

**SHIVAJI UNIVERSITY****STRUCTURE AND SYLLABUS OF M.A. (HOME – SCIENCE)****M.A. – I**

<b>Class</b>	<b>Paper No.</b>	<b>Name of the Paper</b>	<b>Distribution of Marks</b>			<b>Hours of Instructions</b>		
			<b>Theory</b>	<b>Practical</b>	<b>Total</b>	<b>Theory</b>	<b>Practical &amp; related activity</b>	<b>Total</b>
<b>M.A.- I</b>								
1.	I	Research method and statistics	100	-	100	4	-	4
2.	II	Advanced study in Human Development	100	-	100	4	-	4
3.	III	Management of Human Resources	75	25	100	4	1	5
4.	IV	Community Nutrition and Dietetics	75	25	100	4	3	7

## M.A. II

Class	Paper No.	Name of the Paper	Distribution of Marks			Hours of Instructions		
1.	I	Household Equipment and Ergonomics	100	-	100	4	-	4
2.	II	Programme Development and Extension training management	100	-	100	4	-	4
3.	III	Family clothing and traditional textile	75	25	100	4	3	7
4.	IV	Food preservation and quality control	75	25	100	4	3	7

## **EXAMINATION PATTERN AND NATURE OF QUESTION PAPER**

### **THEORY**

1) There will be FOUR Essay type questions with internal choice having 15 Marks Each. (15\*4= 60)

Note – When there is a section, there will be TWO essay type questions from each section having the internal choice from the same section.

2) There will be ONE short note type question of 15 marks. Three out of six each having 5 marks.

Note – When there is a section, THREE short notes from each section should be included in the question paper.

### **Practical and Related Activities.**

There will be an internal assessment of Practical and Related Activities having 25 marks.

## **M.A. – I (HOME SCIENCE)**

### **PAPER – I – RESEARCH METHOD AND STATISTICS**

**WORK LOAD – 4 LECTURES / WEEK**

**Total Marks - 100**

#### **OBJECTIVES :**

1. Underline the significance of research Methodology in research.
2. Develop ability to construct data gathering, instruments appropriate to the research design.
3. Develop ability present and interpret data in a research report or thesis.
4. Understand the role of statistics in research.
5. Apply statistical techniques to research data for analyzing and interpreting data meaningfully.

### **COURSE CONTENT**

#### **SECTION – I**

#### **RESEARCH METHOD**

##### **1. INTRODUCTION :**

Definition of Research, scope of research in Home-science. Types of Research – Historical, survey, Experimental and case study.

##### **2. FORMATION OF RESEARCH PLANS :**

Identification of problem of research. Design of study. Inference about study.

### **3. SOURCES OF INFORMATION :**

Primary and Secondary data, Sources of Primary and Secondary data. Uses of documents and records. Library and other references.

### **4. SAMPLING TECHNIQUES :**

Census and sampling methods. Advantages of sampling over census method, methods of sampling – simple Random sampling, stratified Random sampling and Cluster sampling. Selection of appropriate method in various situations.

### **5. PRESENTATION OF DATA :**

Objects of Classification, Bases of Classification. Terms involved in classification. Ungrouped data and grouped data. Formation of frequency distribution.

Rules to prepare a frequency distribution with illustrations.

### **6. DIAGRAMATIC AND GRAPHICAL REPRESENTATION :**

(a) Diagrams : Bar diagrams- simple, multiple and sub-divided bar diagram, Pie diagram.

(b) Graph : Histogram and Ogive Curves : Computations of Median, Mode, Quartiles from Graphs.

### **7. RESEARCH REPORT :**

Basic requirements for writing report of thesis and Project, presentation of report, format, footnotes, bibliography. Abstract preparation and paper for Publications.

## **SECTION – B**

### **STATISTICS**

#### **1. INTRODUCTION AND MEASURES OF CENTRAL TENDANCY :**

Meaning, scope and Definition of Statistics, Measures of Central Tendency, Mean, Median, Mode, Quartiles, examples for grouped and ungrouped data.

#### **2. MEASURES OF DISPERSION :**

Range, Quartile Deviation, Standard deviations, Skewness and Kurtosis and their interpretations.

#### **3. CORRELATION AND REGRESSION :**

Concept of correlation scatter diagram method, Karl Pearson's Correlation Coefficient, Rank Correlation Coefficient. Regression – Meaning of regression, lines of regression, coefficient of regression, Relation of Correlation coefficient and regression coefficient numerical examples.

