DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, AURANGABAD.



Syllabus of

B.A.I,II & III,IV Semester

HOME SCIENCE

(EFFECTIVE FROM – 2020 ONWARDS)

Semester	Paper	Title / Name of	Credits	Theo.	Prac.	Internal	Exter.
		the Paper		hr/w	hr/w	Marks	Marks
I Sem.	Ι	Introduction to	04	04	-	-	30
		family resource					
		Management					
	II	Basic Nutrition	04	04	-	-	30
		Basic Nutrition	04	-	03	20	20
		(Practical)					
II Sem	III	Extension	04	04	-	-	30
		Education					
	IV	Food &	04	04	-	-	30
		Nutrition					
		Food &	04	-	03	20	20
		Nutrition					
		(Practical)					
III Sem	V	Human	04	04	-	-	30
		Development					
		(Prenatal to					
		Adolescence)					
	VI	Fundamentals of	04	04	-	-	30
		Textile					
		Fundamentals of	04	-	03	20	20
		Textile					
		(Practical)					
IV Sem	VII	Human	04	04	-	-	30
		Development					
	VIII	Textile &	04	04	-	-	30
		Clothing					
		Textile &	04	-	03	20	20
		Clothing					
		(Practical)					

Structure Plan of B.A.I ^{st, and} II Year-Home Science Syllabus (CBCS)

DR.BABASAHEB AMBEDKAR MARATHWAD UNIVESITY, AURANGABAD

Name of the Course	:	B.A. Ist year Home Science
Semester	:	1 st
Paper No. and Title	:	I-Introduction to Family Resource
		Management
Total Marks	:	30
Work Load per week	:	4 Periods (50 min/Lect)

Objectives

- 1) To introduce the Student to the field of Home management.
- 2) To acquire knowledge about the family Resource management.
- 3) To develop the ability to improve their work within less time and fatigue.
- 4) To Understand the ability how to make house hold budget to each income group.

Unit I :Home management and family resource management. Credit 1.5

- a) Introduction, definition, Concept & significance of Home management.
- b) Obstacles in improvement of Home management
- c) Process of Family Resource Management Planning Controlingand evaluation.
- d) Scopes and Significance of F.R.M. classification of family Resources
- e) Characteristics of family Resources
- f) Factors affecting family Resources Management

Unit II :Family income and Saving and Investment Credit 1.0

- A) Family income
 - a) Concept of family income
 - b) Types of income

- c) Sources of Family income
- d) Family Budget-meaning, importance, steps & factors affecting family Budget.
- B) Saving and investment
 - a) Saving Concept, definition, importance, types, new trends of saving.
 - b) Investment concept, types, importance, Guidelines for investment.

Unit III :Factors motivating management

- a) Values Meaning of Definition, Sources, Importance
- b) Goals Meaning, Definition & types.
- c) Standards Meanings, Definition, Classification&Types
- d) Decision making Meaning, importance, types, Steps

Unit IV :Work simplification

- a) Meaning, Definition & importance.
- b) Mundel's law of changes
- c) Fatigue and avoidance of fatigue

References / Books Recommended

- Home management in indianFamiles, Mann M. K., Kalyani Publisher, Ludhiana.
- Home management, M.A. Varghise, N.N. octe, New age international (P) Limited, Pubilisher New Delhi
- Home management (A test book of Home Science), AryaPublishir. House, Karol bagh, Delhi.DeeOegefvekeâie=nJÙeJemLeeheve, [e@. Jewjeie[s, Øee. uee"keâj, Øee. cegUs, efJeÅeeyegkeämeheefyueMeme&, Deewjbieeyeeo.
- keâewšgbefyekeâmebmeeOeveebÛesJÙeJemLeeheveDeeefCeie=nmepeeJeš, ef\$eJesCeerheâjkeâe[s, megueYeeieeWies, efhebheUehegjsDe@C[kebâ. heefyueMeme&, veeiehetj

