



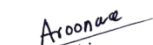
NEP SYLLABUS
FOR
SEMESTER-I
IN
B.Sc. HOME SCIENCE


GONDWANA UNIVERSITY
GADCHIROLI (M.S.)



Dr. P. L. Tejgaonkar


(Mr. N.M. Ghatkande)


Dr. Priya A. Sangole
D.K. Maule Mahavidyalaya
Kulkhedda.


(Dr. A. N. Shende)


(Dr. Nandkishor N.
Padole)


(Dr. O.P. Singh)



Gondwana University, Gadchiroli
NEP 2020 U.G. PROGRAMME SESSION 2024-25
Faculty of Science and Technology
Programme Name - B.Sc. Home-Science SEM- I

Sr. No.	Course Category	Subject name		Total Credit	Teaching Scheme (Hrs)			Examination Scheme								Total Marks	
					Theory	Practical	Total Hrs.	Theory				Practical					
								U A	C A	Total Mark	Min. Passing	Durati on of Exam (Hrs.)	U A	C A	Total Mark		Min. Passing
1	Gr Subject	Select any Two core group subject from Annexure-1	Subject-I (Home-science) 1)Fundamental of Food science and Nutrition OR 2) Fundamental of Home-science Extension OR 3) Fundamental of Family Resource Management OR 4) Fundamental of Textile and clothing OR 5) Fundamental of Human Development	02	02	--	02	40	10	50	20	02	--	--	--	--	50
			ii) Subject II-Major Subject from Applied Science	02	02	--	02	40	10	50	20	02	--	--	--	--	50
			iii) Practical Based on Subject –I	02	--	04	04	--	--	--	--	--	30	20	50	25	50
			iv) Practical Based on Subject –II	02	--	04	04	--	--	--	--	--	30	20	50	25	50
2	OE	Group-A (Any one from Annexure –II) i)Apparel construction ii) Interior decoration &design		02	02	--	02	40	10	50	20	02	--	--	--	--	50

3	VSC	Preparation and preservation of food OR Preparation of teaching material OR Communication Skill OR Accessories in Home Decoration OR Tie and Dye Techniques (Annexure-III)	02	--	04	04	--	--	--	--	--	30	20	50	25	50
4	SEC	i)Guidance and Counseling ii) Dyeing and printing iii) Interior Amenities and housing plan Annexure-IV	02	02	--	02	40	10	50	20	02	--	--	--	--	50
5	VEC	Audit Course (Any one from Annexure –V)	02	02	--	02	--	50	50	20	--	--	--	--	--	50
6	AEC	English/Marathi/Hindi/Bengali /Pali/ Supplementary english (Annexure –VI)	02	02	--	02	40	10	50	20	02	--	--	--	--	50
7	IKS	Generic IKS	02	02	--	02	40	10	50	20	02	--	--	--	--	50
8	CC	NCC/NSS/Yoga/Sports	02	--	04	04	--	--	--	--	--	--	50	50	25	50
Total			22	14	16	30	24	11	350	140	12	90	11	200	100	550

Abbreviations:

OE : Generic/ Open Electives

SEC: Skill Enhancement Courses **AEC:** Ability Enhancement Courses:

IKS: Indian Knowledge System **VEC:** Value Education Courses

VSEC/VSC: Vocational Skill and Skill Enhancement Courses

Note(s):

1) Student shall opt any one subject out of Five from core group-I

2) As per open elective (OE) is concerned, students shall opt one subject from Group-A

3) Generic IKS will be common for all Faculties in the first Semester as per Government letter No. क्र. एनईपी.२०२२/प्र.क्र.०९/विशि-३(शिकाना) दिनांक २५ जानेवारी, २०२४.

4) VSC Shall be based on Group Subject.

**B.Sc. Home Science Semester-I
Core Subject (Credit-2+2)**

1. Fundamentals of Food Science and Nutrition

Total Marks	100
Theory	40
IA	10
Practical's	50

Course Outcomes:

The student at the completion of the course will be able to:

- To understand the function of food and the role of various nutrients, their requirements and effect of deficiency and excess.
- To promote basic knowledge pertaining to various food groups and nutrients.
- To make students familiar with the different method of cooking, their advantages and disadvantages
- To develop ability to improve the nutritional quality of food.

UNIT-I	<p>INTRODUCTION TO FOOD NUTRITION</p> <ol style="list-style-type: none"> 1. Basic terms used in food and nutrition. Definitions-Foods, Nutrients, Nutrition ,Optimum nutrition, Nutritional Status, Health, Balanced diet. 2. Functions of food-Physiological ,Psychological, Social, Cultural 3. Scope of Nutrition, Food groups. <p>MACRONUTRIENTS</p> <ol style="list-style-type: none"> 1. Carbohydrates- Definition, Classification, Sources, Functions, Requirement, Deficiency 2. Protein- Definition, Classification, Sources, Functions, Requirement, Deficiency. 3. Fats- Definition, Classification, Sources, Functions, Requirement, Deficiency.
UNIT-II	<p>MICRONUTRIENTS</p> <p>Vitamins- Definition, Classification</p> <ol style="list-style-type: none"> 1. Fat Soluble Vitamins- Sources, Function, Deficiency of :Vitamin A, Vitamin D, Vitamin E ,Vitamin K 2. Water Soluble Vitamins - Sources, Function, Deficiency of : Thiamine (B1), Riboflavin (B2) ,Nicotinic acid (B3) , Pyridoxine (B6) ,Biotin ,Folic acid, Cynocobalamine (B12),Vitamin C
UNIT-III	<p>Minerals – Sources ,Functions and Deficiency</p> <ol style="list-style-type: none"> 1. Major Minerals:- Sodium ,Potassium ,Calcium, Phosphorous 2. Minor Minerals:- Iron ,Iodine , Magnesium ,Zinc 3. Water:- Functions of water in human body, water balance, sources of water in human body ,effect of dehydration and its prevention

--	--

PRACTICALS

1. Food Presentation and Table Setting.
2. Preparation of Ingredients : Pre-preparation, methods of mixing, methods of cooking.
3. Simple cooking- preparation, serving, calculation of cost and yield
 - a) Appetizers : Soups (any 2).
 - b) Starters: a) Paneer Preparations b) Samosa c) Kabab d) Cutlet (any 2).
 - c) Salad : a) Sprouted b)Vegetable c) Fruits (any 2).
 - d) Raita: (any 2).
 - e) Snacks : Pakoras, Namkin, Sandwiches, Idli, Dhokla (any 2)

INTERNAL ASSESSMENT (Refer Direction)

1. Market survey of the Food Commodities as per Food Groups and their cost.
2. Latest Kitchen appliances in the market-their use & upkeep (any 5).

