



BHAKT KAVI NARSINH MEHTA UNIVERSITY
JUNAGADH
FACULTY OF HOME SCIENCE
Syllabus

For

B.Sc. HOME SCIENCE (Three Year) Programme
General Home Science/ Foods & Nutrition
Choice Based Credit System (CBCS)
Effective from June- 2018-2019 onwards

BhaktkaviNarsinh Mehta University
University Campus Junagadh
Gujarat, India
Website: www.bknmu.edu.in

Preamble

Home Science has contributed a great deal towards national development by training students to take-up leadership roles in extension and community outreach programs. The students are encouraged to develop a scientific temper. Familiarizing them with the use of newer technologies, methods in family and community linkages, and sustainable use of resources for human development are the hallmark of education in Home Science. As a discipline Home Science integrates the ingredients of sciences, social sciences and technology to facilitate the study of and enhance the quality of human life. It approaches in its curriculum that engages the student through teaching, research and extension. The education process in Home Science underscores the importance of the individual “dynamic relationship with his/her family, community and society as a whole, as well as with the resources in the environment. Higher education learning in Home Science subjects provides students the opportunity to sharpen their capacities with a sense of social responsibility.

In contemporary times, Home Scientists promote capacity building of individuals and communities for social and economic empowerment. They train community women and youth from various strata of society for entrepreneurs themselves. They do not remain job seekers but have also become job creators. They gain and provide employment in research organizations, food and textile industries, dietetic practice, education and child development domains, accreditation of green buildings, strategic planning and communication technologies. Keeping in view the growing aspirations of today's youth and capacity of Home Science discipline to deliver, the 3-year choice based credit system has been drawn up.

Years of national and international experience in the field has contributed to the wisdom that all the five windows of opportunity that Home Science offers be opened, i.e. Food and Nutrition. Human Development, communication and Extension and Fabric and Apparel Sciences. In this course, the students will learn the fundamental principles and foundations of all five areas. They are expected to internalize the principle of a Home Scientist, that is, to give back to the community from which they draw, for sustainable development. This is a major contribution of Home Science in both developed and developing societies. The University Grants Commission's model 2001 curriculum of Home Science reflects a similar philosophy. The objectives of the present B.Sc. program Home Science course are:

- ❑ To understand and appreciate the role of interdisciplinary sciences in the development and Well-being of individuals, families and communities.*
- ❑ To learn about the sciences and technologies that enhance quality the life of people*
- ❑ To acquire professional and entrepreneurial skills for economic empowerment of the student in particular, and community in general.*
- ❑ To develop professional skills in food, nutrition, textiles, housing, product making Communication technologies and human development.*
- ❑ To take science from the laboratory to the people.*

Bachelor of Home Science					
SEM.	Course Code		Course Name	Credits	Total
Sem. 1	AE	AE-01	Environmental Science – 1	2+0	24
	CC	CC-01	Fundamental of Food & Nutrition – 1	3+1	
		CC-02	Communication & extension	3+1	
		CC-03	Clothing Construction	3+1	
	DS	DSE-01	Life Span Development – 1	3+1	
		DSE-02	Resource management	3+1	
	SE	EA SE1	Human Physiology	2+0	
		EB SE1	First Aid & home nursing	2+0	
		EC SE1	Life Science	2+0	
Sem. 2	AE	AE -02	Environment science – 2	2+0	24
	CC	CC – 4	Fundamental of Food & Nutrition – 2	3+1	
		CC – 5	Extension for development	3+1	
		CC – 6	Fashion studies	3+1	
	DS	DSE - 3	Life span development – 2	3+1	
		DSE – 4	House keeping	3+1	
	SE	EA SE2	Basic of computer and its applications	0+2	
		EB SE2	Computer application in fashion Design	0+2	
		EC SE2	Computer Applications In Communication And Media Design	0+2	
Sem. 3	CC	CC – 7	Physical Science	3+1	28
		CC – 8	Nutrition For Family	3+1	
		CC – 9	Information Education And Communication Material For Development	3+1	
		CC – 10	Fundamental Of Textile	3+1	
	DS	DSE-5	Early Childhood Care And Education	3+1	
		DSE-6	Foundation Of Art And Design	3+1	
	SE	EA SE3	Disaster Management	3+1	
		EB SE3	Non Formal Education	3+1	
		EC SE3	Women Empowerment	3+1	
Sem. 4	CC	CC – 11	Microbiology	3+1	28
		CC – 12	Food Preservation	3+1	
		CC – 13	Software In Folk Media	3+1	
		CC – 14	Textile Design: Dying And Printing	3+1	
	DS	DSE-7	Child And Human Rights	3+1	
		DSE-8	Consumer In the Market	3+1	
	ES	EA SE4	Introduction To Diet Therapy	3+1	
		EB SE4	Sociological And Psychological Aspects Of Clothing	3+1	
		EC SE4	Family And Child Welfare	3+1	

Sem. 5 General	CC	CC - 15		Research Documentation	3+1	28
		CC - 16		Community Health And Nutrition	3+1	
		CC - 17		NGO Management	3+1	
		CC - 18		Processing in Apparel Design	3+1	
	DS	DSE-9		Children With Disability	3+1	
		DSE-10		Entrepreneurship Development In Women	3+1	
	SE	EA	SE5	Food Processing And Packaging	3+1	
		EB	SE5	Event management	3+1	
		EC	SE5	Activities And Resources For Child Development	3+1	
Sem. 6 General	CC	CC - 19		Applied Physiology	3+1	28
		CC - 20		Health And Nutrition Program And Policies	3+1	
		CC - 21		Changing Trends in Extension	3+1	
		CC - 22		Indian Traditional Textile	3+1	
	DS	DSE-11		Adolation Relation And Well Being	3+1	
		DSE-12		Family Financial Management	3+1	
	SE	EA	SE6	Software In Print Media	3+1	
		EB	SE6	Canteen Management	3+1	
		EC	SE6	Weaving And Knitting	3+1	
Sem. 5 Food & Nutrition	CC	CC - 15		Research Methodology	3+1	28
		CC - 16		Food Science - 1	3+1	
		CC - 17		Nutritional Assessment And Surveillance	3+1	
		CC - 18		Dietetics - 1	3+1	
	DS	DSE-9		Food Microbiology	3+1	
		DSE-10		Biochemistry	3+1	
	SE	EA	SE5	Food Technology And Packaging	3+1	
		EB	SE5	Event Management	3+1	
		EC	SE5	Maternal - Child Health And Nutrition	3+1	
Sem. 6 Food & Nutrition	CC	CC - 19		Physiology	3+1	28
		CC - 20		Food Science - 2	3+1	
		CC - 21		Community Health And Nutrition Program And Policies	3+1	
		CC - 22		Dietetics -2	3+1	
	DS	DSE-11		Food Analysis	3+1	
		DSE-12		Introduction To Public Nutrition And Health Care	3+1	
	ES	EA	SE6	Food Services And Fancy Cookery	3+1	
		EB	SE6	Canteen Management	3+1	
		EC	SE6	Bakery Science	3+1	

AE - ABILITY ENHANCEMENT COMPULSORY COURSE / CC - CORE COURSE /

DS - DISCIPLINE SPECIFIC COURSE / SE - SKILL ENHANCEMENT COURSE

(Paper code: A - ability enhancement compulsory course / C - core course / D- discipline specific course / S-skill enhancement course / P - Practical

- BHAKT KAVI NARSINH MEHTA UNIVERSITY, JUNAGADH - EXAMINATION SYSTEM - F.Y.B.Sc. (HOME SCIENCE) - SEMESTER – 1															ANNEXURE ‘A’
Sem. – 1															
Core Courses	Course Code	Subject	T/P	Credit	Contact Hrs/Week	Total Contact hour (work load)	Exam Duration in Hrs	Marks							
								Internal		External		Practical		Total	
								Total	Passing	Total	Passing	Total	Passing	Total	Passing
Foundation	AE-1	ENVIORMENT SC. - 1	T	2	2	2	1.5	15	06	35	14	**	**	50	20
CORE COURSE	CC-1	FUNDAMENTALS OF FOODS & NUTRITION - 1	T	3	3	5	2	30	12	50	20	20	08	100	40
		FUNDAMENTALS OF FOODS & NUTRITION - PR	P	1	2		2	20	08		INTERNAL .EXAM				
	CC-2	COMMUNICATION &EXTENSION	T	3	3	5	2	30	12	50	20	20	08	100	40
		COMMUNICATION & EXTENSION- PR	P	1	2		2	20	08		INTERNAL .EXAM				
	CC-3	CLOTHING CONSTRUCTION	T	3	3	5	2	30	12	50	20	20	08	100	40
		CLOTHING CONSTRUCTION - PR	P	1	2		2	20	08		INTERNAL .EXAM				
	DSE-1	LIFE SPAN DEVLOPMENT – 1	T	3	3	5	2	30	12	50	20	20	08	100	40
		LIFE SPAN DEVLOPMENT – 1 - PR	P	1	2		2	20	08		INTERNAL .EXAM				
	DSE-2	RESOURCE MANAGEMENT	T	3	3	5	2	30	12	50	20	20	08	100	40
		RESOURCE MANAGEMENT - PR	P	1	2		2	20	05		INTERNAL.EXAM				
ELECTIVE (ANY ONE)															
ELECTIVE - A	SE-1	HUMAN PHYSIOLOGY	T	2	2	2	1.5	15	06	35	14	**	**	50	20
ELECTIVE - B	SE-1	FIRST AID & HOME NURSING	T	2	2	2	1.5	15	06	35	14	**	**	50	20
ELECTIVE - C	SE-1	LIFE SCIENCE	T	2	2	2	1.5	15	06	35	14	**	**	50	20
TOTAL				24	29	29								600	

- BHAKT KAVI NARSINH MEHTA UNIVERSITY, JUNAGADH 'B' - EXAMINATION CODING SYSTEM - F.Y.B.Sc. (HOME SCIENCE) - SEMESTER – 1														ANNEXURE
Sem. – 1														
Core Courses	Course Code	Subject	T/P	Credit	Paper No.	Paper Code	Marks							
							Internal		External		Practical		Total	
							Total	Passing	Total	Passing	Total	Passing	Total	Passing
Foundation	AE-1	ENVIRONMENT SC. 1	T	2	P-1	BHS1es1AE11X	15	06	35	14	**	**	50	20
CORE COURSE	CC-1	FUNDAMENTALS OF FOODS & NUTRITION – 1	T	3	P-2	BHS1fn1C012X	30	12	50	20	20	08	100	40
		FUNDAMENTALS OF FOODS & NUTRITION – PR	P	1		----	20	08		INTERNAL .EXAM				
	CC-2	COMMUNICATION & EXTENSION	T	3	P-3	BHS1ce0C023X	30	12	50	20	20	08	100	40
		COMMUNICATION & EXTENSION- PR	P	1		-----	20	08		INTERNAL .EXAM				
	CC-3	CLOTHING CONSTRUCTION	T	3	P-4	BHS1cc0C034X	30	12	50	20	20	08	100	40
		CLOTHING CONSTRUCTION - PR	P	1		-----	20	08		INTERNAL .EXAM				
	DSE-1	LIFE SPAN DEVELOPMENT – 1	T	3	P-5	BHS1ls1D015X	30	12	50	20	20	08	100	40
		LIFE SPAN DEVELOPMENT – 1 - PR	P	1		-----	20	08		INTERNAL .EXAM				
	DSE-2	RESOURCE MANAGEMENT	T	3	P-6	BHS1rm0D026X	30	12	50	20	20	08	100	40
		RESOURCE MANAGEMENT.- PR	P	1		-----	20	05		INTERNAL .EXAM				
ELECTIVE (ANY ONE)														
ELECTIVE - A	SE-1	HUMAN PHYSIOLOGY	T	2	P-7	BHS1hp0SE17A	15	06	35	14	**	**	50	20
ELECTIVE - B	SE-1	FIRST AID & HOME NURSING	T	2		BHS1fanSE17B	15	06	35	14	**	**	50	20
ELECTIVE - C	SE-1	LIFE SCIENCE	T	2		BHS1lscSE17C	15	06	35	14	**	**	50	20
TOTAL				24									600	

- BHAKT KAVI NARSINH MEHTA UNIVERSITY, JUNAGADH - EXAMINATION CODING SYSTEM - F.Y.B.Sc. (HOME SCIENCE) - SEMESTER – 2 - Sem. – 2															ANNEXURE ‘A’
Core Courses	Course Code	Subject	T/P	Credit	Contact Hrs/Week	Total Contact hour (work load)	Exam Duration in Hrs	Marks							
								Internal		External		Practical		Total	
								Total	Passing	Total	Passing	Total	Passing	Total	Passing
Foundation	AE-2	ENVIORMENT SC. – 2	T	2	2	2	1.5	15	06	35	14	**	**	50	20
CORE COURSE	CC-4	FUNDAMENTALS OF FOODS & NUTRITION - 2	T	3	3	5	2	30	12	50	20	20	08	100	40
		FUNDAMENTALS OF FOODS & NUTRITION - 2	P	1	2		2	20	08	INTERNAL .EXAM					
	CC-5	EXTENSION FOR DEVELOPMENT	T	3	3	5	2	30	12	50	20	20	08	100	40
		EXTENSION FOR DEVELOPMENT - PRA	P	1	2		2	20	08	INTERNAL .EXAM					
	CC-6	FASHION STUDIES	T	3	3	5	2	30	12	50	20	20	08	100	40
		FASHION STUDIES - PRA	P	1	2		2	20	08	INTERNAL .EXAM					
	DSE-3	LIFE SPAN DEVELOPMENT – 2	T	3	3	5	2	30	12	50	20	20	08	100	40
		LIFE SPAN DEVELOPMENT – 2 - PRA	P	1	2		2	20	08	INTERNAL .EXAM					
	DSE-4	HOUSE KEEPING	T	3	3	5	2	30	12	50	20	20	08	100	40
		HOUSE KEEPING - PRA.	P	1	2		2	20	08	INTERNAL .EXAM					
• ELECTIVE(ANY ONE)															
ELECTIVE - A	SE-2	BASIC OF COMPUTER & ITS APPLICATION	P	2	4	4	3	15	06	**	**	35	14	50	20
ELECTIVE - B	SE-2	COMPUTER APPLICATION IN FASHION DESIGN	P	2	4	4	3	15	06	**	**	35	14	50	20
ELECTIVE - C	SE-2	COMPUTER APPLICATIONS IN COMMUNICATION AND MEDIA DESIGN	P	2	4	4	3	15	06	**	**	35	14	50	20
TOTAL				24	31	31								600	

- BHAKT KAVI NARSINH MEHTA UNIVERSITY, JUNAGADH - EXAMINATION CODING SYSTEM - F.Y.B.Sc. (HOME SCIENCE) - SEMESTER – 2														ANNEXURE 'B'
Sem. – 2														
Core Courses	Course Code	Subject	T/P	Credit	Paper No.	Paper code	Marks							
							Internal		External		Practical		Total	
							Total	Passing	Total	Passing	Total	Passing	Total	Passing
Foundation	AE - 2	ENVIRONMENT SC. - 2	T	2	P-1	BHS2es2AE21X	15	06	35	14	**	**	50	20
CORE COURSE	CC- 4	FUNDAMENTALS OF FOODS & NUTRITION - 2	T	3	P-2	BHS2fn2C042X	30	12	50	20	20	08	100	40
		FUNDAMENTALS OF FOODS & NUTRITION – PR - 2	P	1	P-2Pr.	----	20	08			INTERNAL EXAM			
	CC - 5	EXTENSION FOR DEVELOPMENT	T	3	P-3	BHS2efdC053X	30	12	50	20	20	08	100	40
		EXTENSION FOR DEVELOPMENT - PR	P	1	P-3Pr.	-----	20	08			INTERNAL EXAM			
	CC -6	FASHION STUDIES	T	3	P-4	BHS2fs0C04X	30	12	50	20	20	08	100	40
		FASHION STUDIES - PR	P	1	P-4 Pr.	-----	20	08			INTERNAL EXAM			
	DSE-3	LIFE SPAN DEVELOPMENT – 2	T	3	P-5	BHS2ls2D035X	30	12	50	20	20	08	100	40
		LIFE SPAN DEVELOPMENT – 2 - PR	P	1	P-5 Pr.	-----	20	08			INTERNAL EXAM			
	DSE-4	HOUSE KEEPING	T	3	P-6	BHS2hk0D046X	30	12	50	20	20	08	100	40
		HOUSE KEEPING - PR	P	1	P-6 Pr.	-----	20	08			INTERNAL EXAM			
ELECTIVE (ANY ONE)														
ELECTIVE - A	SE-2	BASIC OF COMPUTER & ITS APPLICATION	P	2	P-7Pr.	BHS2bcaSE27A	15	06	**	**	35	14	50	20
ELECTIVE - B	SE-2	COMPUTER APPLICATION IN FASHION DESIGN	P	2	P-7Pr.	BHS2cfdSE27B	15	06	**	**	35	14	50	20
ELECTIVE - C	SE-2	COMPUTER APPLICATIONS IN COMMUNICATION AND MEDIA DESIGN	P	2	P-7Pr.	BHS2ccmSE27C	15	06	**	**	35	14	50	20
TOTAL				24									600	

- BHAKT KAVI NARSINH MEHTA UNIVERSITY, JUNAGADH - EXAMINATION CODING SYSTEM S. Y. B.Sc. (HOME SCIENCE) - SEMESTER – 3														ANNEXURE ‘A’	
Sem. – 3															
Core Courses	Course Code	Subject	T/P	Credit	Contact Hrs/Week	Total Contact hour (work load)	Exam Duration in Hrs	Marks							
								Internal		External		Practical		Total	
								Total	Passing	Total	Passing	Total	Passing	Total	Passing
CORE COURSE	CC-7	PHYSICAL SCIENCE	T	3	3	6	2	30	12	50	20	20	08	100	40
		PHYSICAL SCIENCE – PR	P	1	3		3	INTERNAL .EXAM							
	CC-8	NUTRITION FOR FAMILY	T	3	3	6	2	30	12	50	20	20	08	100	40
		NUTRITION FOR FAMILY - PR	P	1	3		3	INTERNAL .EXAM							
	CC-9	INFORMATION EDUCATION AND COMMUNICATION MATERIAL FOR DEVELOPMENT	T	3	3	6	2	30	12	50	20	20	08	100	40
		INFORMATION EDUCATION AND COMMUNICATION MATERIAL FOR DEVELOPMENT - PR	P	1	3		3	INTERNAL .EXAM							
	CC-10	FUNDAMENTAL OF TEXTILE	T	3	3	6	2	30	12	50	20	20	08	100	40
		FUNDAMENTAL OF TEXTILE - PR	P	1	3		3	INTERNAL .EXAM							
	DSE-5	EARLY CHILDHOOD CARE AND EDUCATION	T	3	3	6	2	30	12	50	20	20	08	100	40
		EARLY CHILDHOOD CARE AND EDUCATION -PR	P	1	3		3	INTERNAL .EXAM							
	DSE-6	FOUNDATION OF ART AND DESIGN	T	3	3	6	2	30	12	50	20	20	08	100	40
		FOUNDATION OF ART AND DESIGN - PR	P	1	3		3	INTERNAL .EXAM							
ELECTIVE (ANY ONE)															
ELECTIVE - A	SE-3	DISASTER MANAGEMENT	T	3	3	6	2	30	12	50	20	20	08	100	40
		DISASTER MANAGEMENT - PR	P	1	3		3	30	12	50	20	20	08	100	40
ELECTIVE - B	SE-3	NON FORMAL EDUCATION	T	3	3	6	2	30	12	50	20	20	08	100	40
		NON FORMAL EDUCATION - PR	P	1	3		3	30	12	50	20	20	08	100	40
ELECTIVE - C	SE-3	WOMEN EMPOWERMENT	T	3	3	6	2	30	12	50	20	20	08	100	40
		WOMEN EMPOWERMENT - PR	P	1	3		3	30	12	50	20	20	08	100	40
TOTAL				28	42									700	