#### **4. PROBABILITY :**

Classical, Empirical and Axiomatic definition of probability. Addition and multiplication Laws of Probability. Conditional Probability and Independence of events (only for two events) and related Examples.

#### **5. PROBABILITY DISTRIBUTIONS :**

Concept of random variable, Probability mass function, probability density function, cumulative density function, Binomial distribution, Normal distribution and their properties Simple related Examples.

## **6. ATTRIBUTES :**

Definition of class & class frequency. Formation of 2 x 2 Contingency table. Association of Attributes, Independence of Attributes and their interpretation with illustrations.

## **TESTING OF HYPOTHESIS :**

Definition of Hypothesis, level of significance.

- a) Large sample tests :
  - i) Test of population mean
  - ii) Test of equality of two population means.
- b) Exact sample tests :
  - I. Chi-square test :
    - i) Test of population variance
    - ii) Test of Goodness of fit
    - iii) Test of Independence of Attributes
  - II. t-test :
    - i) Test of population mean
    - ii) Test of equality of two population means
    - iii) Test of population correlation coefficient
  - III. F-test :
    - i) Test of equality of two Population variances.

## REFERNCES :

1. Introduction of statistical Methods - C.B. Gupta
2. Fundamentals of statistics vol. I & II - Goon, Gupta, Dasgupta
3. Hand book of Research Methodology - Devdas R.P. & Kulandaivel K
4. Research Methods - S.P. Gupta
5. Statistical concepts and applications - Harry Franxk and Steven C. Althoen
6. Fundamentals of statistics - S.C. Gupta
7. Probability theory and Mathematical Statistics - V.K. Rahatgi
8. Mathematics, statistics and systems for Health - Bailey
9. Basic statistics - Dunn
10. Survival models and data Analysis - Elandt Johnson
11. Theory and Analysis of sample survey Designs - Darogasdingh- F.S. Choudhary
12. Methods of Research - Good C.V. and Scafes D.E.
13. Research in Education - Best J.W.
14. Statistics in Education and Psychology - Garret H.
15. सामाजिक संशोधन पद्धती - डॉ. पु. ल. भांडारकर



## **M.A. PART – I- HOME SCIENCE**

### **PAPER – II ADVANCED STUDY IN HUMAN DEVELOPMENT**

WORK LOAD – Theory 4 Lectures per week

#### **OBJECTIVES –**

1. To understand an advanced study of stages in human development with specific focus on adolescent, youth, adulthood and old age.
2. To understand the principles and factors influencing human development in these stages.
3. To study the issue of identity, developmental tasks and problems associated with these stages.

#### **CONTENTS –**

##### **1. ADOLESCENCE (11-18 YEARS)**

- The concept of adolescence in India
- Development tasks of adolescence
- Puberty and its consequences, Emotional stages
- Development of formal operations
- Construct of self and development of self
- Role of family, peers, community and ethnic group, Electronic Media
- Moral reasoning and Judgment
- Health, sexuality

## **2. YOUTH / YOUNG ADULthood (18 – 35 YEARS)**

- Introduction, cultural and developmental perspectives on youth and adulthood
- Development needs, Importance of social organization
- Culmination of Identity formation
- Life cycle approach – sexuality, marriage, marital adjustment, parenthood.

## **3. MARRIAGE**

- Legal age and its relationship to development, marriage as a family / individual issue.
- Marriage choices and significance of marriage in human development.

## **4. MARRIAGE COUNSELING**

- Concept and Role

## **5. DELINQUENCY AND DISTURBANCES IN ADOLESCENTS**

- Juvenile delinquency, causes and prevention.
- Psychological disturbances, depression, suicide, substance abuse.
- Causes of HIV / AIDS and prevention.

## **6. MIDDLE ADULTHOOD (35 – 40 YEARS)**

- Physical continuity and changes, Adult intelligence personality development – Role in family
- Development of self, Inter – generation relationship maintaining family relationship

- Friendship
- Parenting adult offspring's and their Marriages, Menopause in women. Health and disease. Adult sexuality, work and career development.
- Gender differences.