Books Recommended:-

1. **Nutritive Value of Indian Foods:** *Gopalan C, Rama Shastri & Balasubramanin S.C.*, National Institute of Nutrition, 1993
2. **Food Science, Chemistry and Experimental Foods:** *Dr.M.Swaminathan*,The Bangalore Printing and Publishing Co. Ltd. 1995.
3. **Essentials of Food and Nutrition**, Vol.I (Fundamental aspects): *Dr. Swaminathan*, 2nd edition BAPPCO, 1985.
4. **Applied Nutrition:** *R. Rajlakshami* Oxford & IBH Pub. Co.pvt Ltd,3rd edition, 1981.
5. **Foods and Nutrition:** *The Educational Planning Group, Delhi*, Arya Publishing House. 3rd edition, 1991.
6. **Food Chemistry:** *Meyer, L.H.* CBS Publishers & Distributors, Delhi, 1987.
7. **Scope manual on Nutrition:** *Latham M.C., McGandy, McCann M.B.& Stare F.J.* Published by the Upjohn Co, Kalamazoo, Michigan, 2nd edition. The Upjohn Co, Kalamazoo, Michigan 1972.
8. **Every Day Indian Processed foods:** *K.T. Achaya*, National Book Trust, India, 1984.
9. **The book of Ingredients:** *Philip Dowell & Adrian Bailey, Michaey*, Michael Joseph, Ltd, 1980.
10. **Nutrition an integrated approach** : Pike Ruth L and Brown Myrtle L. 1970 :: Wiley Eastern Pvt Ltd.
11. **Nutrition Science:** B. Srilakshmi 4th Edition. New Age International Ltd.
12. **Fundamentals of Foods, Nutrition and Diet Therapy** :S.R Mudambi and M.V.Rajgopal. New Age International Ltd.
13. **Modern Cookery:** Thangam Phillip

B.Sc. Home Science Semester-I
Core Subject (Credit-2+2)

2. Fundamentals of Home Science Extension

Total Marks	100
Theory	40
IA	10
Practical's	50

Objective:

- To impart knowledge regarding:
- To impart knowledge of extension education:
- To acquire knowledge of meaning, fields and objectives of home science extension.
- To develop understanding the importance and functions, models of communication.
- To understand the role of extension teaching method in the field of extension.

Unit – I

Extension Education : Definition of education, types of education, definition of extension education, origin & meaning of extension education, concept , objectives, principles fields, philosophy of extension education, variation between formal & extension education, essential links in the chain of rural development.

Unit – II

Home Science Extension : Definition concept of home science extension, fields of home science extension, philosophy of home science extension, characteristics of home science extension, objectives of home science extension, scope of home science extension, guiding of principles of home science extension.

Unit – III

Extension Teaching Methods : Meaning & definition, importance functions and classification of extension teaching methods according to use and according to form, study of various extension teaching methods.

Interpersonal approach : Visits (Home & Farm), calls (Office & Telephone) & letters.(Personal & Official)

Group approach : Lecture, Method demonstration, study tour, group discussion and meetings. Mass

approach : Circular letter, result demonstration, puppet show, exhibition and film show.

Practical's :

1. Handling and operation of camera for extension photography.
2. Practice of preparing circular letter to motivate homemakers for acceptance of new ideas.
3. Visits to rural areas to get information about rural living (their needs, interests, customs and traditions, standard of living, economic status, educational background, habits, etc)
4. Framing of simple questionnaire to collect data on rural life style.

Internal Assessment :

- 1) Preparation of a twelve page album on rural development activities.

Reference :

1. Dahama, O.P. and Bhatnagar O.P. Education and communication for development oxford and B.M. publishing Co. New Delhi.
2. Chandra A : Introduction of home science, Metropolitan book co. New Delhi.
3. Supe S.V. An Introduction to extension education oxford and IBH publishing co. New Delhi.
4. Singh K. Rural sociology, prakashan Kendra, Lucknow.
5. FarkadeT.Gonge, S.Gruhavigyanvistar, Vidyaprakashan, Nagpur

B.Sc. Home Science Semester-I
Core Subject (Credit-2+2)
3. Fundamentals of Family Resource Management

Total Marks	100
Theory	40
IA	10
Practical's	50

OBJECTIVE:

- 1) To develop good taste through the study of basic elements and principles of design
- 2) To develop aesthetic sense and to be good art consumer

Unit I – Introduction to Foundation of art and Design

1. Meaning of art
2. Elements of art: - a) Line b) Form c) Color d) Texture e) Space d) Light g) Pattern h) Idea
3. Concept of design
4. Objectives to design – i) Beauty ii) Expressiveness iii) Functionalism
5. Design and principles of art
6. Types of design : - i) Structural ii) Decorative iii) Naturalistic
iv) Stylized v) Geometric iv) Abstract vii) Modern viii) Traditional

Unit II-Principal of Design in interior

3. **Harmony:** - a) Definition and importance
4. b) Line and shape ,texture, idea and color c)Application in Interior decoration
3. **Balance:-** a) Definition and Importance b) types of Balance – Formal, Informal, Redial
- c) Balance in interior & exterior decoration
4. **Rhythm –**
 - a) Definition and importance
 - b) Application in interior decoration
5. **Proportion –**
 - a) Definition and importance

6. Emphasis –

a) Definition and importance

Unit III –Importance of colour and colour scheme in Interior Decoration

1. Classification of color

i) Primary ii) Secondary iii) Intermediate iv) Tertiary

iv) Quaternary v) Neutral

2. Characteristics or dimensions of colour

i) Hue ii) Value iii) Intensity

3. Colour wheel, Warm & cool colours

4. Colour Schemes:

a) Related colour scheme: i) Monochromatic ii) Analogous

b) Contrast colour scheme: i) Complementary ii) Double complementary

iii) Split complementary iv) Triad v) Neutral

5. Colour schemes for different rooms

i) Kitchen and dining

ii) Drawing room /Living room

iii) Bed room

Practical

Experiment No. 1.- Types of design

i) Structural ii) Decorative No. iii) - Naturalistic and stylized No. iv) - Geometric and Abstract No. v) - Modern and Traditional No. vi) - Types of Balance

B.Sc. Home Science Semester-I
Core Subject (Credit-2+2)
4. Fundamentals of Human Development

Total Marks	100
Theory	40
IA	10
Practical's	50

Objectives:

1. To make the students aware of science of Human Development.
2. To make student aware of methods of studying human behavior.

Theory:

Unit I - Introduction to Human Development

1. What is Human Development? Definition of HD, why do we need to study HD?
2. Brief history and studies of HD
3. HD as a scientific discipline
4. Scope of the subject
5. Developmental period
6. Rate of development and developmental task.