Credit 0.5

Credit 1.0

- 5) ie=nJÙeJemLeehevemegceleerkegâkeâ[s,ceeOegjerjlveheejKeer, ieerleemegbojsMe, veeruekeâebleyegkeäme, hegCes
- 6) ie=nJÙeJemLeeheve cebpetheešCeer
- keâewštbefyekeâmeeOevemebyebOeerÛesJÙeJemLeeheveDeeefCeie=nmep eeJeš,[e@.ceerveekeâeUsues,efhebheUehetjsheefyueMeme&, veeiehetj
- 8) ie=nJÙeJemLeeheveSJebDeebleefjkeâmeppee-[e@.
 ieeskegâUeYeeuesjeJe,melÙeceheefyueMeme&,MeeŒeerveiej, peÙehetj
- Øeieleie=nJÙeJemLeeheveDeeMeeefvecekeâjmeeefnlÙeØekeâeMevekeWâ
 õveeiehetj

DR.BABASAHEB AMBEDKAR MARATHWADA UNIVESITY, AURANGABAD

Name of the Course : B.A. I Home Science

Semester : I

Paper No. & Title : IIBasic Nutrition

Credit :- 04

Total Marks : **30**

Work load per week : 4 lect/week

Objectives

Students will acquire knowledge in the following fields

- 1) Role of food and functions of nutrient.
- 2) Different sources and deficiencies of nutrients
- 3) Students can improve the nutritional quality of food and nutrition

UnitI.Foods-

Credit=1.0

A-Interrelationship of Foods, Nutrition, Health & Hygiene

B. Concept & basic definitions of the following

i) Diet, Balanced Diet, Optimal diet, deficient diet, Soft diet, nutrients, RDA

ii) Malnutrition , Under nutrition, Over nutrition , Nutritional status, BMI

iii) Full forms and definitions of the following FSSAI, WHO, ICMR, NIN, CFTRI, FAO, UNICEF, HFSS, Junk Foods

C) Functions of Food - physiological, psychological, cultural, social

D) Classification of food groups by different Methods

E) Food Pyramid.

<u>UnitII.</u>Nutrients in Food:

Credit=1.0

A). Classification.B). Macronutrients-

i) Carbohydrates - Classification, Sources, functions, daily Requirements, deficiencies

ii) Proteins- Classification , Sources , functions , daily Requirements , deficiencies

iii) Fats - Classification , Sources , functions , daily Requirements , deficiencies

<u>UnitIII</u> Micro Nutrients:

Credit=1.0

Vitamins and Minerals

A). Classification of Vitamins

i) Fat soluble vitamins -A, D, E, K

Functions, sources, daily requirements, deficiency diseases (Toxicity if applicable)

ii) Water soluble vitamins- B1, B2, B3, B6, B12, Folic acid and Vitamin C - Functions, sources, daily requirements, deficiency diseases

B) Minerals

i) Macro minerals-Calcium and Phosphorus - Sources ,functions , daily requirement , deficiency diseases

ii) Micro minerals-Iron and Iodine- Sources ,functions , daily requirement , deficiency diseases

UnitIV. Water:

Credit=0.5

Importance, Sources , functions , daily requirement , deficiency, toxicity

ii) Fiber- Sources , functions , daily requirements

iii) Medicinal properties of food-namely- Termeric, Ginger, Fenugreek seeds, Flex seeds(jawas)

<u>UnitV</u> Methods of cooking:

Credit=0.5

- i) Methods of cooking & its nutritional significance.
- ii) Loss of nutrients during food preparation and processing
- iii) Conserving and enhancing nutritive value of food
- iv) Food preservation methods.(physical and chemical)

<u>REFERENCES</u>:

- 1 Mudambi, S.R. andRajgopal, M.V. (2012), *Fundamentals of Foods and Nutrition* New Age International Pvt. Ltd.
- 2 Food Science 1st Edition (2012) Sheth Publications. Maharashtra State Board of Secondary and Higher Secondary education Pune.
- **3** Roday S. (2012) *Food Science and Nutrition* (2nd Ed.) Oxford University Press.
- 4 Joshi S. (2009) *Nutrition and Dietetics* Mcgraw Hill Higher Education
- **5** Robinson, and Lawler (1990) *Normal and Therapeutic Nutrition* (17thEdn) Macmillan Pub. Co.
- 6 GuthrieHelen (1986) ntroductory Nutrition, Mosby College Publishing. Times Mirror
- 7 Wardlaw G.M (1997) *Contemporary Nutrition, Issues and Insights*, 3rd Edition Tata McGrawHill Inc. Boston.
- 8 Guthrie H. A. and Frances M. (1994) *Human Nutrition* WilliamC Brown Pub.
- **9** Poshan and Ahar by sau. Shobha waghmare , vidya books, pimpalapure Prakashan.
- **10** Annashashtra by Indira Khadase, Fadake prakashan Nagpur.