#### **7. LATE ADULTHOOD (50 – 55 YEARS)**

- Continuity and changes personality – the family life cycle
- Social Relationships
- Grand Parenthood – intergenerational relations
- Occupational continuity and changes effect on identity
- Retirement from formal work
- Common health problems

#### **8. OLD AGE (65 + YEARS)**

- Physical aspects of aging
- Changes in cognitive abilities and creativity
- Psychological Development
- Changes in family life cycle. Health and diseases
- Death, dying and bereavement

## REFERENCE :

1. Rice E.P. (1992) Human Development : A life span approach, New Jersey : Prentice Hall.
2. Schiamberg, L.B. and smith, Ku (1982) Human Development, New York : Macmillan
3. Santrock, J.W. (1996) The Life Span, New York Wadsworth publishing.
4. Lefrancois, G.R. (1996) Child Development, London Allyn and Bacon.
5. Deats, S.M. and Lenker, L.T. (Eds) (1999). Aging and Identity, London, Praeger.
6. Berk L.E. (1995) Child Development, London Allyn and Bacon.
7. Balk D.E. (1995) Adolescent Development, New York Brooks / cole.
8. Erikson, E.H. (1968) Identity Youth and Crisis, London, Faber and Faber.
9. Kroger, J (1996) Identity in Adolescence London : Routledge.
10. Kakar, S. (1992) Identity of the Adulthood, Delhi, Oxford University Press.
11. Sharma, N L(1996) Identity of the Adolescent girl, New Delhi, Discovery Pub. House.
12. Saraswati, T.S. and Ditta R. (1988) Invisible Boundaries, Grooming for Adult Roles, New Delhi, Northern Book Center.
13. Sharma N. (1999) understanding adolescence New Delhi National Book Trust.
14. किशोरावस्था प्रा. जुनुनकर
15. वैकासिक मानसशास्त्र प्रा. हिरवे, प्रा. तडसरे
16. वैकासिक मानसशास्त्र प्रा. जनई, प्रा. माळी, प्रा. तडसरे

**M.A. – I**

**HOME SCIENCE**

**(PAPER – III) MANAGEMENT OF HUMAN RESOURCES**

WORK LOAD – 3 Lectures per week for Theory	TOTAL MARKS : 100
1 Lecture per week for related	THEORY : 75
activity	Related Activity :
	Seminar/Project – 25

**OBJECTIVES –**

1. To understand the significance of management of resources.
2. To develop the ability to evaluate the management system in family and other organizations.
3. To increase the awareness and importance of human resources.
4. To acquire the ability to use scientific facts and principals for decisions related to use of resources.

**CONTENTS –**

1. HISTORY AND DEVELOPMENT OF HOME MANAGEMENT IN INDIA AND ABROAD.
2. MANAGEMENT AS A SYSTEM
  - Definition
  - Elements
  - Types
  - Advantages and limitations of system approach
  - Application in family resource management.

### 3. MANAGEMENT ABILITIES

- Conceptual
- Human
- Technical

### 4. DECISION MAKING

- Meaning
- Types
- Modes
- Techniques and Tools
- Cost, benefit analysis

### 5. MANAGEMENT FUNCTIONS AND PROCESS

- Planning – objectives, principles, policies, strategies.
- Organizing – Purpose principles, processes delegation authority, responsibility and accountability.
- Staffing – Purpose, principle, recruitment, appraisal.
- Guiding, directing, leadership, motivation, communication.
- Controlling tools for management control, Feedback Evaluation – Tools and techniques.

## 6. HUMAN BEHAVIOUR IN ORGANIZATIONS

- Personality : attitudes, motivating factors
- Group behaviour and Dynamics
- Team Management
- Stress and conflict management

## 7. ENDS SOUGHT THROUGH MANAGEMENT

- Goods – factors affecting ends
- Values – Sources of value pattern, status security
- Standards – Quality control, Total Quality Management
- Harmony – Ethics

## 8. PRINCIPLES OF HUMAN RESOURCE USE

## 9. METHODS AND TECHNIQUES FOR IMPROVING RESOURCE USE

- Questioning approach
- Development and use of labour saving devices
- Improvement of working conditions
- Changing of attitudes
- Development of efficient work methods

## 10. USE OF ENERGY AS HUMAN RESOURCE

- Nature
- Energy demands
- Fatigue and Impairment

## 11. TIME AS A HUMAN RESOURCE

- Nature
- Time demands
- Tools in Time Management
- Process of Managing Time

## 12. FAMILY HEALTH AND RESCREATION MANAGEMENT

- Public and Private agencies help in health and recreation
- Family centered Recreation
- Leisure time and Recreation
- Management of Family Medical care

## **PRACTICAL / RELATED ACTIVITY**

- 1) Seminar on Related topics having 25 marks.