- BHAKT KAVI NARSINH MEHTA UNIVERSITY, JUNAGADH - EXAMINATION CODING SYSTEM - S.Y.B.Sc. (HOME SCIENCE) - SEMESTER – 3													ANNEXURE ‘B’	
Sem. – 3														
Core Courses	Course Code	Subject	T/P	Credit	Paper No.	Paper code	Marks							
							Internal		External		practical		Total	
							Total	Passing	Total	Passing	Total	Passing	Total	Passing
CORE COURSE	CC-7	PHYSICAL SCIENCE	T	3	P-1	BHS3pscC071X	30	12	50	20	20	08	100	40
		PHYSICAL SCIENCE – PR	P	1	PR		INTERNAL .EXAM							
	CC-8	NUTRITION FOR FAMILY	T	3	P-2	BHS3nffC082X	30	12	50	20	20	08	100	40
		NUTRITION FOR FAMILY - PR	P	1	PR		INTERNAL .EXAM							
	CC-9	INFORMATION EDUCATION AND COMMUNICATION MATERIAL FOR DEVELOPMENT	T	3	P-3.	BHS3iecC093X	30	12	50	20	20	08	100	40
		INFORMATION EDUCATION AND COMMUNICATION MATERIAL FOR DEVELOPMENT - PR	P	1	PR		INTERNAL .EXAM							
	CC-10	FUNDAMENTAL OF TEXTILE	T	3	P-4	BHS3ft0C104X	30	12	50	20	20	08	100	40
		FUNDAMENTAL OF TEXTILE - PR	P	1	PR		INTERNAL .EXAM							
	DSE-5	EARLY CHILDHOOD CARE AND EDUCATION	T	3	P-5	BHS3eccD055X	30	12	50	20	20	08	100	40
		EARLY CHILDHOOD CARE AND EDUCATION -PR	P	1	PR		INTERNAL .EXAM							
	DSE-6	FOUNDATION OF ART AND DESIGN	T	3	P-6	BHS3fadD066X	30	12	50	20	20	08	100	40
		FOUNDATION OF ART AND DESIGN - PR	P	1	PR		INTERNAL .EXAM							
ELECTIVE (ANY ONE)														
ELECTIVE - A	SE-3	DISASTER MANAGEMENT	T	3	P-7	BHS3dm0SE37A	30	12	50	20	20	08	100	40
		DISASTER MANAGEMENT - PR	P	1	PR		INTERNAL .EXAM							
ELECTIVE - B	SE-3	NON FORMAL EDUCATION	T	3	P-7	BHS3nfeSE37B	30	12	50	20	20	08	100	40
		NON FORMAL EDUCATION - PR	P	1	PR		INTERNAL .EXAM							
ELECTIVE - C	SE-3	WOMEN EMPOWERMENT	T	3	P-7	BHS3wm0SE37C	30	12	50	20	20	08	100	40
		WOMEN EMPOWERMENT - PR	P	1	PR		INTERNAL .EXAM							
TOTAL				28									700	

- BHAKT KAVI NARSINH MEHTA UNIVERSITY, JUNAGADH - EXAMINATION CODING SYSTEM S. Y. B.Sc. (HOME SCIENCE) - SEMESTER – 4														ANNEXURE ‘A’	
Sem. – 4															
Core Courses	Course Code	Subject	T/P	Credit	Contact Hrs/Week	Total Contact hour (work load)	Exam Duration in Hrs	Marks							
								Internal		External		Practical		Total	
								Total	Passing	Total	Passing	Total	Passing	Total	Passing
CORE COURSE	CC-11	MICROBIOLOGY	T	3	3	6	2	30	12	50	20	20	08	100	40
		MICROBIOLOGY - PR	P	1	3		2	INTERNAL .EXAM							
	CC-12	FOOD PRESERVATION	T	3	3	6	2	30	12	50	20	20	08	100	40
		FOOD PRESERVATION - PR	P	1	3		2	INTERNAL .EXAM							
	CC-13	SOFTWARE IN FOLK MEDIA	T	3	3	6	2	30	12	50	20	20	08	100	40
		SOFTWARE IN FOLK MEDIA - PR	P	1	3		2	INTERNAL .EXAM							
	CC-14	TEXTILE DESIGN: DYEING AND PRINTING	T	3	3	6	2	30	12	50	20	20	08	100	40
		TEXTILE DESIGN: DYEING AND PRINTING - PR	P	1	3		2	INTERNAL .EXAM							
	DSE-7	CHILD AND HUMAN RIGHTS	T	3	3	6	2	30	12	50	20	20	08	100	40
		CHILD AND HUMAN RIGHTS - PR	P	1	3		2	INTERNAL .EXAM							
	DSE-8	CONSUMER INTHE MARKET	T	3	3	6	2	30	12	50	20	20	08	100	40
		CONSUMER INTHE MARKET - PR	P	1	3		2	INTERNAL .EXAM							
ELECTIVE (ANY ONE)															
ELECTIVE - A	SE-4	INTRODUCTION TO DIET THERAPY	T	3	3	6	2	30	12	50	20	20	08	100	40
		INTRODUCTION TO DIET THERAPY - PR	P	1	3		2	30	12	50	20	20	08	100	40
ELECTIVE - B	SE-4	SOCIOLOGICAL AND PSYCHOLOGICAL ASPECTS OF CLOTHING	T	3	3	6	2	30	12	50	20	20	08	100	40
		SOCIOLOGICAL AND PSYCHOLOGICAL ASPECTS OF CLOTHING - PR	P	1	3		2	30	12	50	20	20	08	100	40
ELECTIVE - C	SE-4	FAMILY AND CHILD WELFARE	T	3	3	6	2	30	12	50	20	20	08	100	40
		FAMILY AND CHILD WELFARE - PR	P	1	3		2	30	12	50	20	20	08	100	40
TOTAL				28	42									700	

- BHAKT KAVI NARSINH MEHTA UNIVERSITY, JUNAGADH - EXAMINATION CODING SYSTEM - S.Y.B.Sc. (HOME SCIENCE) - SEMESTER – 4														ANNEXURE ‘B’	
Sem. – 4															
Core Courses	Course Code	Subject	T/P	Credit	Paper No.	Paper code	Marks								
							Internal		External		practical		Total		
							Total	Passing	Total	Passing	Total	Passing	Total	Passing	
CORE COURSE	CC-11	MICROBIOLOGY	T	3	P-1	BHS4micC111X	30	12	50	20	20	08	100	40	
		MICROBIOLOGY - PR	P	1	PR		INTERNAL .EXAM								
	CC-12	FOOD PRESERVATION	T	3	P-2	BHS4fprC122X	30	12	50	20	20	08	100	40	
		FOOD PRESERVATION - PR	P	1	PR		INTERNAL .EXAM								
	CC-13	SOFTWARE IN FOLK MEDIA	T	3	P-3.	BHS4sfmC133X	30	12	50	20	20	08	100	40	
		SOFTWARE IN FOLK MEDIA - PR	P	1	PR		INTERNAL .EXAM								
	CC-14	TEXTILE DESIGN: DYEING AND PRINTING	T	3	P-4	BHS4tdpC144X	30	12	50	20	20	08	100	40	
		TEXTILE DESIGN: DYEING AND PRINTING - PR	P	1	PR		INTERNAL .EXAM								
	DSE-7	CHILD AND HUMAN RIGHTS	T	3	P-5	BHS4chrD075X	30	12	50	20	20	08	100	40	
		CHILD AND HUMAN RIGHTS - PR	P	1	PR		INTERNAL .EXAM								
	DSE-8	CONSUMER INTHE MARKET	T	3	P-6	BHS4cimD086X	30	12	50	20	20	08	100	40	
		CONSUMER INTHE MARKET - PR	P	1	PR		INTERNAL .EXAM								
ELECTIVE (ANY ONE)															
ELECTIVE - A	SE-4	INTRODUCTION TO DIET THERAPY	T	3	P-7	BHS4idtSE47A	30	12	50	20	20	08	100	40	
		INTRODUCTION TO DIET THERAPY -PR	P	1	PR		INTERNAL .EXAM								
ELECTIVE - B	SE-4	SOCIOLOGICAL AND PSYCHOLOGICAL ASPECTS OF CLOTHING	T	3	P-7	BHS4spcSE47B	30	12	50	20	20	08	100	40	
		SOCIOLOGICAL AND PSYCHOLOGICAL ASPECTS OF CLOTHING - PR	P	1	PR		INTERNAL .EXAM								
ELECTIVE - C	SE-4	FAMILY AND CHILD WELFARE	T	3	P-7	BHS4fcwSE47C	30	12	50	20	20	08	100	40	
		FAMILY AND CHILD WELFARE - PR	P	1	PR		INTERNAL .EXAM								
TOTAL					28								700		

- BHAKT KAVI NARSINH MEHTA UNIVERSITY, JUNAGADH - EXAMINATION CODING SYSTEM T. Y. B.Sc. (HOME SCIENCE) - SEMESTER – 5 – GENERAL HOME SCIENCE															ANNEXURE ‘A’	
Sem. – 5																
Core Courses	Course Code	Subject	T/P	Credit	Contact Hrs/Week	Total Contact hour (work load)	Exam Duration in Hrs	Marks								
								Internal		Theory External		Practical External		Total		
								Total	Passing	Total	Passing	Total	Passing	Total	Passing	
CORE COURSE	CC-15	RESEARCH DOCUMENTATION	T	3	3	6	2	30	12	50	20	20	08	100	40	
		RESEARCH DOCUMENTATION - PR	P	1	3		4	EXTERNAL .EXAM								
	CC-16	COMMUNITY HEALTH AND NUTRITION	T	3	3	6	2	30	12	50	20	20	08	100	40	
		COMMUNITY HEALTH AND NUTRITION – PR	P	1	3		4	EXTERNAL .EXAM								
	CC-17	NGO MANAGEMENT	T	3	3	6	2	30	12	50	20	20	08	100	40	
		NGO MANAGEMENT - PR	P	1	3		4	EXTERNAL .EXAM								
	CC-18	PROCESSING APPERAL DESIGN	T	3	3	6	2	30	12	50	20	20	08	100	40	
		PROCESSING APPERAL DESIGN - PR	P	1	3		4	EXTERNAL .EXAM								
	DSE-9	CHILDREN WITH DISABILITY	T	3	3	6	2	30	12	50	20	20	08	100	40	
		CHILDREN WITH DISABILITY - PR	P	1	3		4	EXTERNAL .EXAM								
DSE-10	ENTREPRENEURSHIP DEVELOPMENT IN WOMEN	T	3	3	6	2	30	12	50	20	20	08	100	40		
	ENTREPRENEURSHIP DEVELOPMENT IN WOMEN - PR	P	1	3		4	EXTERNAL .EXAM									
ELECTIVE – ENTREPRENEURSHIP DEVELOPMENT PROJECT																
ELECTIVE - A	SE- 5	FOOD PROCESSING AND PACKAGING	T	3	3	6	2	30	12	50	20	20	08	100	40	
		FOOD PROCESSING AND PACKAGING - PR	P	1	3		4	EXTERNAL .EXAM								
ELECTIVE - B	SE- 5	EVENT MANAGEMENT	T	3	3	6	2	30	12	50	20	20	08	100	40	
		EVENT MANAGEMENT – PR	P	1	3		4	EXTERNAL .EXAM								
ELECTIVE - C	SE- 5	ACTIVITIES AND RESOURCES FOR CHILD DEVELOPMENT	T	3	3	6	2	30	12	50	20	20	08	100	40	
		ACTIVITIES AND RESOURCES FOR CHILD DEVELOPMENT – PR	P	1	3		4	EXTERNAL .EXAM								
TOTAL				28		42								700		

- BHAKT KAVI NARSINH MEHTA UNIVERSITY, JUNAGADH - EXAMINATION CODING SYSTEM - T.Y.B.Sc. (HOME SCIENCE) - SEMESTER – 5 – GENERAL HOME SCIENCE														ANNEXURE ‘B’	
Sem. – 5															
Core Courses	Course Code	Subject	T/P	Credit	Paper No.	Paper code	Marks								
							Internal		Theory External		Practical External		Total		
							Total	Passing	Total	Passing	Total	Passing	Total	Passing	
CORE COURSE	CC-15	RESEARCH DOCUMENTATION	T	3	P-1	BHS5rd0C151X	30	12	50	20	20	08	100	40	
		RESEARCH DOCUMENTATION - PR	P	1	PR		EXTERNAL .EXAM								
	CC-16	COMMUNITY HEALTH AND NUTRITION	T	3	P-2	BHS5chnC162X	30	12	50	20	20	08	100	40	
		COMMUNITY HEALTH AND NUTREITION – PR	P	1	PR		EXTERNAL .EXAM								
	CC-17	NGO MANAGEMENT	T	3	P-3.	BHS5ngoC173X	30	12	50	20	20	08	100	40	
		NGO MANAGEMENT - PR	P	1	PR		EXTERNAL .EXAM								
	CC-18	PROCESSING APPERAL DESIGN	T	3	P-4	BHS5padC184X	30	12	50	20	20	08	100	40	
		PROCESSING APPERAL DESIGN - PR	P	1	PR		EXTERNAL .EXAM								
	DSE-9	CHILDREN WITH DISABILITY	T	3	P-5	BHS5cwdD095X	30	12	50	20	20	08	100	40	
		CHILDREN WITH DISABILITY - PR	P	1	PR		EXTERNAL .EXAM								
	DSE-10	ENTREPRENEURSHIP DEVELOPMENT IN WOMEN	T	3	P-6	BHS5edwD106X	30	12	50	20	20	08	100	40	
		ENTREPRENEURSHIP DEVELOPMENT IN WOMEN - PR	P	1	PR		EXTERNAL .EXAM								
ELECTIVE															
ELECTIVE - A	SE- 5	FOOD PROCESSING AND PACKAGING	T	3	P-7	BHS5fppSE57A	30	12	50	20	20	08	100	40	
		FOOD PROCESSING AND PACKAGING - PR	P	1	PR		EXTERNAL .EXAM								
ELECTIVE - B	SE- 5	EVENT MANAGEMENT	T	3	P-7	BHS5em0SE57B	30	12	50	20	20	08	100	40	
		EVENT MANAGEMENT – PR	P	1	PR		EXTERNAL .EXAM								
ELECTIVE - C	SE- 5	ACTIVITIES AND RESOURCES FOR CHILD DEVELOPMENT	T	3	P-7	BHS5arcSE57C	30	12	50	20	20	08	100	40	
		ACTIVITIES AND RESOURCES FOR CHILD DEVELOPMENT – PR	P	1	PR		EXTERNAL .EXAM								
TOTAL				28									700		

- BHAKT KAVI NARSINH MEHTA UNIVERSITY, JUNAGADH ANNEXURE 'A' - EXAMINATION CODING SYSTEM T. Y. B.Sc. (HOME SCIENCE) - SEMESTER – 6 – GENERAL HOME SCIENCE															
Sem. – 6															
Core Courses	Course Code	Subject	T/P	Credit	Contact Hrs/Week	Total Contact hour (work load)	Exam Duration in Hrs	Marks							
								Internal		Theory External		Practical External		Total	
								Total	Passing	Total	Passing	Total	Passing	Total	Passing
CORE COURSE	CC-19	APPLIED PHYSIOLOGY	T	3	3	6	2	30	12	50	20	20	08	100	40
		APPLIED PHYSIOLOGY - PR	P	1	3		4	EXTERNAL .EXAM							
	CC-20	HEALTH AND NUTRITION PROGRAMME AND POLICIES	T	3	3	6	2	30	12	50	20	20	08	100	40
		HEALTH AND NUTRITION PROGRAMME AND POLICIES –PR	P	1	3		4	EXTERNAL .EXAM							
	CC-21	CHANGING TRENDS IN EXTENSION	T	3	3	6	2	30	12	50	20	20	08	100	40
		CHANGING TRENDS IN EXTENSION - PR	P	1	3		4	EXTERNAL .EXAM							
	CC-22	INDIAN TRADITIONAL TEXTILE	T	3	3	6	2	30	12	50	20	20	08	100	40
		INDIAN TRADITIONAL TEXTILE - - PR	P	1	3		4	EXTERNAL .EXAM							
	DSE-11	ADOLESCENT RELATION AND WELL BEING	T	3	3	6	2	30	12	50	20	20	08	100	40
		ADOLESCENT RELATION AND WELL BEING - PR	P	1	3		4	EXTERNAL .EXAM							
	DSE-12	FAMILY FINANCIAL MANAGEMENT	T	3	3	6	2	30	12	50	20	20	08	100	40
		FAMILY FINANCIAL MANAGEMENT - - PR	P	1	3		4	EXTERNAL .EXAM							
ELECTIVE –															
ELECTIVE - A	SE- 6	SOFTWARE IN PRINT MEDIA	P	3	3	6	2	30	12	50	20	20	08	100	40
		SOFTWARE IN PRINT MEDIA – PR	T	1	3		4	EXTERNAL .EXAM							
ELECTIVE - B	SE- 6	CANTEEN MANAGEMENT	P	3	3	6	2	30	12	50	20	20	08	100	40
		CANTEEN MANAGEMENT – PR	T	1	3		4	EXTERNAL .EXAM							
ELECTIVE - C	SE- 6	WEAVING AND KNITTING	P	3	3	6	2	30	12	50	20	20	08	100	40
		WEAVING AND KNITTING – PR	T	1	3		4	EXTERNAL .EXAM							
TOTAL				28		42								700	

- BHAKT KAVI NARSINH MEHTA UNIVERSITY, JUNAGADH - EXAMINATION CODING SYSTEM - T.Y.B.Sc. (HOME SCIENCE) - SEMESTER – 6 – GENERAL HOME SCIENCE														ANNEXURE ‘B’	
Sem. – 6															
Core Courses	Course Code	Subject	T/P	Credit	Paper No.	Paper code	Marks								
							Internal		Theory External		Practical External		Total		
							Total	Passing	Total	Passing	Total	Passing	Total	Passing	
CORE COURSE	CC-19	APPLIED PHYSIOLOGY	T	3	P-1	BHS6ap0C191X	30	12	50	20	20	08	100	40	
		APPLIED PHYSIOLOGY - PR	P	1	PR		EXTERNAL .EXAM								
	CC-20	HEALTH AND NUTRITION PROGRAMME AND POLICIES	T	3	P-2	BHS6hnpC202X	30	12	50	20	20	08	100	40	
		HEALTH AND NUTRITION PROGRAMME AND POLICIES -PR	P	1	PR		EXTERNAL .EXAM								
	CC-21	CHANGING TRENDS IN EXTENSION	T	3	P-3	BHS6cteC213X	30	12	50	20	20	08	100	40	
		CHANGING TRENDS IN EXTENSION - PR	P	1	PR		EXTERNAL .EXAM								
	CC-22	INDIAN TRADITIONAL TEXTILE	T	3	P-4	BHS6ittC224X	30	12	50	20	20	08	100	40	
		INDIAN TRADITIONAL TEXTILE - - PR	P	1	PR		EXTERNAL .EXAM								
	DSE-11	ADOLESCENT RELATION AND WELL BEING	T	3	P-5	BHS6arwD115X	30	12	50	20	20	08	100	40	
		ADOLESCENT RELATION AND WELL BEING - PR	P	1	PR		EXTERNAL .EXAM								
	DSE-12	FAMILY FINANCIAL MANAGEMENT	T	3	P-6	BHS6ffmD126X	30	12	50	20	20	08	100	40	
		FAMILY FINANCIAL MANAGEMENT - - PR	P	1	PR		EXTERNAL .EXAM								
ELECTIVE –															
ELECTIVE - A	SE- 6	SOFTWARE IN PRINT MEDIA	T	3	P-7	BHS6spmSE67A	30	12	50	20	20	08	100	40	
		SOFTWARE IN PRINT MEDIA – PR	P	1	PR		EXTERNAL .EXAM								
ELECTIVE - B	SE- 6	CANTEEN MANAGEMENT	T	3	P-7	BHS6cm0SE67B	30	12	50	20	20	08	100	40	
		CANTEEN MANAGEMENT – PR	P	1	PR		EXTERNAL .EXAM								
ELECTIVE - C	SE- 6	WEAVING AND KNITTING	T	3	P-7	BHS6wakSE67C	30	12	50	20	20	08	100	40	
		WEAVING AND KNITTING – PR	P	1	PR		EXTERNAL .EXAM								
TOTAL				28									700		