DR.BABASAHEB AMBEDKAR MARATHWADA UNIVESITY, AURANGABAD

Name of the Course ;- B.A. I Home Science

Semester ;- I

Paper No. & Title ;- IIIPRACTICAL (Basic Nutrition)

Credit ;- **04**

Total Marks ;- 20+20=40

Work load per week ;- 3lect/week

Unit I:Weights & Measures of raw and cooked foods Credit= 0.5

Unit II: Basics of Cookery – Laboratory rules Credit= 0.5

- Preparation of kitchen area
- Kitchen equipment, use & care

Unit III: Plan & Prepare Recipes for one serving each from high, medium andlow income groups for the following nutrients.Credit= 2.0

- Energy- high and low
- Proteins
- Vitamin C
- Vitamin A
- Vitamin– B,B2,B3
- Calcium
- Iron

Unit IV: Preparation of types of salads (Any Two) **Credit= 1.0**

• Vegetables

- Fruits
- Sprouts

Scheme of Marking for examinationTotal: 40 Marks

Scheme of Marking for practical exam

QUE.	Details	Distibution	Total
.N.		of Marks	Marks(100)
1	plan & preparation for nutrient	10	10
	rich recipes for three economic		
	groups		
		10	10
	Write up –Any four functions & sources of specific nutrient		
3	Sessional activities	10	10
5	Record Book	10	10
	Total		40

DR.BABASAHEB AMBEDKAR MARATHWADA UNIVESITY, AURANGABAD

Name of the Course:		B.A. 1st year
Semester:	IInd	
Paper no. and titl	le:	III-Extension Education
Total marks	:	30
Work load per week:		4 Period (50 min Lecture)

Objective:

1) To understand the meaning, importance and need of home science extension education

2)To develop awareness about extension learning.

3)To understand the process of communication in development work

4) To understand importance of rural society and social problem.

Unit-I Extension Education

Credit: 1.0

a) Education - Definition of Education, concept of education, Types of education, difference between Formal and Non Formal education.

b) Extension education - Definition on extension education, origin of extension education, scope, objectives, Fields.Principles and essential links in the chain of rural development.

Unit-II Home Science Extension

Credit: 0.5

a) Meaning of Home Science, Philosophy and objectives of home science, scope, and fields of home science, role of home Science Extension in rural and urban areas.

b) Role of extensionworkers.

Meaning and role of extension workers in thefield of development, essential qualities needed by extension worker.

Unit-III- Extension Methods

Credit: 0.5

Individual methods-Home visit, Personal Letter and telephone Call.

Group Contact Methods-Demonstrations, Field trips, group discussions.

Mass Contact methods-Exhibition, Campaign, Television, Mobile.

(Theirbenefits, limitations andlosses)

Unit-IV CommunityDevelopmentand Community Organization Credit: 1.0

a) Community developmentconcept, importance, principles and objective of community development.

b)Community organization concept,Objective and role of government schemas.

IRDP, ICDS, Role of NGO and roleof universities.

Unit –V Rural Society and Rural Problems Credit: 1.0

Meaning of rural society, importance of rural society, rural society group.

Rural Problems-Meaning of rural society, Importance of rural problems, over population, poverty, caste

tension, poor health problems unemployment, sanitation.

Sessional Activities: (Any 2)

1) Preparation of extension bulletin on any home science fields.

2) Preparation and presentation of chart on any home science field..

4) Poster presentation on rural problems.

REFERENCE:

1)Chandra A. Shah &Joshi U-Fundamentals of Teaching Home Science, sterling Publishing New Delhi.1989

2)Supe S.V.: An introduction of extension education:Oxford and IBH Publishing Co.1999.