## **REFERECES :**

1. Kapur S.K. (1996) – Professional Mangement S.K. Publishers, New Delhi.
2. Dwivedi R.S. (1981) – Dynamics of Human Behaviour of work oxford and 9BH, New Delhi.
3. Saiuadain M.S. (1988) – Human Resources management, Tata Mc-Graw Hill, New Delhi.



4. Dayal R. (1996) – Dynamics of Human Resources Development, Mittal Publications, New Delhi.
5. Rao N.P. (1986) – Human Resources Development in Management and Administration, B.K. Publishers, Delhi.
6. Karnik V.G. (1984) – Personal Management, - Jaiw Bombay.
7. Deconrath E. and Firebavgh F.M., - “Home – management concept and context.”
8. Gross Ima and Crandall Elizabeth – “Management for modern families”.
9. Swanson – “Management system”.
10. प्रा. सौ. लीना कांडलकर – प्रगत गृहव्यवस्थापन
11. प्रा. सौ. आशा निमकर – प्रगत गृहव्यवस्थापन
12. प्रा. सौ. नंदिनी जठार – गृहव्यवस्थापन व गृहकला

**M.A. PART – I**  
**HOME SCIENCE**

**(PAPER-IV) COMMUNITY NUTRITION AND DIETETICS**

WORK LOAD – 7 Lectures	Total Marks : 100
Theory : 4	Theory : 75
Practical : 3 lectures/batch	Practical : 25

**OBJECTIVES –**

1. To enable Student to gain awareness of the community and nutritional problems.
2. To get aware and appreciate the contribution of knowledge to the nutritional improvement in community.
3. To acquire knowledge about various important diseases in the community.
4. To develop ability to acquire knowledge for dietary treatments in different diseases.
5. To develop skills to measure and maintain nutritional and health status of the community under normal and abnormal disease condition.

## **CONTENTS –**

### **SECTION – I**

#### **COMMUNITY NUTRITION**

- UNIT 1 :** Perspectives in the history and philosophy of Community Health, Community Nutrition and Society.
- UNIT 2 :** Assessment of nutritional status by using different methods, i.e., diet surveys. Anthropometry, clinical, and Biochemical.
- UNIT 3 :** Prevalence of nutrition related problems in different vulnerable groups – Infant, Pregnant Women, Lactating mother.
- UNIT 4 :** National and International organizations related to nutrition. National organizations, i.e., NIN, CFTRI, NNDIB, ICMR, International organization, i.e., FAO, WHO, CARE, NICEF.
- UNIT 5 :** Nutrition education for the community, Nutrition education through Nutritional feeding programmers. Role of training workers in nutrition education. Planning, controlling and evaluation of nutrition education programme.

### **SECTION – II DIETETICS**

- UNIT 1 :** Special feeding methods, i.e., Tube feeding, Intravenous feeding, Nasal feeding.
- Types of fever, physiology of fever, metabolic changes, Dietary treatment in chronic fever.

**UNIT 2 :** Principles and Planning of post operative diet. Pre and post operative nutrition. (High protein, fat and low Cho diet). Surgery of the stomach, mouth, duodenum, GI tract and Nutrition after burns.

**UNIT 3 :** Principles of planning diet in Kidney diseases, Gall bladder stones, Nephritic syndrome, Nephrosis dialysis, their causes symptoms, dietary treatment and management.

**UNIT 4 :** Principles involved in the diet planning for major nutritional deficiencies such as PEM, Anemia and Vitamin A, their causes, symptoms and dietary modifications.

#### **PRACTICALS –**

1. Assessment of nutritional status of any one of the group of community by use of different methods of assessment.
2. Participating and conducting world Food day, Nutrition week, WHO day.
3. Plan and preparation of diet in various diseases and
  - a) Chronic liver
  - b) Surgery of stomach
  - c) Burns
  - d) Jaundice
  - e) Cirrhosis
  - f) Gall bladder stone

- g) Nephritic syndrome
- h) PEM
- i) Anemia
- j) Vitamin A

### **PRACTICAL EXAMINATION PATTERN**

1. Reports and Record book : Working diet plans for different diseases and Internal assessment of reports related to activities carried out by the students, i.e,
  - i) Nutritional status of any one selected group of community,
  - ii) Participation in WHO, FAO, Nutrition week programme etc. Reports should be neatly written, typed and bound Form having 15 marks.
2. Plan and preparation of diet in various diseases and deficiencies.

