

**D R. BABASAHEB AMBEDKAR  
MARATHWADA UNIVERSITY,  
AURANGABAD.**



**M.A. First Year  
IInd Sem.**

**HOME SCIENCE**

**(EFFECTIVE FROM – 2015 ONWARDS)**

**DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY****AURANGABAD****Department of Home Science****Curriculum Structure and Scheme of Evaluation****For M.A. Ist Year****Semester – Second**

<b>Sr. No.</b>	<b>Course</b>	<b>Name of the Subject</b>	<b>Scheme of teaching (Periods Per week )</b>			<b>Scheme of Evaluation Marks</b>			<b>Total Credits</b>	
			<b>T</b>	<b>P</b>	<b>Total Periods</b>	<b>Theory Exam</b>	<b>Internal</b>	<b>Practical</b>		
<b>1</b>	<b>HSC 403</b>	<b>(Comp.) Human Development (Management for Early Childhood Education)</b>	<b>04</b>	<b>-</b>	<b>04 Week</b>	<b>80</b>	<b>20</b>	<b>--</b>	<b>100</b>	<b>4</b>
<b>2</b>	<b>HSC 404</b>	<b>(Comp.) Research methods &amp; Research Statistics</b>	<b>04</b>	<b>--</b>	<b>04</b>	<b>80</b>	<b>20</b>	<b>--</b>	<b>100</b>	<b>4</b>
<b>3</b>	<b>HSC 423</b>	<b>(Opt) Extension Education</b>	<b>04</b>	<b>--</b>	<b>04</b>	<b>80</b>	<b>20</b>	<b>--</b>	<b>100</b>	<b>4</b>
<b>4</b>	<b>HSC 424</b>	<b>(Opt) Advanced Nutrition</b>	<b>04</b>	<b>--</b>	<b>04</b>	<b>80</b>	<b>20</b>	<b>--</b>	<b>100</b>	<b>4</b>
<b>5</b>	<b>HSC 452</b>	<b>(Comp) Advance Nutrition Practical – I</b>	<b>--</b>	<b>04</b>	<b>04</b>	<b>80</b>	<b>20</b>	<b>--</b>	<b>100</b>	<b>4</b>
		<b>TOTAL</b>			<b>16</b>	<b>320</b>	<b>80</b>		<b>400</b>	<b>16</b>

**M.A. FIRST YEAR  
HOME SCIENCE  
(Second Semester)  
Paper-V  
Human Development  
(Management for Early Childhood Education)**

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<b>Subject Ref. No.</b>	<b>: HSC</b>	<b>403</b>
<b>No. of Credits</b>	<b>: 04</b>	
<b>No. of periods per weeks</b>	<b>: 04</b>	
<b>Assignments / Sessionals</b>	<b>: 20</b>	
<b>Semester Exam</b>	<b>: 80</b>	

**SCOPE :**

The Student would be eligible & qualified for teaching at preprimary level. This will provide opportunity for self employment a) Starting crèche b) Day care centres.

**OBJECTIVES:**

1. To understand the influence of various philosophers, education & theories on E.C.C.E.
2. To make parents aware of significance of E.C.C.E.
3. To develop the skills and techniques to plan and conduct activities in E.C.C.E. centers of different types and to work effectively with parents and community.
4. To understand special needs of exceptional children in educating them.

**Unit I Management in Pre School Education**

**Credit - I**

- i) Principles, long & short term, weekly & daily planning outline & schedules

- ii) Activities for early childhood care & education
- iii) Activities of Preschool Routine activities story telling, music & Rhymes, creative, activities, science experiences, social studies experiences, literature, reading, programme, field trip, festivals & celebration.
- iv) Preparation & use of teaching aids in Nursery school.
- v) Different Ways for Parents Participation, Parent Teacher Association (PTA) Importance & its Activities.

## **Unit II Teaching methods for Preschool Children      Credit - I**

- a) Concept of formal & non-formal education
  - i) Play way methods
  - ii) Integrated approach to learning, teaching experience
  - iii) Psychological effect of pressure on education and play activities
- b) Discipline & Accountability in school
  - i) School discipline, rewards and punishment
  - ii) Ways of ensuring effective institutional discipline
  - iii) Accountability in school education
  - iv) Methods used for assessment of accountability of Teaching & Non-Teaching staff.