3)Devdas, R. P. Methods of Teaching Home Science: National Council of Educational Research and training, New Delhi,1978

4)Singh K.-Rural Sociology Peakashan Kendra, Lucknow_1985

5) Rathore O.S. Dhakar, S.D. Chauhan, M.S.Ohia S.V.:Handbook of Extension Education agro tech Publishing Academy, Udaipur, 1999

6) Reddy A.A.: Extension Education, Shri Laxmi: Press 1971

7) Directorate of Extension, Extension Education in Community Development Group of India: 1968

8) Devdas R. P Nutrition and National Development Saradalaya Press 1980

9) Thimmainah G. (Ed.) – Studies in Rural Dev, Chugh Publishing, 1979

10) Ganguli, B. N. (ed.) Social Dev, New Delhi, Sterling Publishers, 1977

11) Kapur Pramila: The Changing roles & Status of Women: The Indian Family in the change and challenges of the seventies. Sterling Publisher, New Delhi -1972

12) Pandav G. N. Complete Guide to successful Entrepreneurship

DR.BABASAHEB AMBEDKAR MARATHWADA UNIVESITY, **AURANGABAD**

Name of the Course : B.A. I year

٠II Semester

Paper No. & Title : IV, Food & Nutrition

Credit :04

Total Marks : 30

Work Load per Week: 04 (50 minutes/Lecture)

Objectives

- 1. To gain acquaintance with human gastrointestinal track,
- 2. To understand the concept of meal planning,
- 3. To aware of the effect of food poisoning and food adulteration, and
- 4. To gain knowledge about the nutrient need for various age groups.

Unit I: Digestion of Food

Digestive system with illustration, Digestion of Carbohydrates, proteins and fat

Unit II: Energy:

Definition and factors affecting energy requirement, Measurement of Energy by direct method (Bomb Calorimeter)

& indirect method (Benedict Roth),

Food Habits: definition & Factor affecting on it.

Unit III: Meal Planning:

Importance, factors affecting & principles of meal planning,

Meal Planning for: Pregnant women, Lactating Mothers,

Baby Food, d, Preschool Children, e. School going Children,

Credit=1.0

Credit=2.0

Credit=0.5

Adolescent, Old age.

Unit IV: Food Adulteration Credit =0.5

- 1. Causes and types of adulteration,
- 2. Precautionary measures,
- How to detect adulteration in : a. Semolina, b. Groundnut, c. Tea, d. Coffee, e. Saffron.

REFERENCES:

- 1. Mudambi, S.R., Rajgopal, M.V.(2012), Fundamentals of Foods and Nutrition, New Age International Pvt. Ltd.
- Food Science (2012), Maharashtra State Board of Secondary and Higher Secondary education Pune, 1st Edition, Sheth Publications.
- 3. Roday Sunetra, (2012), Food Science and Nutrition, 2nd Edition, Oxford University Press.
- 4. Joshi, Shubhangini (2009), Nutrition and Dietetics , Mcgraw Hill Higher Education.
- 5. Srilaksmi, B.(2011): Dietetics, 6th Edition,New Age International Pvt Ltd Publisher

DR.BABASAHEB AMBEDKAR MARATHWADA UNIVESITY, AURANGABAD

Name of the Course: B.A. 1st year

Semester: IInd

Paper no. and title: - Practical (FOOD AND NUTRITION)

Total marks : 20+20=40

Work load per week: 3 Period (50 min Lecture)

Objectives:

The course would enable the students to:

- 1. Apply principles of diet therapy in planning and preparing foods for specific health conditions.
- 2. Plan foods for specific health conditions keeping in mind cost, availability and other factors.

Unit I Planning and preparation of diets for following age groups at three income level to specific nutritional requirement Credit=1.5

a. Pregnancy, b. Lactation, c. Baby food, d. Preschool, e. School going, f. Adolescents, g. Adult, h. Old age.

Unit II Salad decoration:	Credit=1.5
Unit III Food adulteration:	Credit=0.5
Identify adulterants used in the various food	
Unit IV Survey regarding junk/fast food.	Credit=0.5

Report writing

Scheme of Marking for examination Total: 40 Marks

Scheme of Marking

Q.	Details	Distibution	Total
No.		of Marks	Marks(40)
1	plan & preparation of diet for different	10	10
	age group		
2	b)Write up	10	10
3	Salad Decoration	10	10
4	Record Book	20	10
	Total		40