Unit II – Growth & Development

1. Meaning of growth & development, Principles of growth & development
2. Principal of growth and development
3. Factors influencing growth and development and dimensions of development
4. Role of heredity and Environment, maturation, genetic endowment and learning
5. Needs and Rights of children's

Unit III: - Stages of development –

1. Female reproductive system, menstrual cycle, Fertilization, Conception.
2. Prenatal Development- Factors influencing prenatal Development.
3. Complications /Hazards during pregnancy.
4. Disturbance and care during pregnancy.
5. Birth process, kind of birth

Practicals

1. Methods of child study – Anthropometry, Observation, Interview, Questionnaire, Case study, Projective, Psychological tests, Sociometry, Longitudinal and cross sectional approach
2. Survey of 10 pregnant women (use of questionnaire is compulsory) 3. Observation of children while play.(record to be maintained)
4. Various developments of children.

Internal Assessment (Refer Direction)

1. Visit to crèche and Anganwadi
2. Preparation of resources files on human development.
3. Preparation of work book on any one.
4. Type of play.
5. Type of discipline, Heredity and environment etc.

References:

- Santrock, J.W. (2006). Child development New York : Mc Graw Hill.
Swaminathan, M. (1998), The first five years : A critical perspective on early childhood care and education in India. New Delhi : Sage .

B.Sc. Home Science Semester-I
Core Subject (Credit-2+2)
5. Fundamentals of Textile & Clothing

Total Marks	100
Theory	40
IA	10
Practical's	50

Course Outcome

1. To get acquainted with basic knowledge of textile fibers.
2. To acquire knowledge of various principles of clothing constructions, and their application.

Unit I:

1. Scope of textile and Importance of clothing .:
2. Classification of textile fibers, General and essential properties of textile fibers
3. Manufacturing process of natural fibers.:-Cotton, silk, wool ,jute.
4. Physical and chemical properties of natural fibres

Unit II :

1. Manufacturing process, of manmade fibers: - viscose rayon, nylon, polyester Acrylic.
2. Physical and chemical properties of manmade fibres
3. Latest fibres :- Introduction and use of - Organic cotton , Bamboo , Soy, Lyocel, Metallic, Lycra (spandex)

Unit III :

1. Factors affecting clothing : Age, Sex, Cultural influence, Occupation, Economic Status, Social status, Regional beliefs.
2. Introduction to Tools for pattern making and Garment construction- Measuring tools, marking tools, Cutting tools, sewing tools, Pressing tools,
3. Sewing machine –parts, functions, care
4. Types of sewing machines and their uses (over lock, embroidery, computerized, industrial)

PRACTICALS

1. Demonstration of taking body measurements.
2. Drafting, cutting & stitching of :-Apron, , Bloomer, Baby Frock 3. Embroidery album Decorative stitches - chain, herringbone, stem, running, lazy-daisy, satin, French knot, bullion stitch, buttonhole(Make 4 samples of combination of 2 decorative stitches)
4. Introduction to a sewing machine with a demonstration and practice of learning the running of sewing machine on paper on straight lines, curved lines and corners

Internal Assessment (Refer Direction)

1. Make a decorative article by using combination of decorative stitches (embroidery)
2. Visit to Textile Mill or handloom unit

B.Sc. Home Science Semester-I
OPEN ELECTIVE (OE) (Credit: 2) (Group A)

1. Apparel Construction

Total Marks	50
Theory	40
IA	10

UNIT-I

1. Different Types of pleats.
2. Different Types of Tucks.
3. Different Types of plackets.
4. Different Types of Neckline finishing.

UNIT-II

1. Hemline finishing.
2. Different Types of waistline finishing and waist belt.
3. Different Types of Ruffles.
4. Shirring.

UNIT-III

1. Different types of pockets.
2. Patch work.
3. Bows.
4. Fabric buttons and flowers.

INTERNAL ASSESSMENT

- Make a portfolio of the sample as given in the syllabus

Books Recommended:-

1. Complete guide to sewing – Reader’s Digest
2. Encyclopedia of dress Making – Raul Jewel
3. Comparative clothing construction techniques –S.S Chhabra

B.Sc. Home Science Semester-I
OPEN ELECTIVE (OE) (Credit: 2) (Group A)
2. Interior Decoration & Design

Total Marks	50
Theory	40
IA	10

Unit 1-

Importance of colour in Interior Decoration

Detail Study of Prang colour system:

a) Characteristics or dimensions of colour

i) Hue ii) Value iii) Intensity

b) Classification of color

i) Primary

ii) Secondary

iii) Intermediate

iv) Tertiary

iv) Quaternary

v) Neutral

c) Warm & cool colours

d) Advancing & Receding colours

e) Colour wheel

Unit II-

Decorating Interior & Exterior:

1) Floral Decoration: i) Definition and importance ii) Objectives iii) Material required

2) () Elements of Art in flower Arrangement. ii) Principles of Art in Flower arrangement

3) Use of Flower arrangements: i) Personality ii) Occasion iii) Placement in rooms iv) Flowers as gift v)

Bouquet: (i) Spray of flowers ii) Potted

References:

1. Goldseiu H. & Goldstaia V "Art in everyday life"

2. Mann M.-Home management kalyani publishers New delhi

B.Sc. Home Science Semester-I
VSC (Credit: 2)

1. Preparation and preservation of food

Total Marks	50
UA	30
CA	20

- 1.Preparation of Jam
- 2.Preparation of Jelly
- 3.Preparation of marmalade
- 4.Preparation of sugar syrup
- 5.Preservation by using salt (Pickling)
- 6.Preparation of Dahi
7. Preparation of Yogurt
8. Preparation of Shrikhand.

B.Sc. Home Science Semester-I
VSC (Credit: 2)

2. Preparation of teaching material

Total Marks	50
UA	30
CA	20

The oral communication methods: (stories, songs, Music, description, explanation, etc.) and conversational methods (conversation, heuristic conversation, questioning on a special subject, etc.).

- Exploratory learning methods: direct exploration of objects and phenomena (systematic and independent observation, small experiments, etc.) and indirect exploration (demonstration through pictures, films, etc.).
- Methods based on the pupils' direct voluntary action (exercises, practical work, etc.) and simulated action (didactic games, learning through drama, etc.).
- Use of natural materials (plants, shells, seeds, insects, rocks, sand, etc.)
- Intuitive materials (cast and clay models, Puppets, blocks, puzzles, mazes, etc)
- Figurative aids (pictures, photographs, atlas books, maps)

Creative Activities - importance, Types and values promoted, method of giving instructions. Process of scripting for puppet plays and creative drama.

- a) Painting – free hand, finger, thread, wax resist & spray
- b) Printing -block, leaf, stencil, thumb
- c) Pasting – collage, paper mosaic, sand
- d) Miscellaneous-etching, marbling, dough modelling

B.Sc. Home Science Semester-I
VSC (Credit: 2)

3. Communication Skill

Total Marks	50
UA	30
CA	20

- 1) Writing of a circular letter to communicate effectively to masses.
- 2) Preparation of radio Script.
- 3) Preparation of Television Script.
- 4) Preparation of News story to provide Extension communication to learners.