## **Unit III Children with special needs      Credit - I**

- a. Definitions, causes & Need for Early Detection and Intervention.
- b. Types of Disabilities: Characteristics.
  - 1. Sensory Deficits- Visually & Hearing impairment, Blind children.

2. Mental Retardation
3. Learning Disabilities
4. Children with speech defects.
5. Gifted children – meaning classification characteristics, identification, education, special program.
6. Common behavioral Problems of Pre School Children: Causes and Prevention.

#### **Unit IV) Child Guidance and Counseling**

**Credit - I**

- a. Concept, aim, scope, Principle of guidance & counseling with Reference to Child development
- b. Competencies of Child guidance worker & Counselor
- c. Process of Child Guidance and Counseling
- d. Different Technique of guidance and Counseling-Behavior, Modification, Play Therapy, Case Study

#### **Related activities/sessionals (Any two)**

1. Visits to institutions and families for the study of (Any one)
  - a) Mentally challenged children
  - b) Blind Children
  - c) Deaf and dumb children
  - d) Physically crippled children
  - e) Children with speech defects
2. Growth monitoring of Anthropometric measurements (Height, Weight and Head Circumference) of Early Childhood. (Ten sample)
3. Presenting a Lecture / Demonstration /Seminar / Workshop on issues related to guidance & Counseling of Pre School Children.

4. Evaluation of Nursery school time table and suggest changes if necessary.

## **REFERENCE**

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12. Mohati & (1996). Early Childhood care & education care & New Delhi Deep & Deep Publication.

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17. Wagh Anutai : How to run a Balwadi. Thane, Gram Balshishan Kendra.
18. Sita –A Raman, Getting girls of school. UBSPD-U.B.S. Publication.
19. Aasha Prulekar, Mulanche Mansik tanav va Upachar Unmesh, Prakashan Pune.
20. Mohan Joshi, sujan palak-nirogi, vishal prakashan.
21. Prof, Ramesh Panse Bashikshan – Swarup va Navi Disha, Diamond Publication, Pune.
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**M.A. FIRST YEAR  
HOME SCIENCE  
(Second Semester)  
Paper –VI**

**Research Methods & Statistics**

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<b>Subject Ref. No.</b>	<b>: HSC</b>	<b>404</b>
<b>No. of Credits</b>	<b>: 04</b>	
<b>No. of periods per weeks</b>	<b>: 04</b>	
<b>Assignments / Sessionals</b>	<b>: 20</b>	
<b>Semester Exam</b>	<b>: 80</b>	

**OBJECTIVES:**

To develop understanding of report writing & techniques in statistics.

**CONTENTS:**

**Unit –I Report Writing** **Credit - I**

- a) Introduction, Definition & objectives of report writing.  
Factors of report writing Introduction, Review of Literature,  
Methodology, result & Discussions, Summary and  
Conclusion, Bibliography, Appendix

**Unit –II Statistical Techniques** **Credit -I**

- i) Introduction, Definition, use, merits and demerits of mean,  
median & mode.
- ii) Measures of Variability- Introduction, definition, Mean  
deviation, standard deviation, characteristic, Use,  
limitations.

**Unit III Correlation & Degree of freedom** **Credit –I**

Correlation- Introduction, definition & Types- Karl Person's & Spearman's rank correlation method. Correlation of coefficient- Meaning & use.

#### **Unit IV - Degree of Freedom**

**Credit -I**

- i) Introduction, Definition.
- ii)  $\chi^2$  (Chi-square) Test for  $2 \times 2 \times 3$  table.
- iii) Application of t' for small samples (below 30 samples)
- iv) Application of 'f' test.
- v) Analysis of Variance (ANOVA)

#### **Related activities/Sessionals (Any two)**

- 1. Find out the Mean, Mode, and Median from scores of any class.
- 2. Find Standard deviation from scores of any class.
- 3. Find co-relation.
- 4. Test application of any one : Chi-square, t test, f test.

