- 1.To study the Anthropometry for garment construction
- 2. To gain knowledge in pattern making
- 3. To understand the garment details for clothing construction

Course Outcome:

At the end of the course, students will

- 1.Know the clothing construction basics
- 2. Understand darts and its manipulation for fitting and designing
- 3. Learn the application of garment details for clothing construction

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporati on of Pedagogy
Unit-I	 Clothing construction Anthropometry (Men, Women and Child's body) Importance and method of taking body measurement Fabric preparation- Fabric grain, preparatory steps (preshrinking, straightening, truing) Pattern layout, pinning, marking and cutting 	7	7	Demonstratio n, Class room study Self-study Experiential
Unit-II	 Importance of pattern Methods of making patterns-Draping, Drafting , Flat pattern (application, principles and limitations) Pattern making terms and symbols 	8	8	learning Assignment designing Participative
Unit-III	Darts: types, functions, darts manipulation • Design and Fit-Fit area, fitting guidelines, fitting procedure	7	7	learning
Unit-IV	Construction details- Introduction and types of Seams, Tucks and Pleats, Neck line, Collars, Sleeves, Plackets, Pockets	8	8	

- 1. Goldstein, H. (n.d.). Art in everyday life. McMillan Co.
- 2. Gupta, S., Garg, N., & Sai, R. (n.d.). Textbook of clothing and textiles. Kalyani Publishers.
- 3. Devdas, R. P. (n.d.). Textbook of home science.
- 4. Mullick, P. (n.d.). Garment construction skills. Kalyani Publishers.

Mino	Minor Elective Theory: B- Textile Chemistry (T)831217									
Lev el	Se m	Course Code	Course Name	Credits	Teaching Hours/week	Exam Duration	Max Marks			
.5	IV	83121 7	Textile Chemistry (T)	1	2	2Hrs	External-30 Mark Internal- 20 Mark			

- 1. To know the materials, reagents, equipment and process of laundry
- 2. To learn the application of Additives in laundry
- 3. To understand various finishing techniques

Course Outcome:

At the end of the course, students will

- 1. Co relate the laundry method for different fabrics
- 2. Be acquainted with the finishing processes used in textile industry

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporatio n of Pedagogy
Unit-I	Garment laundering equipment and procedures Principles and methods of laundering Dry cleaning	7	7	Demonstration, Class room
Unit-II	Bleaches stain removers	8	8	study, Self-study, Experiential learning, Assignment designing,
Unit- III	Waterhard and soft water • Methods of softening water • Soap and Detergent	7	7	Participative learning
Unit- IV	Finishing process	8	8	

- 1. Alexander, R. R. (1997). *Textile products: Selection, use and care*. Boston: Houghton Mifflin Co.
- 2. Duelkar, D. (1976). Household textiles and laundry work. Delhi: Atmaram and Sons.
- 3. Joseph, M. L. (1981). *Introductory textile science*. New York: Rinehart and Winston.
- 4. Ling, E. M. (1975). Modern household science. London: Mills and Boon Ltd.
- 5. Lyle, D. S. (1977). Textiles. New York: John Wiley & Sons.
- 6. Rankin, M., & Hildreth, R. (n.d.). Textiles in the home.
- 7. Tortora, P. (1978). *Understanding textiles*. New York: Macmillan Publishing Co.
- 8. Tortman, E. R. (1984). *Dyeing and chemical technology of textile fibres*. London: Griffin and Co. Ltd.
- 9. D'Souza, N. (n.d.). Fabric and fabric care. New Delhi: New Age International Pvt. Ltd.

Level	Semester	Course code	Course Name	Credits	Teaching Hours/ week	Exam Duration	Max marks
5	IV	831218	A- Basics of Garment Construction (P)	1	2	2 Hrs	External-25 Marks Internal- 25 Marks
			Construction				Intern

- To understand types and Application of Trims
 To handle and maintain sewing tools and machine

Course outcome: At the end of the course, students will

- Apply hand and machine sewing techniques
 Apply and use various trims

-List	of Practical in Basics of Garment Construction
1	Introduction to pattern cutting tools, sewing machine and care
2	
	Understanding and developing the basic hand and machine sewing techniques-
	Machine exercises, clipping, notching, stay stitching, under stitching, hemming, basting,
	piping, trimming, mitered corner, gathering, shirring and applying cross way strips, etc
3	Applying trims for eg. Frills, fringes and piping, etc.