- BHAKT KAVI NARSINH MEHTA UNIVERSITY, JUNAGADH - EXAMINATION CODING SYSTEM T. Y. B.Sc. (HOME SCIENCE) - SEMESTER – 5- FOOD & NUTRITION HOME SCIENCE								ANNEXURE ‘A’							
Sem. – 5															
Core Courses	Course Code	Subject	T/P	Credit	Contact Hrs/Week	Total Contact hour (work load)	Exam Duration in Hrs	Marks							
								Internal		Theory External		Practical External		Total	
								Total	Passing	Total	Passing	Total	Passing	Total	Passing
CORE COURSE	CC-15	RESEARCH METHODOLOGY	T	3	3	6	2	30	12	50	20	20	08	100	40
		RESEARCH METHODOLOGY - PRA	P	1	3		4	EXTERNAL .EXAM							
	CC-16	FOOD SCIENCE – 1	T	3	3	6	2	30	12	50	20	20	08	100	40
		FOOD SCIENCE – 1 - PRA	P	1	3		4	EXTERNAL .EXAM							
	CC-17	NUTRITIONAL ASSESSMENT AND SURVEILLANCE	T	3	3	6	2	30	12	50	20	20	08	100	40
		NUTRITIONAL ASSESSMENT AND SURVEILLANCE - PRA	P	1	3		4	EXTERNAL .EXAM							
	CC-18	DIETETICS – 1	T	3	3	6	2	30	12	50	20	20	08	100	40
		DIETETICS – 1 - PRA	P	1	3		4	EXTERNAL .EXAM							
	DSE-09	FOOD MICROBIOLOGY	T	3	3	6	2	30	12	50	20	20	08	100	40
		FOOD MICROBIOLOGY - PRA	P	1	3		4	EXTERNAL .EXAM							
	DSE-10	BIOCHEMISTRY	T	3	3	6	2	30	12	50	20	20	08	100	40
		BIOCHEMISTRY - PRA	P	1	3		4	EXTERNAL .EXAM							
ELECTIVE –															
ELECTIVE - A	SE- 5	FOOD TECHNOLOGY AND PACKAGING	T	3	6	6	2	30	12	50	20	20	08	100	40
		FOOD TECHNOLOGY AND PACKAGING - PR	P	1			4	EXTERNAL .EXAM							
ELECTIVE - B	SE- 5	EVENT MANAG EVENT MANAGEMENT EMENT	T	3	6	6	2	30	12	50	20	20	08	100	40
		EVENT MANAGEMENT – PR	P	1			4	EXTERNAL .EXAM							
ELECTIVE - C	SE- 5	MATERNAL AND CHILD HEALTH AND NUTRITION	T	3	6	6	2	30	12	50	20	20	08	100	40
		MATERNAL AND CHILD HEALTH AND NUTRITION –PR	P	1			4	EXTERNAL .EXAM							
TOTAL				28		42								700	

- BHAKT KAVI NARSINH MEHTA UNIVERSITY, JUNAGADH - EXAMINATION CODING SYSTEM - T.Y.B.Sc. (HOME SCIENCE) - SEMESTER – 5 FOOD & NUTRITION HOME SCIENCE							ANNEXURE 'B'							
Sem. – 5														
Core Courses	Course Code	Subject	T/P	Credit	Paper No.	Paper code	Marks							
							Internal		Theory External		Practical External		Total	
							Total	Passing	Total	Passing	Total	Passing	Total	Passing
CORE COURSE	CC-15	RESEARCH METHODOLOGY	T	3	P-1	BHS5rm0C151X	30	12	50	20	20	08	100	40
		RESEARCH METHODOLOGY - PRA	P	1	PRA		EXTERNAL .EXAM							
	CC-16	FOOD SCIENCE – 1	T	3	P-2	BHS5fs1C162X	30	12	50	20	20	08	100	40
		FOOD SCIENCE – 1 - PRA	P	1	PRA		EXTERNAL .EXAM							
	CC-17	NUTRITIONAL ASSESSMENT AND SURVEILLANCE	T	3	P-3.	BHS5nasC173X	30	12	50	20	20	08	100	40
		NUTRITIONAL ASSESSMENT AND SURVEILLANCE - PRA	P	1	PRA		EXTERNAL .EXAM							
	CC-18	DIETETICS – 1	T	3	P-4	BHS5dt1C184X	30	12	50	20	20	08	100	40
		DIETETICS – 1 - PRA	P	1	PRA		EXTERNAL .EXAM							
	DSE-09	FOOD MICROBIOLOGY	T	3	P-5	BHS5fm0D095X	30	12	50	20	20	08	100	40
		FOOD MICROBIOLOGY - PRA	P	1	PRA		EXTERNAL .EXAM							
	DSE-10	BIOCHEMISTRY	T	3	P-6	BHS5bioD106X	30	12	50	20	20	08	100	40
		BIOCHEMISTRY - PRA	P	1	PRA		EXTERNAL .EXAM							
ELECTIVE														
ELECTIVE - A	SE- 5	FOOD TECHNOLOGY AND PACKAGING	T	3	P-7	BHS5ftpSE57A	30	12	50	20	20	08	100	40
		FOOD TECHNOLOGY AND PACKAGING - PR	P	1	PRA		EXTERNAL .EXAM							
ELECTIVE - B	SE- 5	EVENT MANAGEMENT	T	3	P-7	BHS5em0SE57B	30	12	50	20	20	08	100	40
		EVENT MANAGEMENT – PR	P	1	PRA		EXTERNAL .EXAM							
ELECTIVE - C	SE- 5	MATERNAL AND CHILD HEALTH AND NUTRITION	T	3	P-7	BHS5mhnSE57C	30	12	50	20	20	08	100	40
		MATERNAL AND CHILD HEALTH AND NUTRITION –PR	P	1	PRA		EXTERNAL .EXAM							
TOTAL				28									700	

- BHAKT KAVI NARSINH MEHTA UNIVERSITY, JUNAGADH - EXAMINATION CODING SYSTEM T. Y. B.Sc. (HOME SCIENCE) - SEMESTER – 6– FOOD & NUTRITION HOME SCIENCE														ANNEXURE ‘A’			
Sem. – 6																	
Core Courses	Course Code	Subject	T/P	Credit	Contact Hrs/Week	Total Contact hour (work load)	Exam Duration in Hrs	Marks									
								Internal		Theory External		Practical External		Total			
								Total	Passing	Total	Passing	Total	Passing	Total	Passing		
CORE COURSE	CC-19	PHYSIOLOGY	T	3	3	6	2	30	12	50	20	20	08	100	40		
		PHYSIOLOGY - PRA	P	1	3		4	EXTERNAL .EXAM									
	CC-20	FOOD SCIENCE – 2	T	3	3	6	2	30	12	50	20	20	08	100	40		
		FOOD SCIENCE – 2 - - PRA	P	1	3		4	EXTERNAL .EXAM									
	CC-21	COMMUNITY HEALTH AND NUTRITION PROGRAM AND POLICIES	T	3	3	6	2	30	12	50	20	20	08	100	40		
		COMMUNITY HEALTH AND NUTRITION PROGRAM AND POLICIES – PR	P	1	3		4	EXTERNAL .EXAM									
	CC-22	DITETICS -2	T	3	3	6	2	30	12	50	20	20	08	100	40		
		DITETICS -2 - - PRA	P	1	3		4	EXTERNAL .EXAM									
	DSE-11	FOOD ANALYSIS	T	3	3	6	2	30	12	50	20	20	08	100	40		
		FOOD ANALYSIS - - PRA	P	1	3		4	EXTERNAL .EXAM									
	DSE-12	PUBLIC NUTRITION AND HEALTH CARE	T	3	3	6	2	30	12	50	20	20	08	100	40		
		PUBLIC NUTRITION AND HEALTH CARE - PR	P	1	3		4	EXTERNAL .EXAM									
ELECTIVE –																	
ELECTIVE - A	SE- 6	FOOD SERVICES AND FANCY COOKERY	P	3	6	6	2	30	12	50	20	20	08	100	40		
		FOOD SERVICES AND FANCY COOKERY – PR	T	1			4	EXTERNAL .EXAM									
ELECTIVE - B	SE- 6	CANTEEN MANAGEMENT	P	3	6	6	2	30	12	50	20	20	08	100	40		
		CANTEEN MANAGEMENT – PR	T	1			4	EXTERNAL .EXAM									
ELECTIVE - C	SE- 6	BAKERY SCIENCE	P	3	6	6	2	30	12	50	20	20	08	100	40		
		BAKERY SCIENCE – PR	T	1			4	EXTERNAL .EXAM									
TOTAL				28		42								700			

- BHAKT KAVI NARSINH MEHTA UNIVERSITY, JUNAGADH - EXAMINATION CODING SYSTEM - T.Y.B.Sc. (HOME SCIENCE) - SEMESTER – 6 – FOOD & NUTRITION HOME SCIENCE														ANNEXURE 'B'	
Sem. – 6															
Core Courses	Course Code	Subject	T/P	Credit	Paper No.	Paper code	Marks								
							Internal		Theory External		Practical External		Total		
							Total	Passing	Total	Passing	Total	Passing	Total	Passing	
CORE COURSE	CC-19	PHYSIOLOGY	T	3	P-1	BHS6phyC191X	30	12	50	20	20	08	100	40	
		PHYSIOLOGY - PRA	P	1	PR		EXTERNAL .EXAM								
	CC-20	FOOD SCIENCE – 2	T	3	P-2	BHS6fs2C202X	30	12	50	20	20	08	100	40	
		FOOD SCIENCE – 2 - PRA	P	1	PR		EXTERNAL .EXAM								
	CC-21	COMMUNITY HEALTH AND NUTRITION PROGRAM AND POLICIES	T	3	P-3.	BHS6chnC213X	30	12	50	20	20	08	100	40	
		COMMUNITY HEALTH AND NUTRITION PROGRAM AND POLICIES – PR	P	1	PR		EXTERNAL .EXAM								
	CC-22	DITETICS -2	T	3	P-4	BHS6dt2C224X	30	12	50	20	20	08	100	40	
		DITETICS -2 - PRA	P	1	PR		EXTERNAL .EXAM								
	DSE-11	FOOD ANALYSIS	T	3	P-5	BHS6fa0D115X	30	12	50	20	20	08	100	40	
		FOOD ANALYSIS - PRA	P	1	PR		EXTERNAL .EXAM								
	DSE-12	PUBLIC NUTRITION AND HEALTH CARE	T	3	P-6	BHS6pnhD126X	30	12	50	20	20	08	100	40	
		PUBLIC NUTRITION AND HEALTH CARE - PR	P	1	PR		EXTERNAL .EXAM								
ELECTIVE (ANY ONE)															
ELECTIVE - A	SE- 6	FOOD SERVICES AND FANCY COOKERY	T	3	P-7	BHS6fsfSE67A	30	12	50	20	20	08	100	40	
		FOOD SERVICES AND FANCY COOKERY – PR	P	1			EXTERNAL .EXAM								
ELECTIVE - B	SE- 6	CANTEEN MANAGEMENT	T	3	P-7	BHS6cm0SE67B	30	12	50	20	20	08	100	40	
		CANTEEN MANAGEMENT – PR	P	1			EXTERNAL .EXAM								
ELECTIVE - C	SE- 6	BAKERY SCIENCE	T	3	P-7	BHS6bs0SE67C	30	12	50	20	20	08	100	40	
		BAKERY SCIENCE – PR	P	1			EXTERNAL .EXAM								
TOTAL				28									700		

F. Y. B. Sc. (HOME SCIENCE) SEMESTER – I

SUBJECT	ENVIRONMENTAL SCIENCE- 1				
PAPER NO.	01				
COURSE	AE – 01				
CODE	(BHS1es1AE11X)				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
	02	00	02	THEORY	PRACTICAL
				02	00
				02	

OBJECTIVES

1. To be aware of the holistic ecological approaches to environment
2. To be aware of the environmental problems, hazards and risks
3. To understand the aspects of environmental pollution
4. To know our environmental resources and its conservation
5. To be aware of public duties for sustainable development of India
6. To be aware of the environmental policies, movements and ethics

THEORY

UNIT – 1:- OUR ENVIRONMENT

- 1.1 Introduction
- 1.2 Definition of environment
- 1.3 Environmental factors
- 1.4 Structure of atmosphere
- 1.5 Importance of environmental education

UNIT – 2:- OUR NATURAL RESOURCES

- 2.1 Introduction
- 2.2 Meaning of natural resources
- 2.3 Classification of natural resources
- 2.4 Natural resources and associated problems

2.4.1 Forest resources

2.4.2 Water resources

2.4.3 Land resources

2.4.4 Mineral resources

2.4.5 Food resources

2.4.6 Energy resources

UNIT – 3:- THE ROLE OF PUBLIC IN SUSTAINABLE DEVELOPMENT AND ENVIRONMENT

3.1 Introduction

3.2 Biodiversity and conservation

3.3 Control on pollution

3.4 Forest protection and plantation

3.5 Conservation of water

3.6 Conservation of land

3.7 Conservation of energy

UNIT – 4:- THE ROLE OF INFORMATION TECHNOLOGY AND PUBLIC IN ENVIRONMENTAL PROTECTION

4.1 Introduction

4.2 Environment related changes and information technology

4.3 Affected role of information technology for public environmental awareness

4.4 The role of public in environment protection

4.5 The role of women in environment protection

RECOMMENDED READING

- 1) Chetan Singh Mehta (2000), Environmental Protection and the Law, New Delhi: Ashish Publishing house.
- 2) M.H.Tyagi (2005), Global Environmental issues Jaipur: Raj Publishing House.
- 3) R.B.Singh, D.K.Thakur (2009), Environmental Management Jaipur: Indus valley publication.

F. Y. B. Sc. (HOME SCIENCE) SEMESTER – I

SUBJECT	FUNDAMENTAL OF FOODS & NUTRITION – 1				
PAPER NO.	02				
COURSE	CC – 01				
CODE	(BHS1fn1C012X)				
CREDITS	Theory	Practical	Total	Total Contact HRS	
				Theory	Practical
	03	01	04	03	02
				05	

- **OBJECTIVE**

1. This course enables the student to understand the functions of and the role of various nutrients and the effects of deficiency and excess. (In brief)
2. Learn About The Composition And Nutritional Contribution Selection Of Different Food Stuff.
3. Be Familiar with Different Methods of Cooking Their Advantaged 'Disadvantages.
4. . Develop The Ability To Improve The Nutritional' Gravity Of Food.

THEORY

UNIT: 1 INTRODUCTION

Concept of nutrition

Definition of Food, diet, nutritional status & malnutrition.

Signs of good & poor nutrition.

UNIT: 2 FUNCTIONS OF FOOD

Energy yielding, body building & protective foods.

UNIT; 3 NUTRIENTS; - CLASSIFICATION, SOURCES, FUNCTIONS, R.D.A. AND DEFICIENCY AND EXCESS

- Carbohydrate

- Protein
- Fat
- Energy

UNIT;- 4 BASIC TERMINOLOGY USED IN FOODS PREPARATION ;-

Pre preparation ; Peeling, Scraping, peering, cutting, grating steeping, centrifuging, emulsification, homogenization. Germination Fermentation.

Mixing Terms; Beating, bending, cutting in, creaming, folding in.

PRA CTICAL

1 use and care of kitchen equipment's

2 Controlling techniques: weight & measures standard House hold measures for raw Food.

3 Preparation & calculation of following nutrient rich recopies

- Carbohydrates rich
- Protein rich
- Energy rich
- Fat rich

4 Preparing recipe using pro-preparation methods.

1. Germination '
2. Fermentation

RECOMMENDED READINGS

- Khanna K, Gupta S, Seth R, Mahna R, Rekhi T (2004). *The Art and Science of Cooking: A Practical Manual*, Revised Edition. Elite Publishing House Pvt Ltd.
- Raina U, Kashyap S, Narula V, Thomas S, Suvira, Vir S, Chopra S (2010). *Basic Food Preparation: A Complete Manual*, Fourth Edition. Orient Black Swan Ltd.
- Bamji MS, Krishnaswamy K, Brahman GNV (2009). *Textbook of Human Nutrition*, 3rd edition. Oxford and IBH Publishing Co. Pvt. Ltd.
- Srilakshmi (2007). *Food Science*, 4th Edition. New Age International Ltd.
- Wardlaw and Insel MG, Insel PM (2004). *Perspectives in Nutrition*, Sixth Edition. Mosby.
- Chadha R and Mathur P (eds). *Nutrition: A Lifecycle Approach*. Orient Blackswan, Delhi. 2015

F. Y. B. Sc. (HOME SCIENCE) SEMESTER – I

SUBJECT	COMMUNICATION AND EXTENSION				
PAPER NO.	03				
COURSE	CC-02				
CODE	(BHS1ce0C023X)				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	02
				05	

OBJECTIVES

To enable students to

- 1) Acquire skills in development and using media in development communication.
- 2) Explore the use of different media for different situation.
- 3) To know about the effective communication.

THEORY

UNIT- 1 COMMUNICATION: CONCEPTS

1.1 Historical background, concept and nature

1.2 Functions of Communication

1.3 Types of Communication – communication transactions; Formal and Informal

Communication: Verbal and Non-verbal Communications

1.4 Scope of Communication – Education, training and learning industry, Motivation and Management. Corporate Communication, Management of Organizations, Advertising and Public relations

1.5 Communication and mainstream media-newspaper, radio, television and Cinema, ICTs and web based communication

1.6 Communication for social change

UNIT - 2 UNDERSTANDING HUMAN COMMUNICATION

2.1 Culture and communication- Signs, symbols and codes in communication

2.2 Postulates/Principles of Communication

2.3 Elements of Communication and their characteristics

2.4 Models of Communication

2.5 Barriers to Communication

UNIT - 3 COMMUNICATING EFFECTIVELY

Concept, nature and relevance to communication process:

- Empathy
- Persuasion
- Perception
- Listening

UNIT - 4 COMMUNICATIONS FOR EXTENSION

4.1 Extension: concept. Goals, philosophy and history

4.2 Principles of extension

4.3 Methods and Media of community outreach; Audio-Visual aids- concept, Classification, characteristics and scope

4.4 Relationship between communication and extension- role of extension in Development

PRACTICAL

1. Developing skills in planning and conducting small group communication.
2. Visit to govt. developmental program any one
- 3 Design and use of graphic media

RECOMMENDED READINGS

- 1) Barker, L.(1990). “Communication”, New Jersey: Prentice Hall, Inc; 171.
- 2) Devito, J.(1998) Human Communication. New York: Harper & Row.
- 3) Patri and Patri (2002); Essentials of Communication. Greenspan

F. Y. B. Sc. (HOME SCIENCE) SEMESTER – I

SUBJECT	CLOTHING CONSTRUCTION				
PAPER NO.	04				
COURSE	CC – 03				
CODE	(BHS1cc0C034X)				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	02
				05	

OBJECTIVES

1. This course will provide sound foundation for garment manufacturing techniques.
2. To develop skills in students related to body measurements using appropriate tools, Sewing by non-automatic machine.
3. Application of appropriate constructional stitches, and preparation of fabric for clothing construction.

THEORY

UNIT: 1 SEWING MACHINE

- 1.1 History of sewing machine
- 1.2 Types of sewing machine
- 1.3 Parts and functions of sewing machine
- 1.4 Operation of sewing machine
- 1.5 Care & maintenance of sewing machine

UNIT: 2 TOOLS OF SEWING

- 2.1 Measuring Tools - Function, use and care of the following tools:
- 2.2 Marking tools
- 2.3 Cutting tools
- 2.4 Sewing tools
- 2.5 Miscellaneous tools

UNIT: 3 MEASUREMENTS

3.1 Knowledge of various landmarks on the body, required for making garments.

3.2 Techniques of taking body measurements.

3.3 Types of Measurement

UNIT: 4 TECHNIQUE OF FULLNESS

4.1 Type Tucks

4.2 Type Pleats

4.3 Smocking

4.4 Ruffles

PRACTICAL

1) Prepare a labeled outline diagram of sewing machine.

2) Make a Tools Chart with Sketch

3) Basic Stitches (make any one)

1 Basic Hand stitches

2 Basic Machine Stitches

4) Point of well tailoring stitches

Project Work: Make Article Any One

1. Pleats

2. Smocking

RECOMMENDED READINGS -

- 1) Macall's sewing in colour, Hamlyn
- 2) Singer sewing Book, Gladys Cunningham, Golden Press
- 3) Complete guide to sewing, Reader's Digest
- 4) Clothing construction, Evelyn A. Mansfield, Houghton Mifflin 1953
- 5) The technology of clothing manufacture, Harold Carr and Barbara Latham John Wiley & Sons. 1994
- 6) The Art of Sewing, Thomas (Anna) Jacob, UBS Publication Distributor Ltd.
- 7) Isabel Sutherland Ed. Home dress making Pan Craft Book

F. Y. B. Sc. (HOME SCIENCE) SEMESTER – I

SUBJECT	LIFE SPAN DEVELOPMENT – 1				
PAPER NO.	05				
COURSE	DSE – 01				
CODE	(BHS1ls1D015X)				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	02
				05	

OBJECTIVES

- 1) To become acquainted with development stages from birth to old age.
- 2) To develop awareness of importance aspects of development during the whole life span.
- 3) To understand the issues faced and adjustment required at each stage across the life span.

THEORY:

Unit1: UNDERSTANDING HUMAN DEVELOPMENT

1.1 Definition

1.2 Scope and multidisciplinary nature of Human Development.

1.3 Contexts, stages and domains of Development (Different stage on life span)

1.4 Growth And Development

1.5 Principles of Growth and Development: norms and milestones

1.6 Developments Factors-heredity and Environment, Learning and Maturity

Unit 2: PRE-NATAL DEVELOPMENT

2.1 Conception, Pregnancy and Birth.

2.2 Stage of Prenatal Development

2.3 Influences on Pregnancy

Unit 3: INFANCY

3.1 Definition

3.2 Developmental Task

3.3 Physical and Motor Development

3.4 Social and Language Development

Unit 4: EARLY CHILDHOOD YEAR

4.1 Definition

4.2 Character and Development Tasks.

4.3 Physical and Motor Development

4.4 Social and Language Development

PRACTICAL -

1) Methods of child study and their use:

- Interview,
- Observations,
- Checklist

2) Prepare the album or the game in different development activity

3) Use of secondary sources to understand the depiction of children.