10 marks (Any One)

Chronic Fever / surgery of stomach / Burns / Jaundice / Cirrhosis / Gall bladder stone / Nephritic syndrome / PEM / Anemia / Vitamin A or B carotene.

#### **Planning diet :**

Diet Plan	-	2
Nutritive Value calculation	-	2
RDA writing	-	1
Total	-	5

#### **Preparation of diet :**

Taste – 1, Appearance – 1, Selection – 1, Texture – 1, Overall – 1, Total – 5 marks

## REFERENCES :

1. A text – book of foods, Nutrition and Dietetics by M. raheena Begum
2. Human Nutrition and Dietetics by Davidson and passnore
3. Assessment of the Community Nutritional status by jellitte
4. आहार आणि पोषण – मिनाक्षी तारणेकर
5. पोषण आणि आहारशास्त्र परिचय – सरल लेले
6. मानवी पोषण व आहारशास्त्राची मुलतत्वे – डॉ. आशा देऊरकर
7. पोषणशास्त्र – डॉ. मंजुषा मोळवणे

## PERIODICALS

1. Indian journal of Nutrition and Dietetics
2. Journal Home science Association of India
3. American journal of Clinical Nutrition.
4. आरोग्यदीप

## **M.A. PART – II (HOME – SCIENCE)**

### **PAPER – I – HOUSEHOLD EQUIPMENT AND ERGONOMICS**

WORK LOAD

TOTAL MARKS : 100

THEORY : 4 Lectures / week

#### **OBJECTIVES**

1. To understand the principle underlying the operation, use and care of household equipment.
2. To recognize base material. Finishes used in construction of household equipment.
3. To develop understanding of the standards for evaluating household equipment.
4. To aware the students about importance of ergonomics in work effectiveness and efficiency.

#### **THEORY**

##### **UNIT 1 : INTRODUCTION TO HOUSEHOLD EQUIPMENTS**

A. Meaning, classification – in terms of

- a) Cleaning, Food processing, Laundry equipment's and Equipments for personal care and recreation.
- b) Electrical and non- electrical.
- c) Portable and non- Portable.

- B. Importance of various Household Equipments in conserving time, energy and money.
- C. Factors affecting selection of equipments.

## **UNIT 2 : MATERIAL USED FOR HOUSEHOLD EQUIPMENTS**

- A. Base material – Aluminium, Iron, Steel, Copper, Glass, Plastic
- B. Finishes – Mechanical, Applied
- C. Insulating material – Mica, Fiberglass, Fiberwool, Mineral wool, Plastic, Foam

## **UNIT 3 : OPERATIONAL PRINCIPLE, USE AND CARE OF ELECTRICAL**

Equipments used in home

- |                      |                                   |
|----------------------|-----------------------------------|
| i) Vacuum Cleaner    | ii) Mixer-juicer-grinder          |
| iii) Food processor  | iv) Oven and cooking range        |
| v) Microwave oven    | vii) Eggbeater                    |
| vii) Washing Machine | viii) Geyser, water immersion rod |
| ix) Iron             | x) Hair dryer                     |

## **UNIT 4 : OPERATIONAL PRINCIPLE USE AND CARE OF NON ELECTRICAL EQUIPMENTS USED IN HOME**

- |                      |                        |
|----------------------|------------------------|
| i) Cleaning Mop      | ii) Gas stove          |
| iii) Smokeless chula | iv) Solarcooker        |
| v) Pressure cooker   | vi) Solar water heater |



**UNIT 5 : SELECTION, USE AND CARE OF RECREATIONAL EQUIPMENTS**

- |                      |                |
|----------------------|----------------|
| i) Radio             | ii) Television |
| iii) Tape – recorder | iv) Camera     |
| v) VCR               |                |

**UNIT 6 : SELECTION, USE AND CARE OF ADVANCED EQUIPMENTS**

- |                |              |
|----------------|--------------|
| i) C.D. Player | ii) Computer |
|----------------|--------------|

**UNIT 7 : CONCEPT, SCOPE AND IMPORTANCE OF ERGONOMICS IN HOME**

**UNIT 8 : IMPORTANCE OF SPACE, NOISE, LIGHT, VENTILATION IN WORK PERFORMANCE**

**UNIT 9 : ANTHROPOMETRIC DIMENSIONS OF WORKER AT WORK AND REST**

Elbow room, Clearance space for operating Equipments, working heights for various activities.