Practical Assessment:

Practice and develop basic embroidery stitches

Leve l	Semeste r	Course code	Course Name	Credits	Teaching Hours/week	Exam Duration	Maximum marks
5	IV	831219	B-Textile Chemistry (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks

- To gain knowledge about laundering processes used for different fabrics.
 To use various methods to remove stains on fabrics

Course Outcome: At the end of the course, students will

- Be able to correlate and apply laundering methods for various fabrics
 Apply techniques of removing stains of fabric

List	of Practical
1	Techniques and methods of stain removal
2	Laundering of different clothes
3	Bleaching, Starching, Blueing
4	Visit to commercial laundry set up
5	Soap making

Minor subjects Syllabus

Communication and Extension

Semester - IV

Theory	Theory; Minor IV Dynamics of Communication and Extension (T) 802212								
Lev el	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks		
5	IV	802212	Dynamics of Communication and Extension (T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark		

Course Objectives:

- 1. To understand the importance of communication for extension
- 2. To develop skills in communication
- 3. To understand feedback for effective results

Course Outcome:

At the end of the course, students will

- 1. Be equipped with the skills to effectively share knowledge and empower communities
- 2. Clearly and concisely convey information, ensuring that messages are understood and acted upon

Unit	Content	Hrs	Weight age of	Incorporation of Pedagogy
			Marks Allotted	
Unit-I	Communication & Extension	7	7	Demonstration, Class room study • Self-study • Experiential
Unit- II	 Communication Process Meaning and Process Elements of Communication Process Models of communication 	8	8	Experiential learningAssignmen t designingParticipative
Unit- III	Barriers in communication Process	7	7	learning
Unit- IV	Feed Back in communication Need, importance of Feed Back Role of Feed Back in communication Problems in getting feed Back	8	8	

References:

- 1. Chauhan, J. (2016). *Communication and extension management* (2nd ed.). Kushal Publications and Distributors.
- 2. Kuppuswamy, B. (n.d.). Communication and social development in India. Sterling Publications.
- 3. Dahama, O. P., & Bhatnagar, O. P. (1995). *Education and communication for development*. New Delhi: Oxford and IBH Co.

Level	Semester	Course code	Course Name	Credits	Teaching Hours /week	Exam Duration	Maximum marks
5	IV	802213	Dynamics of Communication and Extension (P)	1	2	2Hrs	External- 25 Marks Internal- 25 Marks

Course Objectives:

- 1. To develop communication skills for extension
- 2. To facilitate dialogue, encourage participation

Course Outcome: At the end of the course ,students will

- 1. Develop confidence to build trust and positive relationships
- 2. Understand ways to get feedback for effective output

-List of Practical in Dynamics of Communication and Extension (P)

1	Activities to develop communication skills (interview, seminar, speech)
2	Organizing role play for extension work
3	Developing feedback for effective extension work

	Theory: Minor Elective Theory A- IV Programme Planning for Extension (T) 802214									
Le vel	Sem	Course Code	Course Name	Credits	Teaching Hours/ Week	Exam Duration	Max Marks			
5	III	802214	A-Programme Planning for Extension (T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark			

- 1. To get acquaint with the Programme planning process in extension
- 2. To understand the importance of Programme Planning, and implementation
- 3. To design and administer tools for collection and analysis of data

Course Outcome:

At the end of the course, students will be able to-

- 1. Develop effective program planning leading to improved outcomes
- 2. Make informed decisions, ensuring that the program is on track to achieve its goals

Unit	Content	H r s	Weightag eof Marks Allotted	Incorporationof Pedagogy
Unit-I	Programme Planning Meaning, Objectives Need & Importance Principles of Programme Planning	7	7	Demonstration, Class room study • Self-study • Experiential learning
Unit- II	Programme Planning Process	8	8	Assignment designingParticipative
Unit- III	Programme Evaluation	7	7	- learning
Unit- IV	Data collection for programme planning • Types and methods	8	8	

- 1. Dahama, O. P., & Bhatnagar, O. P. (1995). *Education and communication for development*. Oxford and IBH Publishing Co.
- 2. Dale, R. (2000). Organization and development: Strategies, structures and processes. Sage Publications.
- 3. Gupta, D. (2007). *Development communication in rural sector*. Mukhopadhyay Abhijeet Publications.
- 4. Nisha, M. (2006). *Understanding extension education*. Kalpaz Publications.