4) Collect information about the changes observed during pregnancy by face meeting with the pregnant women.

RECOMMENDED READINGS

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

F. Y. B. Sc. (HOME SCIENCE) SEMESTER – I

SUBJECT	RESOURCE MANAGEMENT				
PAPER NO.	06				
COURSE	DSE – 02				
CODE	(BHS1rm0D026X)				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	02
				05	

OBJECTIVES

- 1) To know about factors involve in management.
- 2) To create an awareness among the students about management in the family as well.
- 3) To recognize the importance of wise use of resources in order to achieve goals.

THEORY

UNIT 1 INTRODUCTION TO RESOURCE MANAGEMENT

1.1 Concept, university and scope of management

1.2 Approaches to management

1.3 Motivation Theory

UNIT 2 RESOURCES

2.1 Understanding meaning

2.2 Classification and characteristics of resources

2.3 Factors affecting Utilization of resources.

UNIT 3. AVAILABILITY AND MANAGEMENT OF SPECIFIC RESOURCE

BY AN INDIVIDUAL/ FAMILY

3.1 Money

3.2 Time

3.3 Energy

UNIT 4 FUNCTIONS OF MANAGEMENT: AN OVERVIEW

4.1 Decision Making

4.2 Planning

4.3 Supervising

4.4 Controlling

4.5 Organizing

4.6 Evaluation

PRACTICALS;

- 1) Preparation of time plans for self and family
- 2) Make different types of articles covers (any one) Eg. Mobile cover / Sari cover
- 3) Make different types of flower pot any one
- 4) Write your suggestion how to increase your family income

RECOMMENDED READINGS

- 1) Koontz. H. and O'Donnel C., 2005. Management – A systems and contingency analysis of managerial functions. New York: McGraw-Hill Book Company
- 2) Kreitner. 2009, Management Theory and Applications. Cengage Learning: India
- 3) Rao V.S. and Narayana P.S. Principles and practices of Management, 2007, Konark Publishers Pvt. Ltd.

F. Y. B. Sc. (HOME SCIENCE) SEMESTER – I

SUBJECT	HUMAN PHYSIOLOGY				
PAPER NO.	07				
COURSE	SE – 01-A				
CODE	(BHS1hp0SE17A)				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	02	00	02	02	00
				02	

OBJECTIVES;

This course will enable the students to-

- 1) Understand cell & its structure
- 2) Understand the anatomy of Human body
- 3) Understand the structure of different system of Human body.

THEORY

UNIT 1:-INTRODUCTION TO HUMAN BODY:

1.1 Organs, tissue and cell, cell structure, cellular organelles and their\functions. In Brief

1.2 Blood-Composition and functions.

UNIT 2 CARDIOVASCULAR SYSTEM:

2.1 Structure of heart, circulations

2.2 Blood pressure (Definition and factors affecting)

2.3 Respiratory System, Structure and Functions

2.4 Structure of Lungs and its Function

UNIT 3 DIGESTIVE SYSTEM:

3.1 Overview of the Gastrointestinal Tract, organization and functions.

3.2 Structure and functions of:

3.3 Stomach.

3.4 Liver.

3.5 Gallbladder.

3.6 Pancreas

UNIT 4 EXCRETORY SYSTEM:

4.(a) Structure and functions of kidney and enthrones.

4.(b) Endocrine System: Overview of endocrine system

- Structure of main endocrine glands and their functions.
- Pituitary, Thyroid, and Pancreatic hormones.

4. (c) Reproductive System:

- Structure and Functions of Uterus and Ovaries.
- Physiology of Menstruation and Menopause

RECOMMENDED READINGS

- 1) Ganong WF (2014). Review of Medical Physiology, 24th ed. McGraw Hill.
- 2) Ross and Wilson (2013). Anatomy and Physiology in health and illness. 11th ed. Medical Division of Longman Group Ltd.
- 3) Guyton. A.C. and Hall, J.E.(2000)Textbook of Medical Physiology. 10th ed. India: Harcourt Asia
- 4) Das. A. (2004) Medical Physiology-Vil. I and II 3rd Books and Allied (P) Ltd.
- 5) Tortora. G.J. and Grabowski, S.R. (2000)Principles of Anatomy and Physiology. 9th ed. JohnWiley and Sons. Inc.
- 6) Chaudhari S.K.(2000) Concise Medical Physiology. 3rd Edition, Central.
- 7) Mahapatra. A.B.S.(2003): Essentials of Medical Physiology. 3rd Edition, Current BooksInternational.

F. Y. B. Sc. (HOME SCIENCE) SEMESTER – I

SUBJECT	FIRST AID & HOME NURSING				
PAPER NO.	07				
COURSE	SE – 01-B				
CODE	(BHS1fanSE17B)				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	02	00	02	02	00
	02				

OBJECTIVE:

- To enable the students to understand about first aid and its tricks.
- To create awareness about home nursing.

UNIT; - 1

- Definition of first aid.
- Qualities of first aider.
- An ideal First aid kit. Introduction to home nursing.

UNIT; - 2

- First aid of individual fractures, dislocations, sprains, strains, wounds and hemorrhages.
- First aid of burns, scalds, snakebites, scorpion and rabid dog bites.
- Foreign bodies in eye, ear, nose and their removal.

UNIT; - 3

- Respiration - types and methods.

UNIT;- 4

- Recent rules and awareness of road accidents.
- First aid during road accident and our role during road accidents.
- The sick room: care, preparation, cleaning, ventilation and lighting.
- Feeding the sick at home

RECOMONDATION:-

1) Textbook on First Aid and Emergency Nursing

Clement MPhil (Edu) Msc (N) MA (Soc) MA (Child Care), PGDHA

F. Y. B. Sc. (HOME SCIENCE) SEMESTER – I

SUBJECT	LIFE SCIENCE				
PAPER NO.	07				
COURSE	SE – 01-C				
CODE	(BHS1lscSE17C)				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	02	00	02	02	00
				02	

OBJECTIVES;-

- Introduction Of Plant Seeds And Vegetables
- Classification Of Animals

SECTION A - BOTANY

UNIT 1:- INTRODUCTION TO PLANT KINGDOM

- Classification of Plant Kingdom
- Angiospermic plants (Flower with details of its parts)
- Formation of fruit, seed and embryo
- Structure of monocot and dicot seed and seed germination

UNIT 2:- PROPAGATION OF PLANTS – SEED AND VEGETATIVE

- Seed Propagation
- Cuttings – stem leaf and root
- Layering
- Grafting

SECTION B- ZOOLOGY

Unit 3;-

- Classification of animal kingdom
- Chordates up to 5 major classes, characteristics with examples

- Non chordates up to phyla, characteristics with examples
- Cell theory, electron microscopic structure and function of a cell

Unit; - 4

- Parasites and human diseases
- Plasmodium, Giardia, Enamoeba, Taenia, Ascaris etc
- Economics importance and control of common household pests
- Insects as a resource

RECOMMENDED READINGS:

1. Chadha K.L.2012. Handbook of Horticulture. ICAR Publication.
2. Gopalaswami ianger K.S.1991, Complete gardening in India, MessersNagaraj And Co. Madras
3. Hartman H.T and Kester D 1986.:Plant Propagation, Principles and Practices PrenticeHall of India Pvt. Ltd. New Delhi.
4. Raven P. and Johnson G. 2010. Biology. McGraw Hill Science.
5. Soni N.K. and Soni V. 2010. Fundamentals of Botany. Tata McGraw Hill Education.
6. Jordan and Verma,1998, Invertebrate Zoology, S. Chand and Co. Ltd
7. Kotpal,2000,Modern Textbook of Zoology, Rastogi Publications
8. Winchester, A.M. 1967, Genetics, Oxford and IBH Publishing Company
9. Vij and Gupta (2011)Applied Zoology Phoenix Publishing House

F. Y. B. Sc. (HOME SCIENCE) SEMESTER – 2

SUBJECT	ENVIRONMENTAL SCIENCE – 2				
PAPER NO.	01				
COURSE	AE – 02				
CODE	(BHS2es2AE21X)				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	02	00	02	02	00
				02	

OBJECTIVES

1. To be aware of the holistic ecological approaches to environment
2. To be aware of the environmental problems, hazards and risks
3. To understand the aspects of environmental pollution
4. To know our environmental resources and its conservation
5. To be aware of public duties for sustainable development of India
6. To be aware of the environmental policies, movements and ethics

THEORY

UNIT – 1 ECOSYSTEM – EARTH, MAN AND ENVIRONMENT

- 1.1 Introduction
- 1.2 Definition of ecosystem
- 1.3 Structure of ecosystem
- 1.4 Food chain in the ecosystem
- 1.5 Food-web
- 1.6 Types of ecosystem
- 1.7 Effects of man on ecosystem

UNIT – 2 EFFECT OF MAN ON ENVIRONMENT

- 2.1 Introduction
- 2.2 Land pollution

2.3 Air pollution

2.4 Water pollution

2.5 Noise pollution

UNIT – 3 - ENVIRONMENTAL PROBLEMS CREATED AFTER DEVELOPMENT

3.1 Introduction

3.2 Ozone depletion

3.3 Greenhouse effect

3.4 Global warming

UNIT – 4 PROTECTION OF ENVIRONMENT IN INDIA

4.1 Introduction

4.2 Environment related main movements in India

4.3 Environment related ethics

4.4 Environmental protection Acts.

RECOMMENDED READING

1) Chetan Singh Mehta (2000), Environmental Protection and the Law, New Delhi: Ashish Publishing house.

2) M.H.Tyagi (2005), Global Environmental issues Jaipur: Raj Publishing House.

3) R.B.Singh, D.K.Thakur (2009), Environmental Management Jaipur: Indus valley publication.

4) Timmy Katyal, M. Satake (2006), Environmental Pollution, New Delhi: Anmol publications Pvt. Ltd.

F. Y. B. Sc. (HOME SCIENCE) SEMESTER – 2

SUBJECT	FUNDAMENTAL OF FOODS & NUTRITION – 2				
PAPER NO.	02				
COURSE	CC –04				
CODE	(BHS2fn2C042X)				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	02
				05	

OBJECTIVES;

- 1) The course enables the students to understand the functions of food and the role of various nutrients and the effect of deficiency and excess.
- 2) To learn about the composition and nutritional contribution and selection of Different food stuff.
- 3) To be familiar with different methods of cooking, their advantages and Disadvantages.

UNIT: - I;THE BASIC FIVE FOOD GROUPS'

UNIT; - 2; VITAMINS

Classification, sources functions RDA Deficiency and excess Vitamins -Fat soluble 4 Vitamin A,D,E,K water soluble vitamins , Vit. - C & B-complex.

UNIT;- 3; CLASSIFICATION, SOURCES FUNCTIONS RDA DEFICIENCY AND EXCES

- Minerals,
- Calcium
- Phosphorus
- Iron
- Magnesium

- Selenium
- Sodium
- Potassium
- Florida
- Florin
- Iodine
- Cooper
- Water -Sources, water balance and requirements.

UNIT:- 4 METHODS OF FOOD PREPARATION '

Boiling -Pressure cooking –

Steaming Micro wave cooking, Roasting Solar cooking, Baking -Puffing

Frying, Stewing, Poaching, Brewing, Braising.

PRACTICAL

- **Preparation of following recipes: (One dish each)**
- Vitamin A rich
- Vitamin – C rich
- Vitamin B1 and B2
- Vitamin B3 and Folic acid.
- Calcium Rich
- Iron Rich
- Preparing recipes using different methods of cooking (on dish each).
 - Frying - 'Deep Frying&Shallow frying
- Steaming
- Baking
- Pressure cooking
- Solar cooking

- Boiling

RECOMMENDED READINGS

- Khanna K, Gupta S, Seth R, Mahna R, Rekhi T (2004). *The Art and Science of Cooking: A Practical Manual*, Revised Edition. Elite Publishing House Pvt Ltd.
- Raina U, Kashyap S, Narula V, Thomas S, Suvira, Vir S, Chopra S (2010). *Basic Food Preparation: A Complete Manual*, Fourth Edition. Orient Black Swan Ltd.
- Bamji MS, Krishnaswamy K, Brahman GNV (2009). *Textbook of Human Nutrition*, edition. Oxford and IBH Publishing Co. Pvt. Ltd.
- Srilakshmi (2007). *Food Science*, 4th Edition. New Age International Ltd.
- Wardlaw and Insel MG, Insel PM (2004). *Perspectives in Nutrition*, Sixth Edition. Mosby.
- Chadha R and Mathur P (eds). *Nutrition: A Lifecycle Approach*. Orient Blackswan, Delhi 2015.
- Mudambi S (1981). *Fundamentals of Foods and Nutrition*. Wiley Eastern Ltd.
- Neelam Buddhdev, Bhavana Vaid (2004). *Fundamentals of Foods and Nutrition*. Pravin Prakashan.
- Human Nutrition - R. Rajlaxmi (1981). *Applied Nutrition*. Oxford and IBH Publishing Co.
- Thangam E. Philip *Modern Cookery – Vol. I and II*. Orient Longman Publication.
- M. Swaminathan (1979) *Food Science, Chemistry and Experimental Foods*. Ganesh and Co.
- F.P. Antia. (1982). *Clinical Dietetics and Nutrition*. Oxford University Press.

F. Y. B. Sc. (HOME SCIENCE) SEMESTER – 2

SUBJECT	EXTENSION FOR DEVELOPMENT				
PAPER NO.	03				
COURSE	CC –05				
CODE	(BHS2efdC053X)				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	02
				05	

OBJECTIVES

To enable students to-

- 1) Understand the widening concept of extension.
- 2) To know about extension program planning.
- 3) To develop skills for program planning.

THEORY

UNIT 1 COMMUNITY DEVELOPMENT PROGRAMME

- 1.1 meaning
- 1.2 Objectives
- 1.3 Types
- 1.4 Programme planning at central and local level

UNIT 2 METHODS AND APPROACHES OF EXTENSION

- 2.1 Stakeholders in development
- 2.2 People's participation and social mobilization in development
- 2.3 Extension systems- types, advantages and disadvantages
- 2.4 Diffusion of innovation and adoption
- 2.5 Extension methods and approaches- classification, characteristics and selection

UNIT 3 DEVELOPMENT PROGRAMS

- 3.1 Development issues and goals-national and international perspectives

3.2 National Development Programmes- goals, strategies, structure and achievements

3.3 Analysis of contemporary national development programmes-objectives, clients, salient features, outcomes and communication support.

3.4 Behavior Change Communication strategies in development programmes

UNIT 4 EXTENSION TEACHING METHODS AND TECHNIQUE

4.1 Selection

4.2 Classification

4.3 Extension techniques (farm/Home visit , Group Discussion , demonstration , exhibition ,workshop , training , seminar ,field visit ,Sight seeing)

PRACTICALS

1) Analysis of development programmes

2) Evaluate strategies used by development agencies for implementation of
Development programmes

3) Use of any Teaching techniques (demonstration / Work shop)

RECOMMENDED READINGS

1) Mikkelsen, Britha, (2002). Methods for Development Work and Research. New Delhi: Sage Publications

2) Date R. (2004) Evaluating Development Programmes and Projects. New Delhi: Sage Publications

3) Kumar & Hansra. (1997) Extension Education for Human Resource Development. New Delhi: Concept Publishers.

F. Y. B. Sc. (HOME SCIENCE) SEMESTER – 2

SUBJECT	FASHION STUDIES				
PAPER NO.	04				
COURSE	CC –06				
CODE	(BHS2fs0C04X)				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	02
				05	

OBJECTIVE

1. This course helps in understanding concept of fashion and the factors that affect fashion.
2. Its enables the students to familiarize with fashion terminology.
3. Understanding of the fashion trends is must for garment designers to make their designs acceptable in market.
4. Thus this is a very important course for students.

THERORY

UNIT: 1. FASHION

- 1.1 Define the fashion
- 1.2 History of Fashion
- 1.3 Fashion Terminology
- 1.4 Difference between style, fashion and trend.
- 1.5 Fashion cycle
- 1.6 Fashion Forecasting-Seasons, sources, steps in forecasting\

UNIT: 2 COMPONENTS OF FASHION

- 2.1 Silhouette
- 2.2 Details
- 2.3 Color

2.4 Fabric

2.5 Texture

2.6 Seams

2.7 Trims

UNIT: - 3 ADOPTION OF FASHION

3.1 Consumer groups- fashion leaders, followers

3.2 Adoption process- Trickle-down theory, bottom up theory & trickle across theory

3.3 Factors Affecting the Fashion

- age and gender
- geography
- culture
- economy and class
- technology
- Media & Communication
- Transportation

3.4 Selection of clothes for self

Selection and Evaluation of ready-made garments

UNIT: 4 CHANGES IN FASHION TREND

4.1 Fashion Change

4.2 Fashion Trend in 1940/1950 – Period of Independent

4.3 Fashion Trend in 1960- Indo-Western Culture

4.4 Fashion Trend in 1970- Mix Match Knit Wear

4.5 Fashion Trend in 1980- Economical Boom

4.6 Fashion Trend in 1990 – Millennium Fashion

4.7 Fashion Trend in 2000 – Mash Up

PRACTICAL

1. To collections of famous designers photographs Garment from internet which is related to the field.
2. To make Fashion Accessories – (Any Two)
 - a. Jewellery
 - b. Hand Bag
 - c. Purses
 - d. Broach
 - e. Belt
3. Sketching of elements and principles of design
4. Project work – Fashion Accessories / Fashion Style / Fashion Collection

RECOMMENDED READINGS

1. Fashion Design Essentials:100 Principles of Fashion Design - Rockport | Jay Calderin
2. The culture of Fashion - Christopher Breward
3. Fashion and Modernity 0 Christopher Breward
4. Fashion logy: An Introduction to Fashion Studies - Yuniya Kawamura
5. Fashion and Its Social Agendas: Class, Gender, and Identity in Clothing - Diana Crane
6. Fashion Cultures: Theories, Explorations and Analysis - Stella Bruzzi
7. Ready to Wear Apparel Analysis. Prentice Hall, Brown, Patty, Rice J., 1998.
8. Individuality in Clothing & Personal, Marshall S G, Jackson H O, Stanley MS, Kefge M &Specht T, 2009.
9. Appearance, 6th Edition, Pearson Education, USA.
10. The Complete Book of Fashion Design, Harper and Row Publications, Tate S.L., Edwards M.S., 1982, New York
11. Dr. veena s. samani(2012) :apparel making part- 1Saurashtra university – Rajkot

F. Y. B. Sc. (HOME SCIENCE) SEMESTER – 2

SUBJECT	LIFE SPAN DEVELOPMENT – 2				
PAPER NO.	05				
COURSE	DSE – 03				
CODE	(BHS2ls2D035X)				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	02
				05	

OBJECTIVES;

1. To become acquainted with development stages from birth to old age.
2. To develop awareness of importance aspects of development during the whole life span.
3. To understand the issues faced and adjustment required at each stage across the life span

THEORY

UNIT - 1: MIDDLE CHILDHOOD YEARS

- 1.1 Changes, Challenges and development task
- 1.2 Physical motor development
- 1.3 Cognitive, personality and language development
- 1.4 Socio-emotional and moral development

UNIT- 2: INTRODUCTION TO ADOLESCENCE

- 2.1 Definition and theoretical perspective
- 2.2 Physical, physiological changes
- 2.3 Cognitive and language development
- 2.4 Socio-emotional and moral development

UNIT - 3: YOUNG ADULTHOOD

- 3.1 Transition from adolescences to adulthood

3.2 Development tasks of adult

3.3 Socio-emotional development, relationships, marriage and parenting

3.4 Cognition and creative: work, vacation and leisure

UNIT- 4: MIDDLE AND LATE ADULTHOOD

4.1 Development tasks of middle and late adulthood

4.2 Physical and physiological changes and aging

4.3 Diversity in roles and relation

4.4 Parenting growing children

4.5 Cultural perspective on aging and death

PRACTICAL

1 Methods of study and their use

- Reviewing Interview and Observer
- Questionnaire
- Case Study
- Sociometry

2 Case profiles to study Middle Childhood/ adolescence / young adolescences / late adulthood

3 Depictions of adolescence and adulthood in media: Audio-visual, print and theatre

4 Group Discussions – Late Adulthood Problems

RECOMMENDED READINGS:

- Rice, F.P(1995), human development new jersey: prentice hall
- Breck, L.E(1995), child development, London: Allyn and Bacon
- Dutt S (1998). moral values in child development ,new Delhi :Amolsantock, J.W and Yussen, S.R(1998). child development: an introduction
- Element of child development
- Fundamental of children development and child care- Sharma & Lata Gairda.