**REFERENCE BOOKS :**

- |   |  |
|---|--|
| 1. Household physics  | - Aveny H., Mac Millan Co.                   |
| 2. Household Equipments   | - K.K.Bali, Orient paper backs,<br>New Delhi |
| 3. विद्युत उपकरणाची निगा व दुरुस्ती ल. प्रा. प्रकाश शहा अर्त विद्युत शाळा प्रकाशन, पुणे |  |
| 4. International Review of Ergonomics   |  |

- |   |   |   |
|---|---|---|
| Obrone  | - | International Book house,<br>New Delhi  |
| 5. गृहव्यवस्थापन व गृहकला क्षमा लिमये विद्या प्रकाशन नागपूर       |   |   |
| 6. Elements of Home Science                                       | - | Premlata Mulik  |
| 7. House hold Materials   | - | A manual for care and<br>maintenance Manchanda,<br>Goel, Rammurthy, Kumar,<br>Wheeler publication,<br>New Delhi |
| 8. Handbook for Homemakers  | - | Premlata Mullick, Kalyani<br>Publication, New Delhi   |
| 9. Work place dimensions and<br>physiological costs to the worker | - | Hudson W.R. The journal of<br>Industrial Engineering  |
| 10. Household equipment   | - | Peet, L.J., & Pickets, M.s.<br>John Wiley and Sons.   |

**M.A. – II**

**(HOME SCIENCE)**

**PAPER NO. II : PROGRAMME AND DEVELOPMENT AND  
EXTENSION TRAINING MANAGEMENT**

**WORK LOAD :**

**MARKS : 100**

Theory : 4 Lectures / week

**OBJECTIVES :**

1. To enable students to acquire knowledge regarding Programme planning, Programme development, Leadership and Extension evaluation.
2. To help student to acquire knowledge regarding training, training methods, training Evaluation and monitoring.
3. To develop and ability to prepare programme plan for community / individual family.
4. To make the students aware of different training techniques.

**COURSE CONTENT :**

**SECTION A : PROGRAMME DEVELOPMENT**

**UNIT 1 : EXTENSION PROGRAMME**

Concepts, definition, advantages / importance of having a programme.

**UNIT 2 : OBJECTIVES**

Definitions, importance of objectives, Levels of objectives, objectives of Extension.

**UNIT 3 :   PROGRAMME PLANNING**

Concepts. Definition, Principles of Programme planning, Criteria for good Programme planning and criteria for involvement of people in programme planning.

**UNIT 4 :   PROGRAMME DEVELOPMENT PROCESSES AND LEADERSHIP**

Definition, steps involved in Programme development processes, Leadership-

Definition, types of leader, function of leader. Role and importance of leadership development in extension.

**UNIT 5 :   EXTENSION EVALUATION**

Concepts, definition, Degree of evaluation, values of evaluation, six keys of evaluation.

**SECTION B – EXTENSION TRAINING MANAGEMENT**

**UNIT 1 :   EXTENSION TRAINING**

concept, definition, importance of training in extension training Vs education.

**UNIT 2 :   COMPONENTS OF TRAINING**

Objectives, concepts, training methods, trainees, training evaluation.

**UNIT 3 :   DIFFERENT TRAINING METHODS**

Lecture, Group discussion, Buzz session, Role play, Workshop, Panel discussion, Seminar, Symposium.

**UNIT 4 :    TRAINING MANAGEMENT, TRAINING MONITORING O  
EVALUATION –**

Meaning, systems of management, participatory rural appraisal in training (PRA techniques), Training evaluation – definition of evaluation, importance of evaluation in training.

**UNIT 5 :    ORGANIZING HUMAN AND NON HUMAN RESOURCES  
FOR TRAINING**

Role of government and non government agencies in Organizing training.