B.Sc. Home Science Semester-I
VSC (Credit: 2)

4. Accessories in Home Decoration

Total Marks	50
UA	30
CA	20

- 1) Articles made out of low cost / waste material
 - (a) Fabric painting, oil, water, nib, knife, sand, glass, stain glass etc.
 - (b) Wax work / candles etc.
- 2) Preparation of bonsai.
- 3) Visit to Landscape /rock garden.

B.Sc. Home Science Semester-I
VSC (Credit: 2)

5. Tie and Dye Techniques

Total Marks	50
UA	30
CA	20

1. Dyeing with direct dyes- cotton
2. Dyeing with reactive dyes- cotton, wool, silk
3. Dyeing with acid dyes- wool, silk
4. Tie and dye technique
5. Block printing using single and double coloured blocks, various placements of blocks
6. Batik technique Make sample and article of screen, block, stencil and batik
7. Preparation of an article/garment with a combination of techniques learnt above

B.Sc. Home Science Semester-I
SEC (Credit: 2)

1. Guidance and Counselling:

Total Marks	50
Theory	40
IA	10

Unit-1. Introduction to Guidance and Counselling:

- a) Nature
- b) Principle
- c) Goal
- d) Adjustment Problem.

Unit-2. Approaches to Guidance and Counselling

- a) Personal Centered approach
- b) Psychodynamic approach
- c) Behavioural approach
- d) Cognitive behavioural approach: CBT, REBT.
- e) Music therapy
- f) Yoga and meditation

Unit-3 Applications:

- a) Child Counselling
- b) Family Counselling
- c) Career Counselling
- d) Crisis intervention: suicide, grief and sexual abuse

Suggested Readings:

1. Aguilera, D. C. (1998). Crisis intervention: Theory and methodology (8th Ed.) Philadelphia: Mosby.
2. Belkin, G. S. (1998). Introduction to Counselling (3rd Ed.) Iowa: W. C. Brown.
3. Capuzzi, D. & Gross, D. R. (2007). Counselling and Psychotherapy: Theories and interventions (4th Ed). New Delhi. Pearson.
4. Corey, G. (2009) Counselling and Psychotherapy: Theory and practise. (7th Ed.) New Delhi: Cengage Learning.
5. Friedlander, M. L. and Diamond, G. M. (2012). Couple and Family Therapy. In E.M. Altmaier and J. C.
6. Gibson, R. L., & Mitchell, M. H. (2009). Introduction to Counselling and Guidance (7th Ed) New Delhi: PHI Learning Pvt. Ltd.
7. Hansen (Eds.) The Oxford Handbook of Counselling Psychology. New York: Oxford

B.Sc. Home Science Semester-I

SEC (Credit: 2)

2. Dyeing and printing

Total Marks	50
Theory	40
IA	10

OBJECTIVES-

- To provide comprehensive knowledge about the concepts of dyeing and printing of textiles.
- To foster understanding of traditional Indian embroideries-motifs used, color combinations used etc.

Unit I:

1. Dyes : Classification, Natural and synthetic ,different types of dyes – direct, acid, basic, reactive, sulphur, vat, azo and natural dyes (vegetable, animal, mineral and mordents used) .
2. Dyeing- Introduction, classification, Methods of dyeing: stock, yarn, piece and union and cross dyeing ,garment dyeing ,Common dyeing defects

Unit II:

2. Dyeing vs. Printing
3. Styles of printing – Direct, Resist, Discharge
3. Methods of printing – Block, stencil, Roller, Screen, Rotary screen, Heat Transfer,
4. Digital, Flock
5. Common printing defects and their remedy

Unit III:

1. Preparation of cloth for printing, types of ingredients used in printing, types of different thickeners, After treatment of printed goods,.
2. Colorfastness: Factors affecting colorfastness, Testing Wash fastness, Light fastness
3. Paitnings: Kalamkari, Madhubani, Warli.
2. Prints :Sanganeri print fabrics, bagru print fabrics

INTERNAL ASSESSMENT

The Internal Assessment marks will be given on different type of article and album by different Printing.

- a) Block printing d) Batik
- b) Screen e) Tie and Dye
- c) Stencil

B.Sc. Home Science Semester-I **SEC (Credit: 2)**

3. Interior Amenities and housing plan

Total Marks	50
Theory	40
IA	10

Objectives –

- To gain knowledge about the role of internal amenities in contributing for satisfying family living
- To learn technique that will help one to construct some furnishing items, relative to their function and beauty.

UNIT I -Internal Amenities

1. Interior Decoration – i) Essential factors of interior decoration ii) Available material For decoration iv) Decoration in various rooms
2. House Drainage – i) Bath water ii) Laundry water iii) House cleaning water
3. Methods of house drainage – i) Dilution ii) Purification iii) Soakage pits.
4. Waste Disposal - Types of Refuse – i) Dry ii) Solid iii) Liquid
5. Methods of waste disposal – i) Tipping or dumping ii) Taking in to the sea

iii) Compost formation iv) Burning v) Conservancy system

UNIT II - Lighting and Furniture

(A) Natural Lightning

(B) Artificial Lightning: (i) Candles (ii) Oil Lamp (iii) Kerosene Lamp (iv) Gas Lighting (v) Electric Lighting

(C) Principles of Lighting: (i) Intensity (ii) Steady (iii) Glare (iv) Color (v) Safety (vi) Economy

(D) Types of Lighting: (i) Direct (ii) Semi-direct (iii) Indirect (iv) Semi-indirect

Unit III

a) Different symbols used in house plans

b) House plans for different income levels- (i) Higher (ii) Middle (iii) Lower

c) Vastushastra- (i) Importance (ii) Placements of rooms (iii) Location of well (iv) Placements of Doors (v) Position and fixing

Books Recommended:

Agan T. C. –, „The House“ Oxford and I. B. H. publishing Co.

Ann Reilly; Susan A. Roth – „The Home Landscape“, Home planners Inco. Tucson, Arizona. Deshpande R. S. – „Modern Indian Homes in India“, United Book Corporation, Poona, 2nd Edition.

Deshpande R. S. – „Build your own Home“, United Book Corporation, Poona, 4th Edition. Deshpande R. S. –, „Low Cost Housing“, United Book Corporation, Poona, 4th Edition.

Goldstin H. / Goldstein V. – „ Art in Every day Life“ MacMillan Co., New York, 4th Edition. Pak – Tin & Helan Yeap – „Feng Shui – Health Harmony“ B.Jain Publishers Pvt Ltd., New Delhi, 1998.

Rutt A. – „Home Furnishing“, Wiley Eastern Pvt.Ltd., New Delhi, 2nd Edition. Shrivastav – „Remedial Vastu Shastra“, Manoj Publication, Delhi, 2001

NEP SYLLABUS
FOR
SEMESTER-II
IN
B.Sc. HOME SCIENCE

GONDWANA UNIVERSITY
GADCHIROLI (M.S.)