F. Y. B. Sc. (HOME SCIENCE) SEMESTER – 2

SUBJECT	HOUSE KEEPING				
PAPER NO.	06				
COURSE	DSE – 04				
CODE	(BHS2hk0D046X)				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	02
				05	

OBJECTIVES;

To enable students

1. To become aware of the different areas and functions of housekeeping department.
2. To be aware of the importance of proper sanitation and hygiene in room.
3. To develop skills in housekeeping activities.
4. Gain knowledge of accessories of hotel.

THEORY:-

UNIT-1 INTRODUCTION TO HOTELS AS A SERVICED INDUSTRY.

- 1.1 Types of service offered in hotels.
- 1.2 Types of operation (Plans)
- 1.3 House keeping
- 1.4 Introduction and importance of hospitality.
- 1.5 Organization of housekeeping department.
- 1.6 Duties and responsibilities of housekeeping staff.
- 1.7 Co-ordination of housekeeping department with other departments.

UNIT-2; -CLEANING ACTIVITY AND PEST CONTROL

- 2.1 Cleaning agents.
 - 2.1.1 Types of cleaning agent:-
 - 2.1.2 Liquid cleaning agent.

- 2.1.3 Powder cleaning agent.
- 2.1.4 Paste cleaning agent.
- 2.1.5 Selection and use for different surface
- 2.1.6 Cleaning Techniques
- 2.2 Cleaning mechanical equipments:
 - 2.2.1 Vacuum cleaner.
 - 2.2.2 Shampoo machine.
- 2.3. Types of cleaning.

UNIT: - 3 - LINEN AND UNIFORM ROOM:-

- 3.1 Types of linen and their selections.
 - 3.1.1 Table linen.
 - 3.1.2 Bed linen.
 - 3.1.3 Bath linen.
- 3.2 Stock determination, Control and distribution, Record keeping of linen.
- 3.3 Types of uniform.
- 3.4 Selection of uniform.
- 3.5 Distribution and control.

UNIT-4 ACCESSORIES:-

- 4.1 Types and their place in interior Decoration.
- 4.2 Paintings, sculpture and posts, and other Accessories.

PRACTICES

1. To learn room cleaning procedure). List down the daily, weekly and yearly tasks.
2. To learn the cleaning procedure and care of glass articles.
3. To learn cleaning procedure and care of metals like brass and silver articles.
4. To learn the procedure of cleaning wash basin (ceramic) and sinks (stainless steel).
5. To learn the method of cleaning lampshades, fans and other electrical fixtures.

RECOMMENDED READINGS

Asler, (1970): Management of Hospitality Operations, BobbsMerill, London.

- Andrew Sudhir (1985): Hotel Housekeeping- training manual. Tata McGraw-Hill Publishing Co. Ltd., New Delhi.
 - Charavarti, B.K.: A technical guide to Hotel Operation, Metropolitan Book Co. Pvt. Ltd., and New Delhi.
 - David, M.Allen: Accommodation and cleaning service, Vol. 1 & 2. Hutchinson Publishing Group 17-21 Conway street, London.
 - Gladwell Derek: Practical Maintenance of equipment for hoteliers, Licenses and caterers,
 - Hutchinson and Co. Pvt. Ltd. Hurst Rosemary: Accommodation Management for Hostel and residential establishment.
 - Hurst Rosemary: Service and Maintenance for Hotel and Residential establishment.
- William

F. Y. B. Sc. (HOME SCIENCE) SEMESTER – 2

SUBJECT	BASIC OF COMPUTER & ITS APPLICATIONS				
PAPER NO.	07				
COURSE	SE – 02-A				
CODE	(BHS2bcaSE27A)				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	00	02	02	00	02
				04	

OBJECTIVES;

To enable the students to -

1. Know the basics of computers;
2. To be able to use computers for education, information and research.

SESSION 1: LAB GUIDE

Working with Windows OS

- 1.1 Working with Desktop
- 1.2 Creating Folder
- 1.3 Creating Text Files
- 1.4 Renaming and Deleting the File And Folder
- 1.5 Working with Recycle Bin
- 1.6 Shutting Down

SESSION 2: LAB GUIDE

MS-Word 2007

- 2.1 How to Start MS-Office
- 2.2 Office Button – New, Open, Save, Save As, Print, Print Preview, Close
- 2.3 Home Menu – Clipboard, Font, Paragraph, Style, Editing
- 2.4 Insert Menu – Pages, Tables, Illustrations, Header & Footer
- 2.5 Page Layout – Themes, Page Setup, Page Background, Paragraph

SESSION 3: LAB GUIDE

MS-Power Point 2007

3.1 How to Start Power Point

3.2 Office Button – New, Open, Save, Save As, Print, Send, Close

3.3 Home Menu – Clipboard, Font, Paragraph, Drawing, Editing

3.4 Insert Menu – Tables, Illustration, Header & Footer

3.5 Design Menu – Page Setup, Themes, Background,

3.6 Animations Menu – Preview, Animations, Transition

3.7 Slide Show Menu – Start Slide Show, Set Up

SESSION 4: LAB GUIDE

Internet

4.1 Email – Create your E-Mail Account

4.2 Log into E-Mail Account

4.3 Read an E-Mail, Send an E-Mail

4.4 Sending Soft Copy as Attachments

4.5 Download Attachments.

4.2 Open Following Websites.

1. Your College Website

2. BKNMU Website

3. Http www.irctc.com.in

4. Http www.yatra.com

PRACTICAL –

1) Prepare an application for the post of a lecturer in College in MS- Word.

2) Prepare a resume in MS-Word.

3) Prepare your semester – 2 time table in MS-Word.

4) Enlist your semester – 1 and semester – 2 subjects in MS-Word.

- 5) Prepare a bar chart of your college H.Sc. semester – 6 results of last 5 years in MSWord.
- 6) Prepare a pie chart of your class semester – 1 result in MS-Word.
(Number of girls and got grade or class.)
- 7) Prepare a visiting card for hobby classes/tuition class/ beauty parlour in MS-Word.
- 8) Prepare an invitation card for inauguration of your shop in MS-Word.
- 9) Prepare a power point presentation to give information about home science.
- 10) Prepare a power point presentation for your hobby classes/ beauty parlour/ boutique.

RECOMMENDED READINGS –

- 1) Microsoft office 2007 2nd edition by computer world.
- 2) Bano computer expert 5th edition by computer world.
- 3) Beginner's guide 2001 by Aptech Limited
- 4) Computer application & I.-1 by C. Jamnadas& company.

F. Y. B. Sc. (HOME SCIENCE) SEMESTER – 2

SUBJECT	COMPUTER APPLICATIONS IN FASHION DESIGN				
PAPER NO.	07				
COURSE	SE – 02-B				
CODE	(BHS2cfdSE27B				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	00	02	02	00	02
				04	

OBJECTIVES:-

Understanding Fashion Design Through Computer Application

PRACTICAL

1: BASICS OF DESIGN SOFTWARE

1.1 CorelDraw

1.2 Adobe Photoshop

2: CAD IN FASHION DESIGN

2.1 Color

2.2 Textures

2.3 Silhouettes & fashion details

2.4 Accessories

3: FASHION DESIGN CREATIONS THROUGH CAD

3.1 Mood Boards with colourastory and textures

3.2 Dressing up according to themes

RECOMMENDED READINGS

Corel Draw 9 - Manual Avanzado, ,2000, by Francisco Paz Gonzalez

Adobe Photoshop 7.0 Classroom in a Book, 25 June 2002, by Adobe Creative Team

F. Y. B. Sc. (HOME SCIENCE) SEMESTER – 2

SUBJECT	COMPUTER APPLICATIONS IN COMMUNICATION AND MEDIA DESIGN				
PAPER NO.	07				
COURSE	SE – 02-C				
CODE	(BHS2ccmSE27C)				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	00	02	02	00	02
				04	

OBJECTIVES:-

Understanding Social Media through Computer Application

PRACTICAL

1 COMPUTER APPLICATION DESIGNING

1.1 Concept of Computer and Designing

1.2 Need of computer Application Designing in Extension and Communication

1.3 Scope of Computer Application Designing for Extension and

1.4 Communication

1.5 Use of Computer Application Designing for Extension and Communication

2. COMPUTER SOFTWARE FOR DESIGNING

Use of the following software for making IEC material and Teaching Aids

2.1 Word Processor

2.2 Presentation Software

2.3 Corel Draw

2.4 Paint

2.5 Photoshop

2.6 PageMaker

3. ISSUES IN USE OF COMPUTER DESIGNING

Issues and Challenges in use of Computer for Designing in Extension and Communication

Learning Experiences

3.1 Preparing various IEC material with the use of different software

3.2 Arranging expert talk on computer designing

3.3 Viewing different computer designs.

3.4 Preparing charts/poster/flash cards etc. with the help of computer

3.5 Preparing designed brochures, leaflets with the help of various software.

3.6 Preparing presentation with the help of presentation software on development programmes.

RECOMMENDED READINGS

1. Kihrwadkar A, Pushpanadan, (2006), Information and Communication Technology in Education, Sarup and Sons, Delhi
2. Sampath K (1998), Introduction to Educational Technology, Sterling Publishers Pvt. Ltd
3. SagarKrshna (2007), ICTs and Teacher Training, Authors Press, Delhi
4. Valerie Q (1998), Internet in a nutshell, Shroff Publishers and Distributors Pvt. Ltd, Delhi

S. Y. B. Sc. (HOME SCIENCE) SEMESTER – 3

SUBJECT	PHYSICAL SCIENCE				
PAPER NO.	01				
COURSE	CC – 07				
CODE	(BHS3pscC071X)				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
	03	01	04	THEORY	PRACTICAL
				03	03
				06	

OBJECTIVES;

- 1) The students will be able to understand about different solutions, their applications, and pH.
- 2) The Students will understand about lipids, polymers and polymerization.
- 3) The students will understand about mechanics, heat and electricity and its applications.

UNIT 1;- ACIDS, BASES AND SALTS

- 1.1 Concept of acid, base and salt
- 1.2 Neutralization reaction
- 1.3 pH and pH scale
- 1.4 Buffer solutions
- 1.5 Applications in everyday life

UNIT 2; - HOUSEHOLD CHEMICALS

- 2.1 Chemicals in foods- preservatives and colorants
- 2.2 Antiseptics and disinfectants
- 2.3 Soaps and detergents

UNIT 3; - HEAT

- 3.1 Temperature and its measurements.
- 3.2 Types of thermometer

3.3 Heat Transfer- Modes and examples.

UNIT 4; - ELECTRICITY

4.1 Concept of current, voltage and resistance – Ohm's Law.

4.2 Conductors and Insulators of electricity and their applications.

4.3 Household wiring-safety features-fuse and earthings.

UNIT 5- CONSUMER AWARENESS

5.1 Guarantee and warranty of all household equipments.

5.2 Precautions while using equipments and servicing of equipment used.

PRACTICALS

1. Acid base titration
2. Preparation of Detergent Powder
3. Preparation of liquid soap
4. Simple thermometer
5. Doctor thermometer
6. Use of ICT Ohms law Demonstration only

RECOMMENDED READINGS

- Arun Bahl and B.S. Bahl : 2010, Advanced Organic Chemistry, S. Chand
- T. Jacob, 1979, Textbook of Applied Chemistry by McMillan India Ltd.
- Puri, Sharma and Pathania, 2008, Principles of Physical Chemistry by Vishal Publishing House.
- Ahluwalia, V.K. Dharma, S., Gulati, A., 2005, College Practical Chemistry University Press India Pvt. Ltd.
- B.Sc. Practical Physics by Harnam Singh, S. Chand and Co, 2001.
- Lal. S. (1995). Fundamentals Physics, Pradeep Publications, Delhi.
- Peet, L.J., Pickett, M.S. & Arnold, M.G.(1979), Household Equipment, John Wiley and Sons, USA.

- Partab, H. (1987). Electrical Gadgets. Dhanpat Rai & Sons.
- Sharma, S.K. & Jerath, R. (2013). Dinesh New Millennium Physics. Vol. I and Vol. II.
- Khan, N. (2008). Physics. Oxford University Press.
- Ahluwalia, V.K. Dharma, S., Gulati, A., 2005, College Practical Chemistry University Press India Pvt. Ltd.
- B.Sc. Practical Physics by Harnam Singh, S. Chand and Co, 2001.
- Lal. S. (1995). Fundamentals Physics, Pradeep Publications, Delhi.
- Peet, L.J., Pickett, M.S. & Arnold, M.G. (1979), Household Equipment, John Wiley and Sons, USA.
- Partab, H. (1987). Electrical Gadgets. Dhanpat Rai & Sons.
- Sharma, S.K. & Jerath, R. (2013). Dinesh New Millennium Physics. Vol. I and Vol. II.
- Khan, N. (2008). Physics. Oxford University Press

S. Y. B. Sc. (HOME SCIENCE) SEMESTER – 3

SUBJECT	NUTRITION FOR FAMILY				
PAPER NO.	02				
COURSE	CC – 08				
CODE	(BHS3nffC082X)				
CREDITS	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES;

This course will enable the students to

1. Diet and the importance of meal planning.
2. Gain Knowledge about dietary management in common ailments.
3. Know about RDA and healthy food choices.

UNIT 1; BASIC CONCEPTS MEAL PLANNING

- 1.1 Food groups and concept of balanced diet
- 1.2 Food exchange list
- 1.3 Concept of Dietary Reference Intakes
- 1.4 Factors effecting meal planning and food related behavior.
- 1.5 Dietary guidelines for Indians and food pyramid.

UNIT 2; NUTRITION DURING THE ADULT YEARS

Physiological changes, RDA, nutritional guidelines, nutritional concerns and healthy food choices.

- 2.1 Adult
- 2.2 Pregnant woman
- 2.3 Lactating mother
- 2.4 Elderly

UNIT 3; NUTRITION DURING CHILDHOOD

Growth and development, growth reference/ standards, RDA, nutritional guidelines, nutritional concerns and healthy food choices.

3.1 Infants

3.2 Preschool children

3.3 School children

3.4 Adolescents

PRACTICAL

1. Introduction to meal planning

- Use food exchange list

2. Planning and preparation of diets and dishes for

- Young adult

- Pregnant and Lactating woman

- Preschool child

- School age child and adolescents

- Elderly

3. Planning complementary foods for Infants

RECOMMENDED READINGS

1) Seth V and Singh K (2006). *Diet Planning through the Life Cycle: Part 1 Natural Nutrition.A Practical Manual*.Elite Publishing House Pvt. Ltd., New Delhi.

2) Gopalan C. Rama Sastri BV, Balasubramanian SC (1989) *Nutritive Value of Indian Foods*,National Institute of Nutrition, ICMR, Hyderabad.

3) Khanna K. Gupta S. Seth R, Passi SJ, Mahna R, Puri S (2013). *Textbook of Nutrition and Dieteties*.Phoenix Publishing House Pvt. Ltd.

4) Wardlaw GM. Hampi JS.DiSilvestro RA (2204). *Perspectives in Nutrition*.6 Thedition.McGraw Hill.

- 5) ICMR (2011) *Dietary Guidelines for Indians*. Published by National Institute of Nutrition. Hyderabad.
- 6) ICMR (2010) *Recommended Dietary Allowances for Indians*. Published by National Institute of Nutrition, Hyderabad.
- 7) Chadha R and Mathur P eds. *Nutrition: A Lifecycle Approach*. Orient Blackswan, NewDelhi. 2015.

S. Y. B. Sc. (HOME SCIENCE) SEMESTER – 3

SUBJECT;	INFORMATION, EDUCATION AND COMMUNICATION MATERIAL FOR DEVELOPMENT				
PAPER NO.;	03				
COURSE;	CC – 09				
CODE;	(BHS3iecC093X)				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
	03	01	04	THEORY	PRACTICAL
				03	03
				06	

• OBJECTIVES;

This course will enable the students to

1. To know the role of IEC material for development
2. To develop skill for selection preparing IEC materials.

THEORY

UNIT; 1. CONCEPT OF IEC MATERIAL

- 1.1 Meaning of IEC Material
- 1.2 Importance and scope of IEC material for development.
- 1.3 Different types of IEC materials for development.
- 1.4 Role of IEC material for development.

UNIT; 2. GUIDELINES FOR DEVELOPMENT OF IEC MATERIALS

- 2.1 Selection of IEC material
 - 2.1.1 Strength and Limitations of Various IEC materials
 - 2.1.2 Criteria for selecting IEC material
 - 2.1.3 IEC materials for combining for greater impact
- 2.2 Developing a creative brief
 - 2.2.1 Importance of creative brief.
 - 2.2.2 Elements of creative brief.
- 2.3 Preparing prototype IEC material

2.3.1 Guidelines for developing new IEC material

2.3.2 Qualities of effective IEC material

2.4 Pretesting the prototype of IEC material

2.4.1 Assessing the pretested results and revising IEC materials

2.4.2 Monitoring the use and impact of IEC materials.

UNIT; 3. VARIOUS TYPES OF IEC MATERIALS FOR DEVELOPMENT

3.1 Graphics and audio visual charts, posters, flashcards, flexes, flip books, pamphlets, leaflets. Brochures, booklets, modules, manuals

3.2 Mass Media: IEC materials for radio, television, newspapers and magazines

3.2.1 Radio scripts writing

3.2.2 T.V. programme scripts writing Newspaper, magazine article writing

PRACTICALS :-

1. Content analysis of various IEC materials for development messages.
2. Designing layouts for various IEC materials
3. Writing scripts on selected development issues for radio, and T.V. programmes,
4. Viewing and recording various types of television and radio programmes.
5. Preparation of various graphic (IEC) materials
6. Identifying various IEC materials used by NGO's and GO's for development work.

RECOMMENDED READINGS

- Enderson (1972): Introduction to communication theories and practices.
Cummings publishing house. California
- Bernice Hurst (1996): The handbook of communication skills, Kogan Page Limited, London.
- Chandra A. Shah A, Joshi U (1989): Fundamentals of teaching home science.
Sterling publishers, New Delhi

- Wittich and Schulter (1967): Audio visual materials. Havper& Row publications. London
Keval Kumar (2010): Mass communication in India, Jaico publishing house, Ahmedaba

S. Y. B. Sc. (HOME SCIENCE) SEMESTER – 3

SUBJECT;	FUNDAMENTAL OF TEXTILE				
PAPER NO.;	04				
COURSE;	CC – 10				
CODE;	(BHS3ft0C104X)				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES;

1. To acquire the knowledge of different kinds of nature & manmade fibers, Yarns & Fabric construction
2. To develop the basic knowledge of Weaving, Knitting

THEAORY

UNIT:-1 TEXTILE FIBERS AND THEIR PROPERTIES

- 1.1 Primary and secondary properties of textile fibers with reference to their Effect on fiber characteristics
- 1.2 Classification of fibers
- 1.3 Origin, production and properties of various fibers: Natural-cotton, wool, silk. Man-made- (nylon C 6) fibers

UNIT: - 2 YARNS

- 2.1 Types of yarns: Simple, Complex, Textured
- 2.2 Properties of yarns: Yarn numbering systems and twist

UNIT: - 3 FABRIC CONSTRUCTION

- 3.1 Weaving: Parts and functions of the loom
- 3.2 Weaves: Classification, construction, characteristics and use
- 3.3 Knitting: Classification, construction, characteristics and use
- 3.4 Non woven and felts-construction, properties and use

UNIT: - 4 TERMINOLOGY USED IN TEXTILE

PRACTICAL

1. Collection & Identification of different fabric
2. Fiber Identification tests –Visual, burning, microscopic and chemical
3. Weaves- Identification and their design interpretation on graph
4. Visit – Any One
 - Weaving service center
 - Spinning mill/
 - Handloom sector
 - Ginning / Pressing Unit

RECOMMENDED READINGS:

1. Textiles- Fiber to Fabric (6 thEdition), Corbman, P.B., (1985) Gregg Division/
Mc. Graw Hill Book Co., US.
2. Essentials of Textiles (6thEdition),Joseph, M.L., (1988) Holt, Rinehart and Winston
Inc., Florida.
3. Textbook of Fabric Science: Fundamentals to Finishing, Sekhri S., (2013) PHI
Learning, Delhi.
4. Understanding Textiles, Tortora, G. Phyllis, McMillan Co. USA.

S. Y. B. Sc. (HOME SCIENCE) SEMESTER – 3

SUBJECT;	EARLY CHILDHOOD CARE AND EDUCATION				
PAPER NO.;	05				
COURSE;	DSE -05				
CODE;	(BHS3eccD055X)				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

- **OBJECTIVES ;**
- To Understand the Concept and Significance of Early Childhood Care and Education.
- To Develop Understanding of Child Care Education.
- To Create Component and Skilled Professionals to Work in the Areas of child Care and Education.