**REFERENCE BOOK :**

1. Dahma O.P. and Bhatnagar O.P. (1991), Education and communication for development oxford and IBH Publishing Co. New Delhi.
2. ROY G.L., (1991), Extension communication and management, Naya Prakashan, Calcutta.
3. Sandhu A.S. (1994), Extension programme planning, oxford and IBH Publishing co. New Delhi.
4. Supe S.V. (1987), An introduction to Extension Education oxford and IBH Publishing co. New Delhi.
5. Advi Reddy, Extension Education Baptata Publications, Baptata.
6. Lytibs, Rolf P and Pak (1998), Training and development
7. Mishra D.C. (1990), New Directions in Extension training.
8. Sigh R.P., Training Management

## **M.A. – II (HOME SCIENCE)**

### **PAPER NO. III : FAMILY CLOTHING AND TRADITIONAL TEXTILE**

**WORK LOAD :**

**MARKS : 100**

Theory : 4 Lectures / week

Theory : 75

Practical & Related activities-

Practical & related activities-25

3 lecturers/week/batch

### **OBJECTIVES –**

1. To develop an ability to identify clothing needs of family members and select the proper pattern for them to suit their activities.
2. To enable the students to develop skills in clothing construction.
3. To acquire knowledge of Textile from different states of India.

### **THEORY –**

**UNIT 1 :** a) INTRODUCTION, SCOPE AND IMPORTANCE OF CLOTHING.

b) FACTORS INFLUENCING THE CONSUMPTION OF TEXTILE.

Mode of living. Purchasing power, availability of goods, fashion-Ideologies.

**UNIT 2 :** SOLVING FAMILY CLOTHING PROBLEMS

- a) Clothing as a mental stimulant and happiness.
- b) Developing skills in clothing management.
- c) Budgeting for Family Clothing.
- d) Wardrobe planning.
- e) Training the children for selection and care of clothing.

**UNIT 3 :** CLOTHING FOR NEWBORN, CREEPING AGE AND TODDLER

- a) Selection of Fabric regarding color, Print Safety.
- b) Different types of garments for Newborn, Creeping age and Toddler considering construction features and habit formation.

**UNIT 4 :** CLOTHING FOR PRESCHOOL AGE, TEENAGERS, ADOLESCENT AGE, OLD AGE

- a) Selection of fabric and ready to wear garments.

**UNIT 5 :** SELECTION OF CLOTHING FOR DIFFERENT OCASSIONS  
Formal and informal and for various seasons.

**UNIT 6 :** SELECTION OF FABRIC AND GARMENTS FOR VARIOUS SPORTS ACTIVITIES

**UNIT 7 :** GOOD BYE – MANSHIP PRINCIPLES  
Comparison of values, selection of classic styles, clothing needs, brands, testing quality.

**UNIT 8 :     GUIDE TO JUDGE GOOD WORKMANSHIP IN READY TO WEAR GARMENTS**

Fabric, Seam allowance, hems, cuts, size, Finishes, Fit, Pockets plackets, Fastening and trim.

**UNIT 9 :     TRADITIONAL TEXTILES IN INDIA**

History, Fibre used in textile of Maharashtra, Gujrat, Saurashjtra, Kutch, Rajasthan, Jammu & Kashmir, Punjab, Uttar Pradesh, Assam, Manipur, Orissa, West Bengal, Karnataka, Tamilnadu, Kerala and Andhra Pradesh.

**PRACTICAL AND RELATED ACTIVITIES :**

1. Drafting, Cutting and stitching of Party Frock (10 to 12 years)
2. Drafting, Cutting and stitching of Blouse (Sari)
  - a) Simple with Yoke
  - b) Katori blouse
3. Drafting, Cutting and stitching of Shirt
4. Sample collection of fabric used in clothing for different age group (minimum 10 samples)
5. Sample collection of traditional textile in India (minimum 5 samples)



**MARKETING SYSTEM FOR PRACTICAL : Total marks – 25**

Submission of garments – 5 marks/garment 5 x 4 = 20

Submission of sample collection and journal 5 marks.