Gondwana University, Gadchiroli
NEP 2020 U.G. PROGRAMME SESSION 2024-25
Faculty of Science and Technology
Programme Name - B.Sc. Home-Science SEM- II

Sr. No.	Course Category	Subject name		Total Credit	Teaching Scheme (Hrs)			Examination Scheme								Total Marks	
					Theory	Practical	Total Hrs.	Theory				Practical					
								U A	C A	Total Mark	Min. Passing	Duration of Exam (Hrs.)	U A	C A	Total Mark		Min. Passing
1	Gr Subject	Select any Two core group subject from Annesure -1	Subject-I (Home-science) 1) Fundamental of Food science and Nutrition OR 2) Fundamental of Home-science Extension OR 3) Fundamental of Family Resource Management OR 4) Fundamental of Textile and clothing OR 5) Fundamental of Human Development	02	02	--	02	40	10	50	20	02	--	--	--	--	50
			ii) Subject II- Major Subject Applied Science	02	02	--	02	40	10	50	20	02	--	--	--	--	50
			iii) Practical Based on Subject -I	02	--	04	04	--	--	--	--	--	30	20	50	25	50
			iv) Practical Based on Subject -II	02	--	04	04	--	--	--	--	--	30	20	50	25	50

2	OE	Group-A (Any one from Annexure –VIII) i) Principles of Food Science	02	02	--	02	40	10	50	20	02	--	--	--	--	50
		ii) Teaching materials for early childhood education	02	02	--	02	40	10	50	20	02	--	--	--	--	50
3	VSC	Group-B Community Development	02	02	--	02	40	10	50	20	02	--	--	--	--	50
3	VSC	Preparation and preservation of food OR Preparation of teaching material OR Communication Skill OR Accessories in Home Decoration OR Tie and Dye Techniques (Annexure-IX)	02	--	04	04	--	--	--	--	--	30	20	50	25	50
4	SEC	i) Food processing and Bakery ii) Extension learning(Annexure X)	02	02	--	02	40	10	50	20	02	--	--	--	--	50
5	VEC	Audit Course (Any one from Annexure –XI)	02	02	--	02	--	50	50	20	--	--	--	--	--	50
6	AEC	English/Marathi/Hindi/Bengali/Pali/Supplementary English (Annexure XII)	02	02	--	02	40	10	50	20	02	--	--	--	--	50
8	CC	NCC/NSS/Yoga/Sports	02	--	04	04	--	--	--	--	--	--	50	50	25	50
Total			22	14	16	30	240	110	350	140	12	90	110	200	100	550

Abbreviations:

OE : Generic/ Open Electives

SEC: Skill Enhancement Courses **AEC:** Ability Enhancement Courses:

IKS: Indian Knowledge System **VEC:** Value Education Courses

VSEC/VSC: Vocational Skill and Skill Enhancement Courses

Note(s):

- 1) Student shall opt any one subject out of five from core group-I (Other than Semester-I)
- 2) As per open elective (OE) is concerned, students shall opt one subject from Group-A and group B
- 3) VSC Shall be based on Group Subject.

B.Sc. Home Science Semester-II
Core Subject-I (Credit-2+2)
1. Fundamentals of Food Science and Nutrition

Total Marks	100
Theory	40
IA	10
Practical's	50

Course Outcomes:

The student at the completion of the course will be able to:

- To understand the function of food and the role of various nutrients, their requirements and effect of deficiency and excess.
- To promote basic knowledge pertaining to various food groups and nutrients.
- To make students familiar with the different method of cooking, their advantages and disadvantages
- To develop ability to improve the nutritional quality of food.

UNIT-I	<p>INTRODUCTION TO FOOD NUTRITION</p> <p>4. Basic terms used in food and nutrition. Definitions-Foods, Nutrients, Nutrition ,Optimum nutrition, Nutritional Status, Health, Balanced diet.</p> <p>5. Functions of food-Physiological ,Psychological, Social, Cultural</p> <p>6. Scope of Nutrition, Food groups.</p> <p>MACRONUTRIENTS</p> <p>4. Carbohydrates- Definition, Classification, Sources, Functions, Requirement, Deficiency</p> <p>5. Protein- Definition, Classification, Sources, Functions, Requirement, Deficiency.</p> <p>6. Fats- Definition, Classification, Sources, Functions, Requirement, Deficiency.</p>
UNIT-II	<p>MICRONUTRIENTS</p> <p>Vitamins- Definition, Classification</p> <p>3. Fat Soluble Vitamins- Sources, Function, Deficiency of :Vitamin A, Vitamin D, Vitamin E ,Vitamin K</p> <p>4. Water Soluble Vitamins - Sources, Function, Deficiency of : Thiamine (B1), Riboflavin (B2) ,Nicotinic acid (B3) , Pyridoxine (B6) ,Biotin ,Folic acid, Cynocobalamine (B12),Vitamin C</p>
UNIT-III	<p>Minerals – Sources ,Functions and Deficiency</p> <p>3. Major Minerals:- Sodium ,Potassium ,Calcium, Phosphorous</p> <p>4. Minor Minerals:- Iron ,Iodine , Magnesium ,Zinc</p> <p>3. Water:- Functions of water in human body, water balance, sources of water in human body ,effect of dehydration and its prevention.</p>

--	--

PRACTICALS

1. Food Presentation and Table Setting.
2. Preparation of Ingredients : Pre-preparation, methods of mixing, methods of cooking.
3. Simple cooking- preparation, serving, calculation of cost and yield
 - a) Appetizers : Soups (any 2).
 - b) Starters: a) Paneer Preparations b) Samosa c) Kabab d) Cutlet (any 2).
 - c) Salad : a) Sprouted b)Vegetable c) Fruits (any 2).
 - d) Raita: (any 2).
 - e) Snacks : Pakoras, Namkin, Sandwiches, Idli, Dhokla (any 2)

INTERNAL ASSESSMENT (Refer Direction)

1. Market survey of the Food Commodities as per Food Groups and their cost.
2. Latest Kitchen appliances in the market-their use & upkeep (any 5).

Books Recommended:-

1. **Nutritive Value of Indian Foods:** *Gopalan C, Rama Shastri & Balasubramanin S.C.*, National Institute of Nutrition, 1993
2. **Food Science, Chemistry and Experimental Foods:** *Dr.M.Swaminathan*,The Bangalore Printing and Publishing Co. Ltd. 1995.
3. **Essentials of Food and Nutrition**, Vol.I (Fundamental aspects): *Dr. Swaminathan*, 2nd edition BAPPCO, 1985.
4. **Applied Nutrition:** *R. Rajlakshami* Oxford & IBH Pub. Co.pvt Ltd,3rd edition, 1981.
5. **Foods and Nutrition:** *The Educational Planning Group, Delhi*, Arya Publishing House. 3rd edition, 1991.
6. **Food Chemistry:** *Meyer, L.H.* CBS Publishers & Distributors, Delhi, 1987.
7. **Scope manual on Nutrition:** *Latham M.C., McGandy, McCann M.B.& Stare F.J.* Published by the Upjohn Co, Kalamazoo, Michigan, 2nd edition. The Upjohn Co, Kalamazoo, Michigan 1972.
8. **Every Day Indian Processed foods:** *K.T. Achaya*, National Book Trust, India, 1984.
9. **The book of Ingredients:** *Philip Dowell & Adrian Bailey, Michaey*, Michael Joseph, Ltd, 1980.
10. **Nutrition an integrated approach** : Pike Ruth L and Brown Myrtle L. 1970 :: Wiley Eastern Pvt Ltd.
11. **Nutrition Science:** B. Srilakshmi 4th Edition. New Age International Ltd.
12. **Fundamentals of Foods, Nutrition and Diet Therapy** :S.R Mudambi and M.V.Rajgopal. New Age International Ltd.
13. **Modern Cookery:** Thangam Phillip