THEORY

UNIT:-1 SIGNIFICANCE AND OBJECTIVES OF EARLY CHILDHOOD CARE AND EDUCATION

Significance of Early Childhood years in individual's development

Present status of young children in India

Overview of pre and post independence period

UNIT: - 2 EDUCATION METHODS OF ECCE SETTING

- Montessori Method
- Kinder Garden Method (K.G.)
- Balawadi Method

UNIT: - 3 PROGRAMME PLANNING OF ECCE SETTING

3.1 Importance of Programme Planning

3.2 Process of Programme Planning

Sample of Daily, Weekly, and Annual Programme Planning

UNIT: - 4 CURRICULUM FOR ECCE

4.1 Meaning of curriculum

4.2 Types of curriculum

4.3 Foundation of curriculum development

4.4 Sample of curriculum of ECCE

UNIT: - 5 - PERSON MANAGEMENT

Importance of Person for ECCE Center

Person Qualities and Roles: Principle, Teachers and Others

Parents – Teacher Co-operation

PRACTICAL

1. Visit for Deferent Areas ECCE Centre and Prepare of Blue Prints for ECCE Centre
2. Programme Planning for ECCE Centre
3. Planning for Activities for All Round Development of the Child
4. Prepare of Education Game for Early Childhood children
5. Curriculum Planning and Space Design

RECOMMENDED READINGS:

- Rice, F.P(1995), human development new jersey: prentice hall
- brek,L.E(1995),child development, London: allyn and bacon
- dutt S (1998).moral values in child development ,new Delhi :ammolsantock,J.W and yussen, S.R(1998).child development: an introduction
- Element of child development
- Fundamental of children development and child care- Sharma &lataGairda.

S. Y. B. Sc. (HOME SCIENCE) SEMESTER – 3

SUBJECT;	FOUNDATION OF ART AND DESIGN				
PAPER NO.;	06				
COURSE;	DSE -06				
CODE;	(BHS3fadD066X)				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

- **OBJECTIVE;**

1 understand elements and principles at art and design

2 learn to appreciate art

3 develop an understanding to the application of art principles in design composition of traditional and contemporary art architecture and Textiles and interior design

4 develop skill in creating designs in making art objects

THEORY

UNIT; 1 INTRODUCTION TO FOUNDATION OF ART AND DESIGN

- Definitions and types
- Structural, decorative, geometry, Modern Art, natural and traditional design

UNIT; 2 ELEMENTS OF DESIGN

- Line, size, structure, space, pattern, safe, light, color

UNIT; 3 PRINCIPLES OF DESIGN

- Definition and their characteristics
- balance, harmony, proportion, Rhythm, emphasis

UNIT; 4 FLOWER ARRANGEMENTS

- Application of elements of Art and principles of design in arranging flower
- Preparation of flower before arranging

- Equipping required for flower arrangement
- Types of flower arrangement
- Line
- Mass
- Line and mass arrangement
- Miniature arrangement
- dry arrangement

.

PRACTICALS

1 making different types of design

- Structural design
- Geometric design
- decorative design
- modern art
- natural design
- traditional design

2. Preparation at color wheel and color scheme

3. To make artificial flower /making fresh flower arrangement

4. Preparing decorative articles

S. Y. B. Sc. (HOME SCIENCE) SEMESTER – 3

SUBJECT;	DISASTER MANAGEMENT				
PAPER NO.;	07				
COURSE;	SE-03-A				
CODE;	(BHS3dm0SE37A)				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES:

1. the students will be able to understand about the natural and manmade disaster and its management during and after disaster.
2. To get the alimentary knowledge about first aid treatment needed d disaster and its management various injuries.

THEORY: -

UNIT 1. INTRODUCTION OF DISASTER & DIFFERENT TYPES OF DISASTERS.

1. Natural disaster
2. Manmade
3. Other disaster

UNIT 2. DISASTER MANAGEMENT

1. Before, during and after management of different disaster
2. Earthquake
3. Cyclone
4. Tsumani
5. Draught
6. Fire

7.Flood

8.Industrial accident

UNIT 3. FIRST AID

1. Introduction and definition
2. Principles of First aid
3. First aid during cuts
4. First aid during burns
5. First aid during fractures
6. First aid during poisons and bites (snake)
7. First aid during insect bites

PRACTICAL:

1. Preparation of first Aid box
2. Identification of types of bandages
3. Use of various bandages
4. Prepare a project on disaster
5. Visitlecture of nursing college
5. Demonstration/ lecture by GSDMA

REFERENCES:

Community nursing in developing countries by Monica Byrne & F. J. Barnety

Text book of First Aid - Published by John Ambulance Association.

(ApattiVyavasthapan) Disaster Management by S. N. Parikh, Dr. G. P. Mankad

Dr. K. G. Vyas.

S. Y. B. Sc. (HOME SCIENCE) SEMESTER – 3

SUBJECT;	NON FORMAL EDUCATION				
PAPER NO.;	07				
COURSE;	SE-03-B				
CODE;	(BHS3nfeSE37B)				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES:

1. To develop concept of Non-Formal Education
2. To understand the need for Non-Formal Education for children & Youth.
3. To know the various agencies involved in Non-Formal Education programme.
4. To develop ability to plan Non-Formal Education.
5. To comprehend the different methods of Non-Formal Education.
6. To develop understanding regarding the evaluation of Non-Formal Education.

THEORY

UNIT - I : CONCEPT OF NON-FORMAL EDUCATION

- 1.1 Meaning & Purpose
- 1.2 Difference between formal & Non-Formal Education
- 1.3 Significance of Non-Formal Education in India
- 1.4 New education policy & NFE

UNIT - II: NON - FORMAL EDUCATION FOR CHILDREN & YOUTH

- 2.1 Characteristics of children & youth
- 2.2 Need for Non-Formal Education for them
- 2.3 Priority content areas - Population education, Environment education, Consumer Education other related areas of contemporary significance.

UNIT - III: AGENCIES FOR NON - FORMAL EDUCATION PROGRAMME

3.1 National

3.2 State

3.3 Local

UNIT - IV : PLANNING NON-FORMAL EDUCATION PROGRAMME

4.1 Techniques of community study

4.2 Subject matter for Non-Formal Education

4.3 Physical aspects - place, seating arrangement, lighting, ventilation

4.4 Publicity of Non-Formal Programme.

4.5 Implementing the publicity plan.

UNIT - V: DIFFERENT TEACHING METHODS FOR NON-FORMAL EDUCATION

5.1 Criteria for selection of methods and audio visual aids, for advance preparation and precautions in audio-visual materials for -

- (a) Demonstration
- (b) Workshop
- (c) Role play
- (d) Games
- (e) Expert's talk/ illustrated talk
- (f) Discussion
- (g) Dramatized presentation

UNIT - VI: EVALUATION IN NON - FORMAL EDUCATION

6.1 Need and selection of appropriate methods of evaluation.

6.2 Problems in evaluation

Learning Experiences:

1. Visits to different NGO's involved in Non Formal Education
2. Inviting experts from Government/Universities/ NGO's to share their experience of

Non Formal Education.

3. Reporting of Literacy news, events from periodicals and news papers.

REFERENCES :

1. Ahmad Nasim(1997) : Benefits of Literacy and Learning mission vol. xxi (1-4)
2. AthreyaVenkatesh B. (1996) : Literacy and Empowerment , Sage Pub. , New Delhi.
3. Biswas A and Agarwal S.P. (1986) : Development of Education in India concept Pub.Company, New Delhi.
4. C.L. Kundu (1994) : Adult Education in university system, Kulshreshtra, Nirmal Road,Agency, Delhi.
5. Directorate of Adult Education, Govt. of India (1988) : New Delhi, Literacy Digest,National Literacy mission.
6. Gandhi M.K. (1995) : Basic Education, Navjeevan Pub., Ahmedabad.
7. Ministry of Human Resource Development, National Literacy Mission, Dept. of Education, New Delhi.
8. Myrdal Gunnar (1970) : The challenge of world poverty , Penguin Books Ltd., Middlesex, England.
9. Pillai K.S. (1993) : ABC of non formal Education, 17 B Indraprastha estate, New Delhi, Indian Adult Education Association.
10. Ramabrahmam I. (1998) : Adult education - Policy and performance , New Delhi Gain Pub.
11. Revised National policy on Education (1992).
12. SeinivasanLyra (1977) : Perspectives on non formal Adult learning, New York.
13. SrinivasanIyer (1977) : Perspectives on Non formal Adult learning 251 Park Avenue South, New York, 100010, U.S.A., World Education Inc.
14. UGC guidelines for the programme of Literacy and continuing Education in Universities and Colleges (1992)

15. UNICEF: Reaching the unreached non formal approaches and university
primaeducation Education Cluster Programme.

S. Y. B. Sc. (HOME SCIENCE) SEMESTER – 3

SUBJECT;	WOMEN EMPOWERMENT				
PAPER NO.;	07				
COURSE;	SE-03-C				
CODE;	(BHS3we0SE37C)				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

• OBJECTIVES ;

To enable students to

1. To develop understanding about the status of women in india
2. To become aware of the issues and problems of women
3. To become acquainted with services available for women

THEORY:

UNIT 1: IMPORTANCE OF WOMEN'S STUDY

Women's Studies as an interdisciplinary area, as an emerging discipline--Definition, Scope and Controversies.

UNIT 2: STATUS OF WOMEN

- A. Social
- B. Educational
- C. Economical
- D. Legal
- E. Domestic

UNIT 3: PROBLEM AND ISSUES OF WOMEN IN INDIA

- A. Dowry
- B. Suicide
- C. Health

- D. Sexual exploitation
- E. Unwed mother
- F. Rape/Gang rape
- G. Divorce
- H. Domestic violence
- I. Live in relationship
- J. Prostitution

UNIT 4: LOCAL ORGANIZATIONS DEALING WITH ISSUES OF WOMEN

- A. Working women hostel
- B. Legal and family counseling
- C. Helpline 181
- D. Narisurkshakendra
- E. Mahila police station

PRACTICALS

1. Arrange a lecture of gynecologist
2. Arrange a lecture of a legal advisor
3. Visit to a mahila police station
4. Collect the information about the helpline 181

REFERENCE

1. Desai, Neera and Maithrey Krishnaraj. Women and Society in India . Delhi: Ajantha, 1987.
2. Women's Studies in India: A Reader .Ed. Mary John. Penguin: New Delhi, 2008.
3. Goonesekere Savitri (Ed) Violence, Law and Women's Rights in South Asia . New Delhi: Sage, 2004.

S. Y. B. Sc. (HOME SCIENCE) SEMESTER – 4

SUBJECT;	MICROBIOLOGY				
PAPER NO.;	01				
COURSE;	CC – 11				
CODE;	(BHS4micC111X)				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
	03	01	04	THEORY	PRACTICAL
				03	03
				06	

OBJECTIVE ;

- The course will enable to the students to gain deep knowledge and role of microorganism and environment
- Understand the importance of microorganism and its characteristic

UNIT – 1 - INTRODUCTION OF MICROBIOLOGY

- what is microbiology
- Brief history of microbiology
- Virus
- Bacteria
- Importance of microbiology (Economical – industrial – medicinal)

UNIT – 2 – STERILIZATION

- Physical method
- chemical method

UNIT – 3 – MICROSCOPY AND STAINING

- Microscopy
- Types of Microscopy
- Staining
- Types of staining (wet mounting simple , special and differential staining)

UNIT – 4 – IMMUNITY

- Immunity
- Roll of immunity in our body

PRACTICAL

- Studies of Microscope
- Studies of laboratory instrument (autoclave , Incubator , hot air oven , centrifuge)
- Wet mounting of yeast
- Wet mounting of fungi
- Staining of microorganism from cured sample
- Visit to a pathological laboratory

S. Y. B. Sc. (HOME SCIENCE) SEMESTER – 4

SUBJECT;	FOOD PRESERVATION				
PAPER NO.;	02				
COURSE;	CC – 12				
CODE;	(BHS4fprC122X)				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

- **Objectives:-**

- The course will enable students:
- To gain knowledge regarding principles of food preservation.
- To prepare students for home scale production of preservative products such as jam, jelly, tomato ketchup, etc.
- To teach students different methods of food preservation.
- To appraise students of the latest development in food preservation.

THEORY:

UNIT-1: INTRODUCTION OF FOOD PRESERVATION

Importance of Food Preservation

Principle of Food Preservation

UNIT-2: METHODS OF FOOD PRESERVATION

2.1 Bacteriostatic Methods: Dehydration, Fermentation, Freezing or Low Temperature, Salt, Sugar, oil, Vinegar, Chemicals, etc.

2.2 Bactericidal Methods: Use of higher temperature, Pasteurization, Canning, Boiling, Irradiation.

UNIT-3: FOOD SPOILAGE

- Food fit for consumption

- Deterioration of food quality: Nonperishable, Semi perishable and Perishable foods.
- Causes of food spoilage

UNIT-4: PRESERVATION OF FOOD PRODUCTS, PREPARATION AND PRINCIPLES OF FOOD PRESERVATION

- Fruit juice and Squashes
- Jam, Jelly and Marmalade.
- Tomato Products (Chutney and ketchup)

4.4 PICKLES

PRACTICALS:

Preparation of the following food products in laboratory.

- Syrup and Squash
- Jam
- Jelly
- Marmalade
- Pickles
- Chutney
- Tomato ketchup
- Freezing
- Drying of vegetables and fruits

RECOMMENDED READINGS

- G. Subbalashmi - Shobha A. Udipi, Food Processing and Preservation, New Age International Publisher.
- Girdharilal, G. S. Siddappa, G.L.Tandon, Preservation of Fruits and Vegetables,.
- M. Swami Nathan, Food Science, Chemistry and Experimental Foods,

S. Y. B. Sc. (HOME SCIENCE) SEMESTER – 4

SUBJECT;	SOFTWARE IN FOLK MEDIA				
PAPER NO.;	03				
COURSE;	CC – 13				
CODE;	(BHS4sfmC133X)				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES:

1. To develop awareness regarding historical developments in folk media.
2. To develop understanding regarding folk media and its role in developmental Communication.
3. To develop understanding regarding traditional as well as contemporary folk forms of Communication.
4. To develop skill in selecting and using folk media for developmental Communication.

THEORY;

UNIT - I: HISTORICAL PERSPECTIVE

- 1.1 Genesis and growth of folk media in India.
- 1.2 Folk media as means of transmitting the culture of a society .
- 1.3 Current trends in the use of folk media in development.

UNIT - II: FOLK MEDIA IN DEVELOPMENTAL COMMUNICATION

- 2.1 Significance of folk media in developmental context.
- 2.2 Contribution of folk music, folk dances and folk dramas for developmental society.

UNIT - III: VARIOUS TYPES OF FOLK MEDIA

- 3.1 Forms of folk media

3.1.1 Music, Folk Music - The concept of folk music, the cultural, physical intellectual, Emotional, moral and spiritual value of music – folksong, (bhajan & Dayro)

3.1.2 Dance,

Folk Dance - Various forms of folk dances and their educational value.
Bajaniya & Vanzara Folk Mela & Festivals

3.1.3 Theater,

Folk theater - Street theater - meaning, preparation, its performance, its Educational value, evaluation of street plays Puppets - Types, stages, accessories, storage, performance, Educational values Popular Indian Folk Theater - Bhavai – Gujarat Lavani - Maharashtra Nautanki

UNIT IV: MESSAGES FOR FOLK MEDIA

4.1 Developing messages for folk media

- Their nature
- Steps in developing messages
- Limitations of developing messages

4.2 Integrating of the exiting messages of the community with the developmental Messages

4.3 Media blending - concept and it's importance are in the use of folk media.

PRACTICALS:

1. Identify few folk forms of different regains of India with its content, context and Origin with the specific cultural background.
2. Select any contemporary issues and write of script based on a selected folk format And enact it.
3. Record same folk forms
 - Nautanki
 - Bhavai

- Lavani etc.

REFERENCE:

1. Jain, R. (1993) : Mass Media and Rural Development, Vol. II, New Delhi, Manak Pub. Pvt. Ltd.
2. Karunkaran K. and Hando J. (1988) : Folklore in India, Coimbatore Bharathiar University, Coimbatore.
3. KaurBetal(1993) ; Potentiality of communicating home improvement messages through traditional media, M.Sc. dissertation, Haryana Agricultural University, Hissar.
4. Mishra M.K. (1990) : Role of Traditional Media Today. Folklore March
5. Mody Bella (1991): Designing Messages for Developmental Communication, New Delhi, Sage Pub.
6. Roy G.L. (1991): Extension Communication Management , Calcutta, Nayaprakash
7. Shah A. & Joshi U. (1992): Puppetry & Folk drama for Non-formal education . Sterling Publishing Pvt. Ltd. New Delhi.
8. Thakur B.S. and Agarwal C. (1989): Media Utilization for the development of women and children, New Delhi, Concept Pub. Company.

S. Y. B. Sc. (HOME SCIENCE) SEMESTER – 4

SUBJECT;	TEXTILE DESIGN: DYEING AND PRINTING				
PAPER NO.;	04				
COURSE;	CC – 14				
CODE;	(BHS4tdpC144X)				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

- **OBJECTIVES;**

To enable the student to

Impart knowledge on the basic principles of printing

Help developed creativity in designing for friends

Create awareness of different printing techniques.

UNIT 1: SURFACE DESIGN IN TEXTILE AND FABRIC

Printing and painting

UNIT 2: DYEING

- Introduction
- Application and method of dying
- Direct
- Resist
- Discharge
- Fiber fabric and yarn dyeing

UNIT 3: PRINTING

- Fundamental of printing color and pigment of printing
- Hand printing
- Machine printing

- latest printing methods

UNIT 4: ECO FRIENDLY TEXTILE

- Meaning
- Advantage

PRACTICAL

1 Dyeing

- Simple Dyeing
- Tie and dye (anyone)
- Types of Bandini,
- Lahariya,
- Bartik

2 Design through color application (any three)

- Warli print
- Block print
- Stencil print
- Vegetable and leaves print
- Finger and Thumb print

3 Project work (anyone)

Make a household article by using printing method

S. Y. B. Sc. (HOME SCIENCE) SEMESTER – 4

SUBJECT;	CHILD AND HUMAN RIGHTS				
PAPER NO.;	05				
COURSE;	DSE-7				
CODE;	(BHS4chrD075X)				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES

- To know about the child rights.
- To know about the Human rights.
- To aware Laws and policies for children in difficult circumstances.
- To know Laws policies and programs for girls and women in India.

THEORY

UNIT - 1 HUMAN RIGHT

- Concept of Human Right
- Origination and development of Human Right at the level of National and international
- Classification of Human Right
- Challenges/ Limitations of Human Right
- Fundamental Right : - Right of Equality, Right of Freedom, Right of Against Exploitation , Right of Freedom of religion , Culture and educational Right, Right Constitution Remedies

UNIT- 2 A CHILD RIGHT AND WOMEN RIGHT

A- Meaning and Concept of Child Right

A- Evolution of Child Right

A- Children's Human Rights

A- Major problems related to children (Related to Child Rights)

B Women Right

2.1B Meaning and Concept of women Right

2.2B Basic Right of Women

2.3B Female rights are human rights

UNIT- 3 RIGHT OF INFORMATION

3.1 Concept and importance of Information

3.2 International Standards of Information Rights

3.3 Objectives of Information Rights

3.4 Right to Information Act - 2005

UNIT- 4 VIOLATION OF HUMAN RIGHT

4.1 Causes of Violations of Human Right

4.2 Solution of Violations of Human Right

4.3 Positive Action for Awareness of Human Right

PRACTICAL

Arrange the Expert lecture on Human Right

Collect Information of Major Judgment under the rights of children

Survey the Women's awareness of their rights

Prepare an application for obtaining information

Collect Information of Areas of Violation of Human Right in Society

S. Y. B. Sc. (HOME SCIENCE) SEMESTER – 4

SUBJECT;	CONSUMER IN THE MARKET				
PAPER NO.;	06				
COURSE;	DSE-8				
CODE;	(BHS4cimD086X)				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES;

- 1) To understand the role of consumer in the market.
- 2) Become aware for marketing condition and rights responsibilities of Consumers.
- 3) Recognize the problems in buying and know about the means of redressed.

UNIT 1; - IMPORTANCE OF CONSUMER EDUCATION

- 1) Consumer-Meaning and Definition
- 2) Rights responsibilities of consumer

Rights-To safety, To choose, To be heard, To get information, To redress and
To get healthy environment

- 3) Adulteration

UNIT 2: MARKET

- 1) Definition
- 2) Types of Market
- 3) Function and Characteristics of Market

UNIT 3; - ADVERTISEMENT

- 1 Meaning, Importance, Characteristics, Advantage and disadvantages
 - 2 Psychology of advertisement
 - 3 Types of advertisement
- Press medium – Radio, T.V., and Cinema

- Direct publicity- Packaging and Display
- Outdoor publicity

UNIT 4; - CONSUMER PROTECTIVE SERVICES

- 1 Development and aims of consumer organization in India
- 2 Consumer education and research center- Ahmedabad
- 3 Consumer guidance society-Bombay
- 4 Educational institutions
- 5 Indian standard institutions
- 6 Consumer co-operatives
- 7 Government agencies, Municipalities.