**REFERENCE BOOKS :**

1. Clothing for children - Thompson and Rea, John Wiley and son
2. Clothing - Latzke and quitan, hippincot co. Chicago
3. Fabric and Dress - Rathbone and Tarplay hongten Miffin co.
4. Manual of children's clothing- Pandit Savitri Orient Longmans Ltd.
5. Guide to Modern clothing - Starn M and Gieser
6. Fundamentals of Textile - Dhantyagi Sushila
7. वस्त्रशास्त्र - सौ. आढाव विमल, महाराष्ट्र विद्यापीठ ग्रंथ निर्मिते मंडळ, औरंगाबाद
8. पारिवारिक परिधान व्यवसाय - श्रीमती मंजु पाटणी, स्टार पब्लीकेशन, आग्रा
9. शास्त्रोक्त शिवणकला भाग 1 व 2 - हेगडे, हेगडे टेलरिंग कॉलेज, पुणे
10. Costumes and Textile Art of India - Jamilla Brji Bhishan, D.B. Tara Porewala and sons
11. Textiles and Embroideries of India marg Publications
12. Traditional Indian Textile, John Gillow, Nicholas Barnord Thames and Hudson Ltd., London
13. Comparative clothing constructions – Lewis
14. Hand woven Fabrics of India, edited by Jasteen Dhamija and Jyotindia Jain Maping Publishing Pvt. Ltd., Ahmedabad.

## **M.A. – II (HOME SCIENCE)**

### **PAPER NO. IV : FOOD PRESERVATION AND QUALITY CONTROL**

WORK LOAD : 7 (4+3)

MARKS : 100

Theory : 4 Lectures / week

Theory : 75

Practical - 3 lecturers/week/batch

Practical -25

**OBJECTIVES :** To enable students to

1. Acquire knowledge regarding principles and methods of food preservation
2. To make the student aware about food microbiology and food hygiene
3. To gain the knowledge about food law, ISI, Agmark, FPO standards and analyze foods for its quality control.

### **THEORY :**

#### **UNIT 1 : HISTORY AND PRINCIPLES OF FOOD PRESERVATIONS**

Food contamination – natural, handling and processing, Food spoilage, Food poisoning.

#### **UNIT 2 : FOOD MICROORGANISMS**

Bacterial, Yeast, Mould, Viruses their types and Characteristics, factors affecting growth of microorganisms.

#### **UNIT 3 : FOOD PRESERVATION METHODS**

Asepsis, Washing, By use of High temperature – Pasteurization, their types, boiling, canning – method, factors affecting the microorganism by use of high temperature, Thermal death time.

**UNIT 4 :** METHODS BY USE OF LOW TEMPERATURE

Cellars, Chilling, Freezing, Cold storage, factors affecting the microorganisms by use of low temperature.

**UNIT 5 :** METHODS BY USE OF DRYING

Non mechanical – sun drying : Fumigation, Salting Mechanical – Freeze drying, Foam mat, Spray and drum drying.

**UNIT 6 :** METHODS BY USE OF PRESERVATIVES

Natural preservatives, artificial chemical preservatives – organic, inorganic, food additives, developed preservatives.

**UNIT 7 :** METHODS BY USE OF RADIATION

Types of radiation methods, Effect of radiation on foods.

**UNIT 8 :** FOOD LAWS

Food adulteration act, ISI, Agmark, FPO, etc. structure of laws and their role.

**UNIT 9 :** ANALYSIS OF PH

Total soluble solids, total sugar, total protein, total crude fat from selected foods by use of PH meter, Refractometer and Spectrometer.

**UNIT 10 :** PREPARATION OF THE PRODUCTS FOR MARKETING

Principles involved in packing and labeling materials used in packages, sealing methods, calculation of market cost and benefit.

## **PRACTICALS**

1. Preparation of jam, jelly, ketchup
2. Preparation of synthetics syrups, squash, marmalade
3. Preparation of pickles – mix vegetables, Mango, Lemon, Chillies
4. Preparation of papad, potato wafers
5. Analysis of PH, TSS, total sugar, protein and fats
6. Visit to canning industry and pasteurization unit

## **PRACTICAL EXAMINATION PATTERN**

**Total Marks : 25**

### **AND MAKING SYSTEM**

1. Preparation any one product : 10marks  
Jam/Ketchup/Synthetics Syrup/Squash/ Pickels  
(Taste : 2 Appearance :2 Texture : 2 Doneness : 2  
Overall : 2 Total : 10 marks)
2. Analysis of any one from the given food material  
PH/TSS/Total sugar/Protein/Fat 5 marks
3. Submission of Report and Journal 10 marks

**REFERENCES :**

1. Food microbiology by Frazier.
2. Technology of food preservation – Desrosare N.W. ABT Pub - Company
3. Food science and Technology by Magnum Prike.
4. प्रा. राजकुमार कांबळे – 'अन्नसंरक्षण'
5. Food Preservation of fruits and vegetables by King.
6. Preservation of foods by Girdharilal Siddhoyya.
7. Journal of food science and Technology.