B.Sc. Home Science Semester-II
Core Subject (Credit-2+2)

2. Fundamentals of Home Science Extension

Total Marks	100
Theory	40
IA	10
Practical's	50

Objective:

- To impart knowledge regarding:
- To impart knowledge of extension education:
- To acquire knowledge of meaning, fields and objectives of home science extension.
- To develop understanding the importance and functions, models of communication.
- To understand the role of extension teaching method in the field of extension.

Unit – I

Extension Education : Definition of education, types of education, definition of extension education, origin & meaning of extension education, concept , objectives, principles fields, philosophy of extension education, variation between formal & extension education, essential links in the chain of rural development.

Unit – II

Home Science Extension : Definition concept of home science extension, fields of home science extension, philosophy of home science extension, characteristics of home science extension, objectives of home science extension, scope of home science extension, guiding of principles of home science extension.

Unit – III

Extension Teaching Methods : Meaning & definition, importance functions and classification of extension teaching methods according to use and according to form, study of various extension teaching methods.

Interpersonal approach : Visits (Home & Farm), calls (Office & Telephone) & letters.(Personal & Official)

Group approach : Lecture, Method demonstration, study tour, group discussion and meetings. Mass

approach : Circular letter, result demonstration, puppet show, exhibition and film show.

Practical's :

1. Handling and operation of camera for extension photography.
2. Practice of preparing circular letter to motivate homemakers for acceptance of new ideas.
3. Visits to rural areas to get information about rural living (their needs, interests, customs and traditions, standard of living, economic status, educational background, habits, etc)
4. Framing of simple questionnaire to collect data on rural life style.

Internal Assessment :

- 1) Preparation of a twelve page album on rural development activities.

Reference :

1. Dahama, O.P. and Bhatnagar O.P. Education and communication for development oxford and B.M. publishing Co. New Delhi.
2. Chandra A : Introduction of home science, Metropolitan book co. New Delhi.
3. Supe S.V. An Introduction to extension education oxford and IBH publishing co. New Delhi.
4. Singh K. Rural sociology, prakashan Kendra, Lucknow.
5. FarkadeT.Gonge, S.Gruhavigyanvistar, Vidyaprakashan, Nagpur

B.Sc. Home Science Semester-II
Core Subject (Credit-2+2)
3. Fundamentals of Family Resource Management

Total Marks	100
Theory	40
IA	10
Practical's	50

OBJECTIVE:

- 1) To develop good taste through the study of basic elements and principles of design
- 2) To develop aesthetic sense and to be good art consumer

Unit I – Introduction to Foundation of art and Design

1. Meaning of art
2. Elements of art: - a) Line b) Form c) Color d) Texture e) Space d) Light g) Pattern h) Idea
3. Concept of design
4. Objectives to design – i) Beauty ii) Expressiveness iii) Functionalism
5. Design and principles of art
6. Types of design : - i) Structural ii) Decorative iii) Naturalistic
iv) Stylized v) Geometric iv) Abstract vii) Modern viii) Traditional

Unit II-Principal of Design in interior

3. **Harmony:** - a) Definition and importance
4. b) Line and shape ,texture, idea and color c)Application in Interior decoration
3. **Balance:-** a) Definition and Importance b) types of Balance – Formal, Informal, Redial
- c) Balance in interior & exterior decoration
4. **Rhythm –**
 - a) Definition and importance
 - b) Application in interior decoration
5. **Proportion –**
 - a) Definition and importance

6. Emphasis –

a) Definition and importance

Unit III –Importance of colour and colour scheme in Interior Decoration

1. Classification of color

i) Primary ii) Secondary iii) Intermediate iv) Tertiary

iv) Quaternary v) Neutral

2. Characteristics or dimensions of colour

i) Hue ii) Value iii) Intensity

3. Colour wheel, Warm & cool colours

4. Colour Schemes:

a) Related colour scheme: i) Monochromatic ii) Analogous

b) Contrast colour scheme: i) Complementary ii) Double complementary

iii) Split complementary iv) Triad v) Neutral

5. Colour schemes for different rooms

i) Kitchen and dining

ii) Drawing room /Living room

iii) Bed room

Practical

Experiment No. 1.- Types of design

i) Structural ii) Decorative No. iii) - Naturalistic and stylized No. iv) - Geometric and Abstract No. v) - Modern and Traditional No. vi) - Types of Balance

B.Sc. Home Science Semester-II
Core Subject (Credit-2+2)
4. Fundamentals of Human Development

Total Marks	100
Theory	40
IA	10
Practical's	50

Objectives:

1. To make the students aware of science of Human Development.
2. To make student aware of methods of studying human behavior.

Theory:

Unit I - Introduction to Human Development

1. What is Human Development? Definition of HD, why do we need to study HD?
2. Brief history and studies of HD
3. HD as a scientific discipline
4. Scope of the subject
5. Developmental period
6. Rate of development and developmental task.

Unit II – Growth & Development

1. Meaning of growth & development, Principles of growth & development
2. Principal of growth and development
3. Factors influencing growth and development and dimensions of development
4. Role of heredity and Environment, maturation, genetic endowment and learning
5. Needs and Rights of children's

Unit III: - Stages of development –

1. Female reproductive system, menstrual cycle, Fertilization, Conception.
2. Prenatal Development- Factors influencing prenatal Development.
3. Complications /Hazards during pregnancy.
4. Disturbance and care during pregnancy.
5. Birth process, kind of birth

Practicals

1. Methods of child study – Anthropometry, Observation, Interview, Questionnaire, Case study, Projective, Psychological tests, Sociometry, Longitudinal and cross sectional approach
2. Survey of 10 pregnant women (use of questionnaire is compulsory) 3. Observation of children while play.(record to be maintained)
4. Various developments of children.

Internal Assessment (Refer Direction)

1. Visit to crèche and Anganwadi
2. Preparation of resources files on human development.
3. Preparation of work book on any one.
4. Type of play.
5. Type of discipline, Heredity and environment etc.

References:

- Santrock, J.W. (2006). Child development New York : Mc Graw Hill.
Swaminathan, M. (1998), The first five years : A critical perspective on early childhood care and education in India. New Delhi : Sage .