PRACTICALS:

- 1) Adulteration
- 2) Visit to a Grahak suraksha samiti
- 3) To get information about-Brand, Trade mark, Agmark, Labelling, Packaging, I.S.I.,
- 4) Effect and impact of advertising on consumer buying

RECOMMENDED READINGS

- Sarkar A. (1989); Problems of consumer in modern India, Discovering publishing House
- Consumer Report, CERC, Thakurbhai Desai smarkbhavan, Ahmedabad
- Consumer Conformation, CERC, Thakurbhai Desai smarkbhavan, Ahmedabad.
- Agrwal V.K.(1989) Consumer protection in India with special reference to unfairtrade Practices, New Delhi; Deep and Deep publishers.

S. Y. B. Sc. (HOME SCIENCE) SEMESTER – 4

SUBJECT;	INTRODUCTION TO DIET THERAPY				
PAPER NO.;	07				
COURSE;	SE-4A				
CODE;	(BHS4idtSe47A)				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

- **OBJECTIVE: -**

To understand the roll of diet therapy

To gain knowledge on the dietary modification for various dieses

To acquire the ability to plan and prepare diets for various dieses

UNIT 1. INTRODUCTION

A. Basic Concept Diet Therapy Therapeutic Diet

B. Principles of Diet Therapy

C. Dietetic Care of Hospital Patient

D. Team Approach to Health Care And

E. Assessment of Patient Need

UNIT 2. MODIFICATION OF NORMAL DIET

A. Normal Diet

B. Clear Liquid Diet

C. Full Liquid Diet

D. Soft Diet

E. Bland Diet

UNIT 3. MODES OF FEEDING

A. Enteral Feeding

B. Tube Feeding

C. Parenteral Feeding

**UNIT 4. ETIOLOGY DIAGNOSIS AND DIETARY MANAGEMENT OF
PATIENT WITH**

A. Weight Management: Overweight, Underweight

B. Gastrointestinal Disturbances: A. Constipation B. Diarrhea C. Peptic Ulcer D.
Ulcerative Colitis

C. Dietary Management In Febrile Condition And Infection

PRACTICALS;

Planning and preparation of

A. Clear Liquid Diet

B. Full Liquid Diet

C. Soft Diet

D. Bland Diet

2 Planning and Preparation Of Diet For Patient With

A. Overweight

B. Underweight

C. Constipation

D. Diarrhoea

E. Peptic Ulcer

F. Ulcerative Colitis

G. Typhoid

H. T.B.

RECOMMENDED READINGS

1. Robinson C. H. – Normal and therapeutic Nutrition, The Oxford Uni. Press.
2. Williams S.R. – Nutrition and Diet Therapy, V.C. Mosby Co.
3. Anita F.P. –Clinical Nutrition and Dietetics, The Oxford Uni. Press.
4. Krause M.V. and Hinster M.- Food, Nutrition and Diet Therapy, W.B. Saunders
5. Vaid B. M. - Diet Therapy, Saurashtra University
6. Vaid B. M. - Therapeutic Nutrition, Saurashtra University
7. Vaid B. M – Dietetics, Saurashtra University

S. Y. B. Sc. (HOME SCIENCE) SEMESTER – 4

SUBJECT;	SOCIOLOGICAL AND PSYCHOLOGICAL ASPECT OF CLOTHING				
PAPER NO.;	07				
COURSE;	SE-4B				
CODE;	(BHS4spcSE47B)				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

- **OBJECTIVES:**

- To create awareness about impact of attitudes and values on clothing and fashion.

THEORY

UNIT 1: CONCEPT AND THEORIES OF THE ORIGIN OF CLOTHING.

UNIT2: IMPRESSING INFORMATION, SELF EVALUATION, AND SELF ENHANCEMENT.

UNIT 3: FACTORS INFLUENCING CHOICE OF CLOTHING ATTITUDES AND VALUE, INTEREST, ROLE AND STATUS.

UNIT 4: CONFORMITY AND INDIVIDUALITY IN DRESS CLOTHING AND PHYSICAL SELF.

PRACTICAL

1) Documentary. (Any one topic.)

2) Power Point presentation. (Any one topic.)

- Clothing and self evaluation.
- Clothing and self enhancement.
- Clothing and attitude and values.
- Impression formation.
- Conformity and individuality.
- Clothing and physical self.

S. Y. B. Sc. (HOME SCIENCE) SEMESTER – 4

SUBJECT;	FAMILY AND CHILD WELFARE				
PAPER NO.;	07				
COURSE;	SE-4C				
CODE;	(BHS4fcwSE47C)				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES

- Student will gain knowledge about the family and child welfare.
- Gain knowledge on the schemes of central and state government for family and child welfare.
- Get relevant information about services for women aged and the family provided by NGO organizations at the state, national and international level.

THEORY

UNIT-1 FAMILY AND CHILD WELFARE

- Meaning of Family and Child Welfare
- Movement of Child Welfare
- Child welfare in India

UNIT- 2 INSTITUTE/ SERVICES OF FAMILY AND CHILD WELFARE

2.1 Home for the Crippled

2.2 Juvenile Guidance center

2.3 Certified School

2.4 Child welfare center

2.5 Home for the Aged

UNIT - 3 SCHEMES AND ORGANIZATION OF FAMILY AND CHILD WELFARE

3.1 Red Cross Society

3.2 V.H.A.L. (Voluntary Health Association in India)

3.3 N.I.P.C.C.D. (National Institute of Public Co- Operation and Child Development)

3.4 W.H.O.

3.5 U.N.I.C.E.F.

3.6 C.A.R.E.

UNIT- 4 NATIONAL POLICIES

4.1 Child Policy

4.2 Women Policy

4.3 Ageing Policy

PRACTICALS ;

- Get Information About of any welfare Institute.
- Arrange the Expert Lecture on Voluntary Agency and Know Their Factions in welfare of society
- Field Work- Visit a Home for the Aged.
- Collect Information about Government Social welfare scheme.
- Visit and Get Information about of Health Care Centre

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 5

MAJOR	GENERAL HOME SCIENCE				
SUBJECT;	RESEARCH DOCUMENTATION				
PAPER NO.;	01				
COURSE;	CC-15				
CODE;	BHS5rd0C151X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

Objectives;

- Understand The Fundamental Principles Of Methodology Concerning Research
- Prepare Research Tools Applicable To Developmental Issues
- Develop Skills In Documentation

Unit: 1 Introduction to Research

- 1.1 Meaning And Concept Of Research
- 1.2 Characteristics Of Research
- 1.3 Importance Of Educational Research
- 1.4 Types Of Research
- 1.5 Research Method
 - (A) Historical Research Method
 - (B) Descriptive Research Method

Unit: 2 Steps of Research Process

- 2.1 Introduction
- 2.2 Identification or Selection of Problem
- 2.3 Review of Related Literature
- 2.4 Objectives of the Study
- 2.5 Identification of Variables
- 2.6 Hypothesis
- 2.7 Method of Research
- 2.8 Population and Sampling
- 2.9 Selection or Construction of Tools

- 2.10 Data Collection
- 2.11 Analysis of Data and Statistical Techniques
- 2.12 Interpretation Of Results
- 2.13 Research Report Writing

Unit: 3 The Research Hypothesis And Sampling

- 3.1 Meaning and Importance Of Hypothesis
- 3.2 Characteristics of Good Hypothesis
- 3.3 Types of Hypothesis
- 3.4 Limitation of Hypothesis
- 3.5 Meaning of Sampling
- 3.6 Importance of Sampling
- 3.7 Sampling Techniques

Unit: 4 Tools and Techniques of Research

- 4.1 Concept and Types of Tool
- 4.2 Questionnaire
- 4.3 Interview
- 4.4 Rating Scale
- 4.5 Attitude Scale
- 4.6 Check List

PRACTICALS;

- (1) Project Preparation on Home Science Related Subjects by Survey, Interview, and Questionnaire Method.

RECOMMENDED READINGS

- A.N.Sadhu,(1980). Research Methodology In Social Science, Bombay: Himalayas Publishing House,
- Dr. G.B.Singh, (2011). Research Methodology I, Jaipur: Paradis Publishers.
- M.N.Borse, (2004). Research Methodology, Jaipur: Shree Niwas Publications.
- Vandana Vohra, (2013), Research Methodology, Jaipur: Pratiksha Publication
- Dr. R.S.Patel (2014), Methodology Of Education Research; 2ne Edition, Jay Publication Ahmedabad.

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 5

MAJOR	GENERAL HOME SCIENCE				
SUBJECT;	COMMUNITY HEALTH AND NUTRITION				
PAPER NO.;	02				
COURSE;	CC-16				
CODE;	BHS5chnC162X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES

- 1) Understand the concept of communication in nutrition health.
- 2) The student will know about NHC.
- 3) Students gain knowledge about Government programs, NGOs for nutrition, health and communication

Unit – 1

Demography and Vital statistics

- 1.1 Demographic profile
- 1.2 Vital statistics of developed and developing countries

Unit – 2

Introduction to assessment of nutritional status

2.1 Direct Parameters

2.1 a) Anthropometry

- i. Concepts, methods, advantages and disadvantages and Interpretations. Weight, height, BMI, MUAC, Head & chest circumference, SFT, Waist / Hip ratio. Classifications – Gomez, water low, IAP etc
- ii. Various standards for reference for different age groups
- iii. Use of growth charts

2.2 b) Diet Surveys

- i. Family food questionnaire and record procedure
- ii. Weighed food inventory
- iii. Recipe method
- iv. Weigh as you eat
- v. Food composite analysis method

vi. Food diaries and others vii. Adult consumption unit

2.3 Clinical assessment

2.4 Biochemical estimations, their estimations and critique

2.5 Indirect Parameters I. Socio-economic status

II. Morbidity Rates,

III. Mortality rates (IMR, NMR, MMR, CDR, CBR)

Unit 3;

- Health care of the community

- Concept of health care
- Different levels of Healthcare
- Healthcare services at different levels
- National Population Policy -2010

Unit;- 4

Nutritional education programs / Planning implementation and evaluation

- Needs of nutrition and health education programs
- Essentials of nutrition – Educating planning
- Planning and implementation of Nutrition education programs
- Evaluation nutrition education programs

PRACTICALS;

1 Diet Survey

- a. Assessing the frequency of consumption of various foods in the community.
- b. Survey of food habits of various communities viz between rural and urban of ethnic Groups of different socio-economic groups

2 Anthropometric measurements for children in poor and affluent or urban and Rural groups comparisons with the standards and interpretations

- a. Weight
- b. Height
- c. BMI
- d. waist/hip ratio
- e. MUAC

3. Understanding clinical signs and symptoms of various nutritional disorders

- a. Visit to the corporation schools
- b. Visit to the pediatric ward in the civil hospital

4. Visit to the various community based programmes focused on health and Nutrition and conduct interviews with

- a. Organizations and service providers
- b. Beneficiaries regarding participation and its impact

RECOMMEDED READINGS

- Gibson(1992) Principles of nutritional assessment, New York, Oxford University Press
- Gopalan C (1989) Combating undernutrition – Basic issues and practical approaches. New Delhi, Nutrition foundation of India
- Gopaldas T., Sheshadri S. (1989) Nutrition Monitoring and Assessment, New Delhi Oxford University Press.
- Jlliffee DB and Jelliffe EP (1980) Community Nutritional Assessment Oxford University Press New Delhi
- Food and Nutrition Board (1995) National Plan of Action on Nutrition, Department of Women and Child Development, Ministry of HRD, Govt of India
- IGNOU - DNE – 2 Block – 6
- IGNOU DNE -3 Block – 6
- IGNOU DNE -3 Block – 2
- IGNOU DNE -2 Block – 6
- IGNOU Public Health Nutrition
- Preventive and Social medicine by Park & Park 21st Edition

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 5

MAJOR	GENERAL HOME SCIENCE				
SUBJECT;	NGO MANAGEMENT				
PAPER NO.;	03				
COURSE;	CC-17				
CODE;	BHS5ngoC173X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

Objectives :

1. To provide the students the basic information about N.G.O.
2. To inform the students the functions & functional area of N.G.O.
3. To intimate the students the work methodology of self helps group management
4. To prepare a student for planning of rural area's social and economical development.

Theory:

Unit: I NGOs: Basic concept

Evolution of NGOs in India, Meaning, Definition, Objectives, types, goals, classification, vision and mission, structure and Characteristics of NGOs.

Unit: II Functions of NGOs:

- Social Justice (Uniform opportunities for everyone all the social evils and barriers)
- Sustainable Development
- The Healthy world and nation
- Information exchange
- Human Right
- Protection of Interest
- Awareness

Unit: III NGOs and their Functional Areas

- Women empowerment and women welfare (Widows, Women. etc).women education.
- Underprivileged Children's education and, education for all

- Mentally challenged and juvenile criminal' observation room
- Old people's home and their welfare
- Vaccinations and Donations of eye, kidney, blood, sperm.AIDS, Thalesimia, Malnutrition, Cancer, low rates treatment centre.
- Saving the planet, earth, Environment and Wildlife conservation.
- Gender Issues and equality
- Rural and Urban development

Unit: IV NGOs and their Registration Process

- Basic documentation
- Permission and other formalities
- Governments' approval
- Hierarchy involved in registration
- Legal Environment
- Domain Registration on Internet and promotions of NGO

PRACTICALS

- 1) Student training Programs with NGO/OR visit to- any one NGO.Collect information, and prepare a report on it.
- 2) To plan a Programs for community awareness on any one challenges e. g. AIDS/Cancer/Women education/ malnutrition /Importance of vaccination/,any other
- 3) Prepare any one media on:(visual/Audiovisual /computer aided learning-power Point presentation) Function/ functional area/objectives of NGOs/SHG Management.
- 4) Know about the role of NGOs in Environmental Development, prepare a list of NGOs working in the field of environment.
- 5) collect information of NGOs work in state, National & International Level, their Work Areas & Beneficiaries.

REFERENCES:

- Goyal. V.P.(2005), Schemes for NGO's in Development, Mangal Deep Publication, Jaipur
- Gulati. Ravi and Kaval Gulati (1996), Strengthening Voluntay Action in India, Delhi: Konark. Laxmi, Kulshreshta and Archana Gupta, (2002),
- NGO's in Micro-Financing Patterns in Rural Development, Kurukshetra-Journal of Rural Development, Vol-50

- Laxmi. Kulshreshta and Archana Gupta, (2002), NGO's in Micro-financing Patterns in Rural Development, Kurukshetra-Journal of Rural Development, Vol-50
- Manimekalai, N.(2000), NGOs intervention through Micro-credit for Self-Help Women Groups in Rural Tamil Nadu, NGO's and Socio – Economic Development Opportunities, Deep & Deep Publications. PVT. Ltd. New Delhi.
- Pruthi, R.K. (2006), NGO's in the New Millennium, Saad Publications, New Delhi.
- Puran Chandra, (2005), NGOs in India - Role, Guidelines & Performance Appraisal Akansha Publishing
- Goel.S.,and Kumar R. (2005) , Administration and Management of NGOs, New Delhi Deep & Deep Publications Pvt.Ltd.,2/13,Ansari Road, Daryaganj,Delhi. 110 002.
- Nabhi's .,(2006), Handbook For NGOs, An Encyclopedia for Non-Government Organizations and Voluntary Agencies Vol,1,New Delhi : Nabhi Publication ,Jain
- Book Depot,C-4,opp.PVR Plaza, Connaught place, post box No: 51, New Delhi,110 001
- Varma,seetha,kaushik,rani,goyal,(2009)Extension and communication Management,Udaipur:Agrotech publishing Academy.
- Bishnoi,I,Dubey,V.,(2008),Extension education and communication, New Delhi: New Age International Publishers.
- Chandra,S.,(2007)Non-GovernmentalOrganisations,structure,Relevance and Function, New Delhi:Kanishka Publishers, distributors.
- Dubey,M., Patel, A.,(2010),NGOs and Social Work, New Delhi: Crescent Publishing Corporation.
- Chandra's.,(2003),Guidelines For NGOs Management in India.NewDelhi: Kanishka Publishers, distributors.
- Rashtriya Krushi and Gramin Vikas Bank booklet :swasahai jutho sathe Banking.
- Rashtriya Krushi and Gramin Vikas Bank booklet :Swa sahai jutho Rachava mateni mahiti
- Rajpura.,M.,Thakar.,A.,Dave.,R.,(2015) Binsarkari sangathan vyavasthapan,Bharat Publication

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 5

MAJOR	GENERAL HOME SCIENCE				
SUBJECT;	PROCESSING IN APPERAL DESIGN				
PAPER NO.;	04				
COURSE;	CC-18				
CODE;	BHS5padC184X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES

1. To able the students to equip them with techniques
2. Acquaint with the various step involved in the apparel making
3. To improve the skill in garment making
4. Prepare the garment as per measurement using appropriate tool, machine and technique

Guide in lab to students

Unit: - 1 Introduction to body measurement

- 1.1 Meaning of- Standard measurement
- 1.2 Standard measuring points of body parts
- 1.3 Eight heads theory

Unit: - 2 Introduction to pattern making

- 2.1 Methods of pattern making
- 2.2 -Drafting
- 2.3 Paper Pattern
- 2.4 Block Pattern
- 2, 5 Lay Out

Unit: - 3 Preparatory steps for garment construction

- 3.1 Fabric grain Line.
- 3.2 Layouts for patterns- general guidelines, basic layouts- lengthwise, partial Lengthwise, crosswise, double fold, open, combination fold
- 3.3 Spreading, marking and cutting
- 3.4 Layouts for fabrics- Unidirectional, bold and large prints, plaids, stripes and Checks, various widths of fabric

Unit:- 4 Design & Fitting

4.1 Designing for different figure types

4.2 Fitting guidelines

4.3 Fitting Problems

4.4 Fitting Remedies

PRACTICAL

1. Application of different types of Seams

2. Bodice Block – Adult Bodice Block , Child Bodice Block

3 Construction of skirt/ Salwer for self

4 Construction of top/ kurta for self

5 Project Work: Sketch of Sleeves

Sketch of Colors

Sketch of Pocket

Sketch of Neckline

RECOMMENDED READINGS

1. Pattern Making for Fashion Design Armstrong, H.J., 2009, , Harper Collins Publishers Inc., Ney York.

2. Evaluating Apparel Quality Stamper, A.A., S. H. Sharp and L.B. Donnell, 1986, , Fairchild Publications, America

3. Fitting and Pattern Alteration Liechty, E.G., Potterberg, D.N., Rasband, J.A., 2010, : A Multi method Approach, Fairchild Publications, New York.

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 5

MAJOR	GENERAL HOME SCIENCE				
SUBJECT;	CHILDREN WITH DISABILITY				
PAPER NO.;	05				
COURSE;	DSE- 9				
CODE;	BHS5cwdD095X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

Objectives

- 1) To Appreciate The Special Needs Of Children With Different Disabilities And Disorders:
- 2) To Gain Insights into the Causes Of Disability And Disorders In Children, And Into Their Prevention.
- 3) To Be Sensitized To The Similarities And Differences Between Disabled And Non-Disabled Children.

Theory

Unit 1 Introduction to Childhood Disabilities

- 1.1 Defining Disabilities
- 1.2 Classification Of Disability
- 1.3 Models Of Disability
- 1.5 Demography

Unit 2 Common Childhood Disabilities

Identification, Assessment and Etiology With Reference To

- 2.1 Locomotors Disability
- 2.2 Visual Disability
- 2.3 Auditory and Speech Disability
- 2.4 Intellectual Disability
- 2.5 Autism
- 2.6 Learning Disability

Unit 3 Children with Disabilities And Society

- 3.1 Families of Children with Disability
- 3.2 Prevention and Management of Different Disabilities

3.3 Educational Practices- Special Education And Inclusion

3.4 Policy and Laws

Unit 4 Use Of Assistive Devices For Children With Disabilities

4.1 Use of Assistive For Visual Disability

4.2 Use of Assistive For Auditory Disability

4.3 Use of Assistive For Locomotors Disability

PRACTICALS;

1- Visits Or Collect The Information Of Organizations Working With Children With Disabilities

Or

Observing Children with Disabilities In Families And Institutions

2- Prepare A Checklist To Identifying Disabilities And Planning Developmentally Activities For Them.