#### **REFERENCES :**

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- 2. Bhatnagar, G.L. (1990): Research Methods and Measurement in Behavioural and aocial Science, Agri, Cole Publishing Academy, New Delhi.
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12. Dr. V.R. Bhiotade Shishanik Saushodhan Padhati, Nityanutan Prakashan, Khan communication Hindustan Mudranalaya, Tilak Road, Pune.-30
13. Dr. C.P. Kadam, Shishanik Sankhayashastra Nutan Prakashan Daswadi. Pune.
14. Dr. K.M. Bhadarkar, Sulabh Shaishanik Sankhayashastra, Nityanutan Prakashan, Daswadi Pune.
15. Deshkar, Deshpande, SankhkiShastra.
16. Dr. Suman Bahare Samajik Sushodhan Padhati Vidhya Prakashan, Ruikar road, Nagpur.
17. Dr. U.B. Kondewar, Smita Kondewar, Sankhiki aani Sankhayatmak tantra. Shibhabharti Prakashan, Ahemadpur Dist. Latur.
18. Dr. Pradip Aaglave, Saushodhan Padhati va Tantra Pramod Munje, Vidhya Prakashan, Nagpur.
19. Dr. Dilip Khainar, Dr. Kishor Raut, Samajik Saushodhan, Shinmaya Prakashan Paithan gate road Aurangabad.
20. R.R. Mule V. L. Umale Shikshanik Mutatve Maharashtra University Nirmat Mandal Nagpur.

**M.A. FIRST YEAR**  
**HOME SCIENCE**  
**(Second Semester)**  
**Paper -VII**  
**EXTENSION EDUCATION**

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<b>Subject Ref. No.</b>	<b>: HSC</b>	<b>423</b>
<b>No. of Credits</b>	<b>: 04</b>	
<b>No. of periods per weeks</b>	<b>: 04</b>	
<b>Assignments / Sessionals</b>	<b>: 20</b>	
<b>Semester Exam</b>	<b>: 80</b>	

**OBJECTIVES :**

1. Understand the role of Home Science in Rural Development
2. Plan an Extension Education Programme in Home Science
3. To develop skills in working with people.

**Unit I Rural Sociology**

**Credit 1.5**

- a. Community, family, Groups and neighborhood, Concept and Characteristics.
- b. Rural and urban community characteristics
- c. Social mobility, social interaction, social institutes, culture, social control and social change
- d. Understanding concept related to gender differences for society and development perspective. Patriarchy, caste class, gender and education, economic empowerment and gender, and issues related to women.

**Unit II Teaching Learning Process**

**Credit 0.5**

- a) Concept of learning , Elements & Principle involved in Learning
- b) Learning experience
- c) Types of Learning
- d) Adult Learning

### **Unit III Extension Program Planning**

**Credit - 1**

- a) Meaning and importance of Extension Program Planning
- b) Principles of Extension Program Planning
- c) Steps in Program Planning
- d) Problems in implementation of an Extension Program

### **Unit IV Support Structure and their function in extension education**

**Credit - 1**

- A)
  - i) Panchayat Raj Institution in India
  - ii) Zilla Parishad
  - iii) State social welfare board
- a) Rural development Programme, agencies and voluntary organizations in rural development-
  - 1. Development Programmes for farm sector-FAO, NAREGA, TRYSEM
  - 2. Development Programmes for non farm sector-ICDS,SGSY, NIPCD,WHO, DWACRA,
  - 3. Development agencies –RUDA, NABARD, ATMA, CAPARTC

### **Sessional Activities (Any Two)**

- 1. Preparation of CD/DVD on any topic from five major areas- Human Development, Nutrition, dietetics extension, family resource management, textile & clothing.

2. Survey of rural community and need assessment (Report writing).
3. Assignment on rural development programmes.
4. Survey to any developmental organization / Government or Non-Government.

## **REFERENCES :**

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8. [e@. yeeefjos, [e@. kegâuekeâCee, meecegoeeefÙeekeâ DeejesiÙee Je heeeefjÙeeefjkeâe mesJee mebkeseâle ØeekeâMeve, Deewjbieeyeeo.
9. Øee. megOee keâeUoeles, DeeOegeefvekeâ YeejleeÙÙee meeceeeefpekeâ mecemÙee.

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**M.A. FIRST YEAR**  
**HOME SCIENCE**  
**(Second Semester)**  
**Paper-VIII**  
**Advanced Nutrition**

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<b>Subject Ref. No.</b>	<b>: HSC</b>	<b>424</b>
<b>No. of Credits</b>	<b>: 04</b>	
<b>No. of periods per weeks</b>	<b>: 04</b>	
<b>Assignments / Sessionals</b>	<b>: 20</b>	
<b>Semester Exam</b>	<b>: 80</b>	

**OBJECTIVES :**

1. To understand the basic concept of metabolism of nutrients.
2. To plan and prepare innovative foods.
3. To understand the importance of enrichment of food.