B.Sc. Home Science Semester-II
Core Subject (Credit-2+2)
5. Fundamentals of Textile & Clothing

Total Marks	100
Theory	40
IA	10
Practical's	50

Course Outcome

1. To get acquainted with basic knowledge of textile fibers.
2. To acquire knowledge of various principles of clothing constructions, and their application.

Unit I:

1. Scope of textile and Importance of clothing :.
2. Classification of textile fibers, General and essential properties of textile fibers
3. Manufacturing process of natural fibers.:-Cotton, silk, wool ,jute.
4. Physical and chemical properties of natural fibres

Unit II :

1. Manufacturing process, of manmade fibers: - viscose rayon, nylon, polyester Acrylic.
2. Physical and chemical properties of manmade fibres
3. Latest fibres :- Introduction and use of - Organic cotton , Bamboo , Soy, Lyocel, Metallic, Lycra (spandex)

Unit III :

1. Factors affecting clothing : Age, Sex, Cultural influence, Occupation, Economic Status, Social status, Regional beliefs.
2. Introduction to Tools for pattern making and Garment construction- Measuring tools, marking tools, Cutting tools, sewing tools, Pressing tools,
3. Sewing machine –parts, functions, care
4. Types of sewing machines and their uses (over lock, embroidery, computerized, industrial)

PRACTICALS

1. Demonstration of taking body measurements.
2. Drafting, cutting & stitching of :-Apron, , Bloomer, Baby Frock 3. Embroidery album
Decorative stitches - chain, herringbone, stem, running, lazy-daisy, satin, French knot, bullion stitch, buttonhole(Make 4 samples of combination of 2 decorative stitches)
4. Introduction to a sewing machine with a demonstration and practice of learning the running of sewing machine on paper on straight lines, curved lines and corners

Internal Assessment (Refer Direction)

1. Make a decorative article by using combination of decorative stitches (embroidery)
2. Visit to Textile Mill or handloom unit

B.Sc. Home Science Semester-II
OPEN ELECTIVE (OE) (Credit: 2) (Group A)

1. Principles of Food Science

Total Marks	50
Theory	40
IA	10

Unit-I

Introduction to Food Science Properties of food (a) Colloids, sols, gels, foam- (b) Emulsion formation- (c) Bound and free water -(d) pH Value, osmosis and osmotic pressure- (e) Boiling, melting and freezing points Sensory Evaluation- Subjective and objective. Cereals & Millets-Production, importance & composition- Cereal Products. Wheat, rice maize, ragi and sorghum. Malting and cooking of cereals, non-enzymatic reactions, Leavening agents. Fermented products, Milling of wheat, Parboiling of Rice, Pulses- composition, toxic constituents and cooking of pulses, variety and processing

Unit-II

Fruits and vegetables – Production composition, pigments, flavors and variety- changes during cooking- enzymatic browning, non-enzymatic browning. Milk and milk products- composition, storage- Processing of milk- Coagulation- Milk products available in India. Egg- structure, composition, storage, grade, quality, selection, Role of egg in food preparation, coagulation.

Unit-III

Sugar, Jaggery and honey - Composition, different forms of sugar, storage- Behaviors of syrups at different temperatures- Crystallization and caramelization Oil and Fats- Composition, types, storage, plasticity, Hydrogenation and processing .Changes during heating- Fats as shortening agents, smoking point, Rancidity, specific fat (Lard, Butter, Margarine) Meat, Fish poultry-structure, composition, storage, Post mortem changes in meat, Curing of meat, Tenderization, Aging of meat, selection, Meat cookery.

References

1. Arora K., Gupta K.V., Theory of cooking
2. Bennen Marion. Introductory foods
3. Lavies. (1998) Food commodities. Heinemann Ltd, London
4. Lowe Bella Experimental cookery
5. Norman N Potter, Joseph H Hotchkiss (1999) Food science Technology
6. Peckham. Foundation of food preparation
7. Srilakshmi. Food Science. New Age International Publishers, New Delhi.

B.Sc. Home Science Semester-II
OPEN ELECTIVE (OE) (Credit: 2) (Group A)
2. Teaching materials for early childhood education

Total Marks	50
Theory	40
IA	10

Unit-1

The oral communication methods: (stories, songs, Music, description, explanation, etc.) and conversational methods (conversation, heuristic conversation, questioning on a special subject, etc.).

- Exploratory learning methods: direct exploration of objects and phenomena (systematic and independent observation, small experiments, etc.) and indirect exploration (demonstration through pictures, films, etc.).
- Methods based on the pupils' direct voluntary action (exercises, practical work, etc.) and simulated action (didactic games, learning through drama, etc.).
- Use of natural materials (plants, shells, seeds, insects, rocks, sand, etc.)
- Intuitive materials (cast and clay models, Puppets, blocks, puzzles, mazes, etc)
- Figurative aids (pictures, photographs, atlas books, maps, albums, table games, etc.)

Unit-2-

Design and development of developmentally appropriate play materials to foster all round development in children using indigenous materials, Developing stories, songs with music and rhythm appropriate for infancy through early childhood

Creative Activities - importance, Types and values promoted, method of giving instructions. Process of scripting for puppet plays and creative drama.

- a) Painting – free hand, finger, thread, wax resist & spray
- b) Printing -block, leaf, stencil, thumb
- c) Pasting – collage, paper mosaic, sand
- d) Miscellaneous-etching, marbling, dough modelling

Unit-3- Creating teaching learning materials for developmentally challenged children (Blind, Dumb & deaf, Learning disabilities, Speech disorders, Mentally retarded, Gifted children, Slow learners)

-Designing & developing digital play materials like videos, audio aids or audio- Visual aids

Reference:

1. Contractor, M., 1984, Creative drama and puppetry in education, National book trust of India, Delhi
2. Devadas P. Rajammal and N. Jaya (1996), "A Textbook on child development", Mac Millan India Ltd. New Delhi.
3. Nasim Siddiqi, Suman Bhatia and Suptika Biswas (2007) Early Childhood Care and Education –Book IV, DOABA HOUSE, New Delhi.
4. Sen Gupta, M. (2009). Early Childhood Care and Education. New Delhi: PHI Learning Pvt.Ltd.
5. Soni, R., 2015, Theme based early childhood care and education programme- A Resource Book, NCERT

B.Sc. Home Science Semester-II
OPEN ELECTIVE (OE) (Credit: 2) (Group B)
Community Development

Total Marks	50
Theory	40
IA	10

Unit-I

Community Development: Meaning and definition of community development, elements of community development, objectives of community development programme, philosophy behind community development programme.

UNIT-II

Community Organization-

Meaning and concept of community organization, importance, objectives, principles underlined in community organization, methods of community organization in extension work.

UNIT-III

Development programme

Definition of development, need and importance of development programme in the field of home science. Role and impact of IRDP, ICDS, NPFW, NAEP etc. in upliftment of rural/urban families.