T	Theory: Minor Elective Theory B- Social Entrepreneurship (T) 802215									
Level	Sem	Course Code	Course Name	Credits	Teachin g Hours/ Week	Exam Duration	Max Marks			
5	III	802215	B - Social Entrepreneurship (T)	3	3	2Hrs	External-30 Mark Internal- 20 Mark			

- 1. To stimulate knowledge and critical thinking in Social Entrepreneurship
- 2. Develop insights into the different social issues
- 3. To understand how systemic solutions enable to bridge the gaps

Course Outcome:

At the end of the course, students will

- 1. Understand the concept of entrepreneurship types and phases
- 2. Understand the dynamics of entrepreneurial dimensions
- 3. Understand the standards of entrepreneurial growth & development

Unit	Content	Hrs	Weightage of Marks Allotted	Incorporation of Pedagogy
Unit-I	Concept of entrepreneurship	7	7	
	Meaning, Definition, Types of			D
	Entrepreneurship			Demonstration,
	Social Entrepreneurship			Class room
	Concept, Need, Functions, Types,Examples and models			study • Self-study
Unit-II	Benefits of building a social enterprise	8	8	Experiential
Omt-m	Characteristics of Social Entrepreneurs	0	0	learning
	 Difference between Social Entrepreneurs 			• Assignment
	and others			designing
	Role of Social entrepreneurship in			Participative
	sustainable development			learning
Unit-	Rural entrepreneurship	8	8	
III	 Meaning, types, importance, scope, 			
	challenges			
	Development of rural entrepreneurship in			
	India.			
	NGO Magning Purpose examples			
	Meaning, Purpose, examplesRole of NGO in Social Entrepreneurship			
Unit-	Trends in Social Entrepreneurship	7	7	-
IV	Major challenges, Major opportunities	'	,	
	Role of Government for growth of social			
	entrepreneurship in country			
	Corporate Social Responsibility (CSR)			
	 Social entrepreneurship in India 			

References:

- 1. Chahine, T. (n.d.). *Introduction to social entrepreneurship*.
- 2. Verma, A. (2009). Social entrepreneurship management. Global India Publications Pvt Ltd.
- 3. Nicholls, A. (Ed.). (n.d.). *Social entrepreneurship: New models of sustainable social change.* Oxford University Press.
- 4. Ajmeri, S. R. (n.d.). Social entrepreneurship. Pothi.
- 5. Bornstein, D., & Devis, S. (n.d.). Social entrepreneurship. Oxford University Press.
- 6. El Fasiki, H. (n.d.). *Social entrepreneurship: Meaning, challenges, and strategies.* Lambert Academic Publishing.
- 7. Khanka, S. S. (n.d.). Entrepreneurship development.
- 8. Baporikar, N. (n.d.). Entrepreneurship development and project management.

Level	Semester	Course code	Course Name	Credits	Teaching Hours/ week	Exam Duration	Maximum marks
5	IV	802216	Programme Planning for Extension (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks
Common Obligations							
Course Objectives:							

- Course Outcome: At the end of the course ,students will
- 1. Achieve skills in programme designing
- 2.Improve efficiency in utilising resources for better outcome

-List of Practical in Programme Planning for Extension (P) 1 Undertake a projects within your organization that involve program planning 2 Plan, execute and evaluate the programme for the project undertaken

Level	Semester	Course code	Course Name	Credits	Teaching Hours/ week	Exam Duration	Maximum marks	
5	IV	802217	Social Entrepreneurship (P)	1	2	2Hrs	External-25 Marks Internal- 25 Marks	
1.Thinl	ourse Outco	ome: At the	e end of the course ,st p new solutions to soo s, services, and busines	cial proble				
-List o	f Practical i	n Social	Entrepreneurship (I	P)				
1	Visit to a l	NGO to un	derstand its working (Report wri	ting)			
	Work with	a social e	nterprises or organizat	ions to gai	n practical ex	perience		
	Work with a social enterprises or organizations to gain practical experience Identify a Social Issue-Develop a Solution- Market Your Solution							

e distribution of marks for the examination shall be as follows:

Internal Assessment	20 Marks
1.Class tests–Assessment on any two(Open Book Test/Objective type	10 Marks
Test/Descriptive Test)	
2.Assignment/Seminar/Group Discussion/ Case studies/ field wok /Visit Report	10 Marks
External Evaluation and Examination system	30 marks

The distribution of marks for the practical examination shall be as follows:

External Evaluation		Internal Evaluation		
Performance of any two Experiments	20M	Students performance	10M	
Viva-voice	05M	Practical Record Book	05M	
		Assignment on practical	10M	
Total	25M	Total	25M	