<b>Unit – I</b>	<b>Carbohydrate</b>	<b>Credit – I</b>
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- a. Composition.
- b. Classification, distribution & characteristics.
- c. Functions.
- d. Dietary allowances & food sources.
- e. Dietary fibers.
- f. Digestion & metabolism of carbohydrates.

<b>Unit – II</b>	<b>Proteins and amino acid</b>	<b>Credit – I</b>
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- a. Composition, structure, and classification (in brief)
- b. Function.



- c. Dietary protein requirements and allowances, biological value.
- d. Improving protein quality of foods.
- e. Food sources.
- f. Digestion & absorption and metabolism of protein (in brief).
- g. Protein deficiency - Causes, classification & nutritional remedies, malnutrition.

### **Unit – III Lipids**

**Credit – I**

- a. Composition, classification & characteristics.
- b. Functions of Fats
- c. Essential fatty acids, Phospholipids, cholesterol.
- d. Dietary allowances.
- e. Food sources
- f. Digestion, absorption & metabolism (in brief).

### **Unit – IV Energy Metabolism**

**Credit – I**

- 1. Introduction
- 2. Measurement, Kilocalories, Joules, Physiological Fuel and Specific Fuel.
- 3. Factors influencing the total energy requirement.
  - a. Muscular activity
  - b. Mental effort
  - c. Calorigenic effect of food.
  - d. Maintenance of body temperature
  - e. Growth

4. Measurement of energy exchange of body : Direct & indirect calorimeter. Basal metabolism test, Factors influencing on BMR.

**Sessional Activities: (Any two)**

1. Making and selling of products like pickles, masale, squash, dry chutneys etc.
2. Survey of new instant food products oat products, soya products, multigrain products.
3. Survey of malnourished child with corrective measures suggested.

**REFERENCES**

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3. Shils M.E. Olson J.A., Shike M and Ross, A.C. (1999) Modern Nutrition in health & disease, 9<sup>th</sup> Edn. Williams & Wilkins.
4. Garrow, J.S. James, W.P.T. & Ralph, A (2000) "Human Nutrition & Dietetics" 10<sup>th</sup> Edn. Churchill Livingstone.
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**M.A. FIRST YEAR**  
**HOME SCIENCE**  
**(Second Semester)**

**Advanced Nutrition (Practical)**

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<b>Subject Ref. No.</b>	<b>: HSC</b>	<b>452</b>
<b>No. of Credits</b>	<b>: 04</b>	
<b>No. of periods per weeks</b>	<b>: 04</b>	
<b>Assignments / Sessionals</b>	<b>: 20</b>	
<b>Semester Exam</b>	<b>: 80</b>	

**1. Enrichment :**

- a. Protein – For malnourished children of different grades and income group (quality, quantity).
  - b. Calories – Low & high calories diet (fat free receipes).
  - c. Fiber – High & Low fiber food.
  - d. Minerals – Calcium, Iron and Sodium High & Low.
  - e. Vitamins – Vit A, B Complex : B1, B2, B3 and Vit C.
2. Preservation – Jam, Jelly, Ketchup, Chutney, Avala moravala, Avala Supari, Pickles with and without oil, Lime and orange squashes, Masala Kala Masala, Samber Masala, Pavbhaji Masala Garam Masala.
3. Development and preparing non conventional food.
- a. Recipe :  
Atleast 3 receipes made from waste of vegetables, fruits, cereals and milk.
  - b. Sensory Evaluation
  - c. Preparation of receipes containing probiotic foods.

### **Distribution of Marks for Practical Examination**

Enrichment Planning & Calculation of 3 receipes (one for each income group) of given nutrient	:	20 Marks
Preparation of one recipe	:	20 Marks
Detail write up and calculation of given receipe:		20 Marks
Preservation : Planning any one given receipe / Non Conventional food planning of any one Receipe & detail write up	:	20 Marks
Viva	:	10 Marks
Record Book	:	10 Marks
<b>Total</b>	<b>:</b>	<b>100 Marks</b>