INTERNAL ASSIGNMENT

Arranging photos in photo-album on any developmental activity in village.

Books Recommended:

1. Supe. S. V. An Introduction to Extension Education – Oxford Publishing Company, New Delhi & Kolkata. 1999.
2. Dahama. O. P. and Batnagar O. P. Education & Communication for Development, Oxford & IBH Publishing Co., New Delhi, 1977.
3. Reddy Adivi. A. Extension Education, Shree Laxmi Press, Bapatla, Guntur, A.P.
4. Singh J. K., Mass Media and Information Technology, Mangaldeep Publication, Jaipur.
5. Kumar K. J. L., Mass Communication in India, Jaico Publishing House, Mumbai.
6. Audio Visual Aids for Co-operative Education and Training, FAO Publications.

B.Sc. Home Science Semester-II
VSC (Credit: 2)

1. Preparation and preservation of food

Total Marks	50
UA	30
CA	20

- 1.Preparation of Jam
- 2.Preparation of Jelly
- 3.Preparation of marmalade
- 4.Preparation of sugar syrup
- 5.Preservation by using salt (Pickling)
- 6.Preparation of Dahi
7. Preparation of Yogurt
8. Preparation of Shrikhand.

B.Sc. Home Science Semester-II
VSC (Credit: 2)

2. Preparation of teaching Materials

Total Marks	50
UA	30
CA	20

The oral communication methods: (stories, songs, Music, description, explanation, etc.) and conversational methods (conversation, heuristic conversation, questioning on a special subject, etc.).

- Exploratory learning methods: direct exploration of objects and phenomena (systematic and independent observation, small experiments, etc.) and indirect exploration (demonstration through pictures, films, etc.).
- Methods based on the pupils' direct voluntary action (exercises, practical work, etc.) and simulated action (didactic games, learning through drama, etc.).
- Use of natural materials (plants, shells, seeds, insects, rocks, sand, etc.)
- Intuitive materials (cast and clay models, Puppets, blocks, puzzles, mazes, etc)
- Figurative aids (pictures, photographs, atlas books, maps)

Creative Activities - importance, Types and values promoted, method of giving instructions. Process of scripting for puppet plays and creative drama.

- a) Painting – free hand, finger, thread, wax resist & spray
- b) Printing -block, leaf, stencil, thumb
- c) Pasting – collage, paper mosaic, sand
- d) Miscellaneous-etching, marbling, dough modelling

B.Sc. Home Science Semester-II

VSC (Credit: 2)

3. Communication Skill

Total Marks	50
UA	30
CA	20

- 1) Writing of a circular letter to communicate effectively to masses.
- 2) Preparation of radio Script.
- 3) Preparation of Television Script.
- 4) Preparation of News story to provide Extension communication to learners.

B.Sc. Home Science Semester-II

VSC (Credit: 2)

4. Accessories in Home Decoration

Total Marks	50
UA	30
CA	20

- 1) Articles made out of low cost / waste material
 - (a) Fabric painting, oil, water, nib, knife, sand, glass, stain glass etc.
 - (b) Wax work / candles etc.
- 2) Preparation of bonsai.
- 3) Visit to Landscape /rock garden.

B.Sc. Home Science Semester-II

VSC (Credit: 2)

5. Tie and Dye Techniques

Total Marks	50
UA	30
CA	20

1. Dyeing with direct dyes- cotton
2. Dyeing with reactive dyes- cotton, wool, silk
3. Dyeing with acid dyes- wool, silk
4. Tie and dye technique
5. Block printing using single and double coloured blocks, various placements of blocks
6. Batik technique Make sample and article of screen, block, stencil and batik
7. Preparation of an article/garment with a combination of techniques learnt above

B.Sc. Home Science Semester-II

SEC (Credit: 2)

1. Food processing and Bakery

Total Marks	50
Theory	40
IA	10

UNIT-I

Food Preservation:

Introduction principles and importance of food preservation. Methods of food preservation- Physical method, Chemical method.

Fruit and vegetables processing: Canning of vegetables, principles of food concentration. Preparation of sauces, pickles jam, jelly, sauces and juices. Methods of packaging.

UNIT-II

Spoilage of different groups of food: Importance of microorganism in food Fermentation technology, fermented vegetables, beer, vinegar and fermented soy products. Rice based and pulse based fermented products.

UNIT-III

Baking process and principles: Common bakery terms Baking standardization of items, methodology for baking. Preparation of bread, cakes, biscuits, cookies and pastries. Decoration of baked foods, Types of icing.

Suggested Readings:

1. Shrivastava Shyam Sundar (2001): Fruits preservation: Principles and methods; Kitab

Mahal Agencies, 22 Sarojini Naidu Marg, Allahabad 211001

2. Sahgal, Anita: Food preservation, Shiva Prakashan, Shri Ganesh Market, Khajauri

Bazar, Indore. Mobile 9827056900

B.Sc. Home Science Semester-II

SEC (Credit: 2)

2. Extension learning

Total Marks	50
Theory	40
IA	10

Objectives:

1. To develop understanding regarding extension teaching
2. To develop understanding regarding extension learning
3. To impart the knowledge of motivation for extension achiever
4. To understand the role of extension worker in rural development.

THEORY:

Unit –I

Extension Teaching: Meaning, definition of extension teaching and importance of extension teaching, factors contributing to teaching, principles of extension teaching, steps involved in extension teaching and desirable traits of a teacher for effective extension work.

Unit-II

Extension Learning: Meaning and definition of extension learning, laws of learning, principles of learning, ideal learning situation to achieve the goal, learning experience.

Unit-III


Extension Motivation: Definition and classification of motivation, importance of motivation in extension work, basic elements to motivate the home maker.

Internal Assignment


Write a detail account on one of the progressive programmes held in your village. Eg. Gramin Swachata Aabhiyan, sarva shiksha abhiyan etc.


Books Recommended:

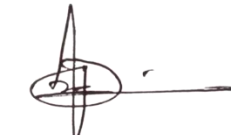
1. Supe. S. V. An Introduction to Extension Education – Oxford Publishing Company, New Delhi & Kolkata. 1999.
2. Dahama. O. P. and Batnagar O. P. Education & Communication for Development, Oxford & IBH Publishing Co., New Delhi, 1977.
3. Reddy Adivi. A. Extension Education, Shree Laxmi Press, Bapatla, Guntur, A.P.
4. Singh J. K., Mass Media and Information Technology, Mangaldeep Publication, Jaipur.
5. Kumar K. J. L., Mass Communication in India, Jaico Publishing House, Mumbai.
6. Audio Visual Aids for Co-operative Education and Training, FAO Publications



Dr. P. L. Tejgale


(Mr. N. M. Ghatkande)


Dr. Priya A. Sangole
B. K. Maula Mahavidyalaya
Kukheda.


(Dr. A. N. Shende)


(Dr. Nandkishor N.
Padole)


(Dr. O. P. Singh)