2.1 Visual Disability

2.2 Auditory Disability

2.3 Intellectual Disability

3- Exploring Audio-Visual Sources With Reference To Children With Disabilities

4- Psychometric Tests : Tests For Detecting Learning Disabilities

RECOMMENDED READINGS

1) Chopra,G., (2012). *Early Detection of Disabilities and persons with disabilities in the community*. New Delhi: Engage publications

2) Chopra,G., (2012). *Stimulating Development of Young Children with Disabilities at Anganwadi and at Home: A Practical Guide*. New Delhi: Engage publications.

3) Sharma, N. (Ed)(2010). *The Socail Ecology of Disability-Technical Series -3*Lady Irwin College. Delhi:Academic Excellence

4) Mangal, S. K. (2007).*Exceptional children: An introduction to special education*. New Delhi: Prentice Hall of India

5) Jangira, N.K.(1997) “Special Educational Needs of Children and Young Adults: An Unfinished Agenda,” *Education and Children with Special Needs: From Segregation toInclusion*,Ed. Seamus Hegarty, Mithu Alur, Thousand Oaks: Sage Publications Inc.

6) Karna, G. N. (1999). *United Nations and rights of disabled persons: A study in Indian perspective*. New Delhi: A.P.H. Publishing Corporation.

7) Mani, R. (1988). *Physically handicapped in India*. Delhi: Ashish Publishing House.

8) Mastropieri, M. A., & Scruggs, T. E. (2004). *The inclusive classroom: Strategies for effective instruction*. NY: Pearson.

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 5

MAJOR	GENERAL HOME SCIENCE				
SUBJECT;	ENTREPRENEURSHIP DEVELOPMENT IN WOMEN				
PAPER NO.;	06				
COURSE;	DSE – 10				
CODE;	BHS5edwD106X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES

To enables students to

1. Develop entrepreneurship skill
2. Understand the process and procedure of setting up small enterprise
3. Develop managerial skill for entrepreneurship development.

THEORY

Unit-1

- 1.1 Entrepreneurship development among women
- 1.2 Problems and constraints of women entrepreneurship.
- 1.3 Suggestion to improve working efficiency of entrepreneurship.
- 1.4 Importance and need for self employment.

Unit- 2

- 2.1 Quality of good entrepreneur
- 2.2 Establishment of enterprise
- 2.3 Legal aspect and procedure to establish enterprise.

Unit – 3

- 3.1 Entrepreneurship programs in India.
 - (A) Entrepreneurship development institute of India (E.D.I.)
 - (B) National Institute for Entrepreneurship and small business development (NIESBI)
 - (C) National Institute development bank of India (SIDBI)
 - (D) Small Industry development organization.
 - (E) National alliance of young entrepreneur.(NAYE)
 - (F) State Bank of India.
 - (G) National small industries corporation National Industry of small Industry

Extension training (NISIET)

(H) Directorates of industries of the state government and state small industries corp.

(I) Khadi and village industries commission(KVIC)

(J) State financial corporation(SFCS)

(K) Jilla Udyogkendra

(L) Gujarat agricultural industries.

(M) Industrial extension board.

(N) Gujarat industrial and technical consultancy organization.

Unit – 4

4.1 Putting a project proposal

4.2 Application form

4.3 Viable project proposal

4.4 Processing of proposal

4.5 License and quota

4.6 Registration security- guarantee retunes.

PRACTICAL

1. Prepare a project proposal to start a new enterprise and feasible report
2. Collect information by visiting different entrepreneurship program in your town
3. Collect information from small scale industries from the surrounding sources
4. Which of the legal aspects and the procedure do entrepreneurs need while the starting an Enterprise

RECOMMENDED READINGS

- Gundry Lisa K. & Kickul Jill R.,2007, Entrepreneurship Strategy: Changing Patterns in New Venture Creation, Growth, and Reinvention, SAGE Publications, Inc.
- Taneja & Gupta, 2001, Entrepreneur Development- New Venture Creation, Galgotia Publishing Company

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 5

MAJOR	GENERAL HOME SCIENCE				
SUBJECT;	FOOD PROCESSING AND PACKAGING				
PAPER NO.;	07A				
COURSE;	SE – 5				
CODE;	BHS5fppSE57A				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

Objectives

- 1) To make the students understand the importance of food additives and fortification.
- 2) To gain knowledge of food packaging and convenience food
- 3) To orient student to food safety laws and standards

Unit - 1

- Food Additives;- Meaning And Classification

Unit - 2

- Food Fortification
- Purpose Of Food Fortification
- Different Types Of Food Fortification

Unit - 3

Food Packaging

- Importance Of Food Packaging
- Different Types Of Food Packaging
- Advantages And Disadvantages

Unit; – 4 Food Safety Law And Food Standards

- Special Responsibilities As To Food Safety
- Responsibilities Of The Food Business Operator
- Designated Officer
- Powers & Liability Of Food Safety Officer
- General Provision Relating To Penalty

PRACTICALS;

1. Preparation Of Different Masala And Its Packaging. (Any Two)
2. Preparation Of Dry Snacks And Its Packaging.(Any Two)
3. Planning And Preparation Of Fortified Food (Any Two)

- **Recommended Reading**

- 1. G. Subbulakshmi – Shobha A. Udipi, “Food Processing And Preservation”, New Age International Publisher.
- 2. Girdharilal, G.S. Siddappa – G.L. Tandon, Preservation Of Fruits And Vegetables.
- 3. M. Swaminathan, “Food Science, Chemistry and Experimental Foods”.
- 4. B. Lakhtariya – “Food Safety And Standard Act 2006 With Food Safety And Standard Rules, 2011”. The New Gujarat Law House Ahmedabad.

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 5

MAJOR	GENERAL HOME SCIENCE				
SUBJECT;	EVENT MANAGEMENT				
PAPER NO.;	07B				
COURSE;	SE – 5				
CODE;	BHS5em0SE57B				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES ;

To enable students to

- 1) To prepare student for project management to the creation and development of festivals and event.
- 2) To provide knowledge for event planning process and tools and strategy

Theory

Unit - 1 Introduction

- 1.1 Kinds of event management
- 1.2 Carrier in event management

Unit - 2 Event planning

- 2.1 Event scheduling
- 2.2 Develop strategies for success

- Make checklist
- Create budget
- Plan publicity
- Timing
- Organizing committee
- Role of official

- 2.3 Key tips in developing the event plan

Unit - 3 Event leadership

- 3.1 Growth opportunities for event leader
- 3.2 Developing the carrier

- Mastering yourself
- Effective timing management

- Financial and accounting skill
- Mastering in technology
- Human resource skill
- Event leadership carriers

Unit - 4 Step of Successful event management

- 4.1 Techniques of market research
- 4.2 Qualitative and quantitative research
- 4.3 Validity and reliability
- 4.4 Produce considering effective events
- 4.5 Event design
- 4.6 Creative process in event research
- 4.7 Needs assessments and analysis

PRACTICALS

- Arrange Any One Competition In Your College
Rangoli , Recipe , Mahendi
- Plan And Managed Any One Of Event At Your Level And Evaluate
Navaratri , Sports Week
- Celebrate Different Days

RECOMMENDED READINGS

- (1) Swarup K Goyal 2010 Adhyayan publishers and distributors Darya Ganj New Delhi
- (2) Allen J Jarris R & Huyasken M Event Management Sydney University of Technology

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 5

MAJOR	GENERAL HOME SCIENCE				
SUBJECT;	ACTIVITIES AND RESOURCES FOR CHILD DEVELOPMENT				
PAPER NO.;	07C				
COURSE;	SE – 5				
CODE;	BHS5arcSE57C				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

Objective

- To Know The Requirements Of Infants And Toddlers And Develop Skill To Create Play Materials And Designing Learning Experiences.
- To Understand the Significance Of Various Creative Activities And Teacher's Role In Implementing Them.
- To Become Aware Of Suitable Literature For Children.
- To Understand The Role Of Adults To Promote Communication Skills.

Theory

Unit-1 Information about Sensations and Sense Training In Childhood

- 1.1 Concept
- 1.2 Characteristics
- 1.3 Types Of Sensations
- 1.4 The Capacities And Its Training Of The Sensory
 - Seeing
 - Hearing
 - Touch
 - Testing
 - Smelling

Unit-2 Creativity Concept Of Creativity And Highlights Of The Role Of Creative Expressions In Overall Development Of Children.

- 2.1 Concept of Creativity
- 2.2 Characteristics of Creativity
- 2.3 Principles of Creativity
- 2.4 Activities of Creativity/ Art Activities
 - Painting / Printing / Cutting / Pasting

3. Music And Rhythm

3.2 Importance Of Music In Child 'S Life

3.3Criteria for Selection of Songs.

3.3Developmental Stages in Musical Activities.

3.4Types Of Child Song

3.5 Teacher's Role in Providing Appropriate Experiences.

3.6Rhythmic Movements Body

3.7 Simple Musical Instruments

4. Communication – Language Arts

The Unit Emphasizes Role Of Communication And Experiences To Be Provided For Language Development.

4.1Importance Of Communication.

4.2Concept Of Language

4.3Promotion Of Language Skills : Listening, Speaking, Reading And Writing.

4.4Experiences For Language Development : Story Telling , Characteristics Of Good Story

4.5Techniques Of Story Telling : Story Book, Flash Card Chart, Puppet

Practical

1- Prepare Materials Design Activities For Sense Training In Childhood

1.1 Seeing

1.2Hearing

1.3Touch

1.4Testing

1.5Smelling

2- Prepare Materials Design Of Art Activities

2.1Prepare A Varsity Of Brushes - Cotton, Wool, Brooms, Feather Etc.

2.2Painting - Brush Painting, Spray Painting, Blow Painting, Finger Painting.

2.3Printing - Vegetable Printing, String Printing, Block Printing, Coins Printing

2.4Cutting And Pasting (Collage)

3- Learning To Sign Rhythm Song With Action And Making Simple Music Instrument

4- Prepare A Story With Techniques (Teaching Aid) Any One.

- Story Book

- Flash Card

- Chart

- Puppet

RECOMMENDED READINGS

- Beaty, J.J. (1996). *Preschool Appropriate Practices*. London : Harcourt Brace College Publishers.
- Carol, S. & Barbour, N. (1990). *Early Childhood Education: An Introduction: Iind Edition*.
- Contractor, M. (1984). *Creative Drama And Puppetry In Education*, Delhi : National Book Trust Of India.
- Johnson, A.P. (1998). *How to Use Creative Dramatics In The Classroom*. Childhood Education, 2– 6.
- Kaul, V. (1991). *Early Childhood Education Programme*. New Delhi : NCERT.
- Lasky, L. & Mukerjee, R. (1980). *Art Basic For Young Children*, Washington, D.C., NAEYC.
- Moomaw, S. (1984). *Discovering Music In Early Childhood*. Bostom : Allyn And Bacon, Inc.
- Swaminathan, M. (1984). *Play Activities For Young Children*, New Delhi : UNICEF.
- Swaminathan, M. (1991). *Play Activities For Young Children* . UNICEF.
- Taylor, B.J. (1985). *A Child Goes Forth Minneapolis* : Burgess Publishing Co. (6th Ed.).

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 5

MAJOR	FOOD & NUTRITION HOME SCIENCE				
SUBJECT;	RESEARCH METHODOLOGY				
PAPER NO.;	01				
COURSE;	CC – 15				
CODE;	BHS5rm0C151X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

Objectives;

- Understand The Fundamental Principles Of Methodology Concerning Research
- Prepare Research Tools Applicable To Developmental Issues
- Develop Skills In Documentation

Unit: 1 Introduction to Research

- 1.6 Meaning And Concept Of Research
- 1.7 Characteristics Of Research
- 1.8 Importance Of Educational Research
- 1.9 Types Of Research
- 1.10 Research Method
 - (A) Historical Research Method
 - (B) Descriptive Research Method

Unit: 2 Steps of Research Process

- 2.1 Introduction
- 2.2 Identification or Selection of Problem
- 2.3 Review of Related Literature
- 2.4 Objectives of the Study
- 2.5 Identification of Variables
- 2.6 Hypothesis
- 2.7 Method of Research
- 2.8 Population and Sampling
- 2.9 Selection or Construction of Tools
- 2.10 Data Collection

- 2.11 Analysis of Data and Statistical Techniques
- 2.12 Interpretation of Results
- 2.13 Research Report Writing

Unit: 3 The Research Hypothesis And Sampling

- 3.1 Meaning and Importance of Hypothesis
- 3.2 Characteristics of Good Hypothesis
- 3.3 Types of Hypothesis
- 3.4 Limitation of Hypothesis
- 3.5 Meaning of Sampling
- 3.6 Importance of Sampling
- 3.7 Sampling Techniques

Unit: 4 Tools and Techniques of Research

- 4.1 Concept and Types of Tool
- 4.2 Questionnaire
- 4.3 Interview
- 4.4 Rating Scale
- 4.5 Attitude Scale
- 4.6 Check List

PRACTICALS

(1) Project Preparation On Home Science Related Subjects By Survey, Interview, And Questionnaire Method.

RECOMMENDED READINGS

- A.N.Sadhu,(1980). Research Methodology In Social Science, Bombay: Himalayas Publishing House,
- Dr. G.B.Singh, (2011). Research Methodology I, Jaipur: Paradis Publishers.
- M.N.Borse, (2004). Research Methodology, Jaipur: Shree Niwas Publications.
- Vandana Vohra, (2013), Research Methodology, Jaipur: Pratiksha Publication
- Dr. R.S.Patel (2014), Methodology Of Education Research; 2ne Edition, Jay Publication Ahmedabad.

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 5

MAJOR	FOOD & NUTRITION HOME SCIENCE				
SUBJECT;	FOOD SCIENCE – 1				
PAPER NO.;	02				
COURSE;	CC – 16				
CODE;	BHS5fs1C162X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

• OBJECTIVES;-

- 1) To impart knowledge pertaining to the basic properties of food.
- 2) To provide basic understanding of principles behind food and also with processing Technology used for different foods.
- 3) Understand the application of science principles to experimental study of foods.
- 4) Select food to meet your requirements both in terms of food quality as well as cost.
- 5) Identify the different types of energy giving, body building and regulatory foods Available in market.

UNIT 1:- Energy Giving Foods

1.1Cereals: - Selection of cereals and millet. Nutritional factors in selection of cereals.

- a) **Wheat;** - Types, structure, composition and milling. Products of wheat (whole flour, bread flour, self raising flour, all purpose cake flour, Maida, semolina), macaroni product.
- b) **Rice;** - Composition and par boiling

1.2Roots and tubers: - Selection of roots and tubers.

1.3Fats and oils:- Selection of fats and oils, nutritional importance of fats and oils. Functions of fats and oils.

1.4 Sugar, jaggery and other sweetening agents:- Selection of sugar, jaggery and other sweetening agents. White crystalline sugar, cube sugar, brown sugar, liquid sugar glucose, jiggery, honey and saccharine related products. Indian chikki.

UNIT 2; - Body Building Foods

2.1 Pulses: - Selection of pulses, commonly used pulses, nutritional factors in section of pulses, Toxic factors in pulses.

2.2 Milk and milk products: Selection of milk and milk products, chemical composition, standardizing, pasteurization, kinds of milk available, food products derived from milk such as cream, ghee, curd, paneer, khoa, milk powder, cheese.

2.3 Flesh foods: Selection of flesh foods, meat, poultry, eggs, fish and other sea foods.

2.4 Nuts: Selection of nuts.

UNIT 3; - Protective/ Regulatory Foods

3.1 Vegetables: Selection of vegetables, chemical composition of vegetables, salad.

3.2 Fruits: Selection of fruits, composition, ripening and storing of fruits, banana, orange, mango, lime, custard apple, pineapple, papaya, chickoo, guava, amla, melons, grapes, peach, berries

UNIT 4; - Unconventional Foods

Soyabean, ragi, oats, and barley, unconventional leaves, mushrooms, spirulina.

PRACTICALS

1) Selecting, preparing and serving items from current restaurant menus

(1 preparation each)

a) Cereals	e) Pulses
b) Roots and tubers	f) Milk and milk products
c) Sugar jiggery	g) Vegetables
d) Fats and oils	h) Fruits

2) Preparation of unconventional foods.

(1 preparation each)

a) Soya bean products	c) Unconventional cereal
b) Unconventional leaves	d) Unconventional roots and tubers

RECOMMENDE READINGS

- 1) N Shukuntala Manay, M. Sadaksharaswamy, "Foods –Facts and Principles.
- 2) M Swaminathan "Food Science and Experimental Food."
- 3) Peckham G C. "Foundation of Food Preparation" The Mcmillan Co. 1962
- 4) Norman P N "Food Science" The A V I Publishing Co. 1982
- 5) Charley H "Food Science" John Wiley and Sons 1982
- 6) Griswold RM "The Experimental Study of Foods" Houghtan Migglin Co. 1962
- 7) Lowe B "Experimental Cookery" John Wiley and Sons.1965
- 8) ANC-1 Nutrition for the Community- Practical manual Part-1 IGNOU.
- 9) ANC-04 IGNOU.
- 10) CCCD-02 IGNOU.
- 11) Srilaxmi- Food Science.

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 5

MAJOR	FOOD & NUTRITION HOME SCIENCE				
SUBJECT;	NUTRITIONAL ASSESSMENT AND SURVEILLANCE				
PAPER NO.;	03				
COURSE;	CC – 17				
CODE;	BHS5nasC173X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

Objectives;

1. To sanitize students to the principal and Method of assessment of nutritional status
2. To equip students to use and interpret various method of assessing nutritional status
3. To enable understanding purpose and type of nutritional surveillance

Theory

Unit - 1

Demographic and vital statistics

- Demographic profile and demographic cycle
- vital statistics of developed and developing country
- Population trends in India and other countries

Unit - 2

Nutritional Status Assessment Methods and Understanding Anthropometric Measurement in Adults and Children

- Overview Of Nutritional Status Assessment Methods; Direct Parameters-(Anthropometry Clinical Signs And Symptoms Dietary Assessment And Biochemical Parameters
- Anthropometric Measurements Commonly Used In Public Health(Weight For Age Weight For Height And Height For Age Indications)
- Other Measurements Used In Clinical Settings BMI, Skinfold Thickness, Waist Hip Ratio,
- Of Introduction Of New W H O Growth Standard For Children
- Use Of Growth Monitoring Charts In Community And Their Advantages

Unit - 3

Assessment of Nutritional Status Using Dietary Intake and Biochemical Parameters and Comparisons With The Standard Values

- Comparison Between Available Dietary Intake Methods And Understanding Their Usage And Limitations In Different Field Situations; 24 Hour Diet Recall Methods, Food Frequency Method, Weighed Food Inventory, Food Composition Methods
- Understanding The New RDA And Actual Consumption Unit
- An Overview Of Assessment Of Biochemical Parameters For Changes In The Level Of Nutrients And Their Metabolism In Body Tissues At Different Levels Of Nutrition, Their Interpretation-Lipids,(TG, LDL, And HDL, Cholesterol)
- Carbohydrates(Blood And Urinary Glucose)
- Protein(Serum Protein, Albumin, Urea Creatinine Ratio)
- Iron (Hemoglobin, Serum Iron)
- Vitamin A, Vitamin B, B Complex Vitamins, Vitamin C, Calcium, Iodine

Unit - 4

Indirect Parameters Affecting Nutritional Status and Understanding Clinical Signs and Various Conditions

- Socioeconomic Status, Income, Literacy, Unemployment
- Mortality Rates And Morbidity Rates
- Understanding Clinical Signs And Symptoms Of Various Nutritional Deficiencies Through Field Visit; Severe Acute Malnutrition, Anaemia, Vitamins, Iodine Disorder Deficiency,

Practicals;

1. Conducting Diet Survey For Family
2. Anthropometric Measurements For Children In Poor And Effluent; Wait Height BMI,MUAC, Waist Hip Ratio
3. Planning Low Cost Dishes Using Unconventional Food For Pregnant Women, Lactating Women, Weaning Food, School Going Children And Old Age

RECOMMEDED READINGS

- Gibson(1992) Principles of nutritional assessment, New York, Oxford University Press
- Gopalan C (1989) Combating undernutrition – Basic issues and practical approaches. New Delhi, Nutrition foundation of India
- Gopaldas T., Sheshadri S. (1989) Nutrition Monitoring and Assessment, New Delhi Oxford University Press.
- Jlliffee DB and Jelliffe EP (1980) Community Nutritional Assessment Oxford University Press New Delhi
- Food and Nutrition Board (1995) National Plan of Action on Nutrition, Department of Women and Child Development, Ministry of HRD, Govt of India
- IGNOU - DNE – 2 Block – 6
- IGNOU DNE -3 Block – 6
- IGNOU DNE -3 Block – 2
- IGNOU DNE -2 Block – 6
- IGNOU Public Health Nutrition
- Preventive and Social medicine by Park & Park 21st Edition

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 5

MAJOR	FOOD & NUTRITION HOME SCIENCE				
SUBJECT;	DIETETICS – 1				
PAPER NO.;	04				
COURSE;	CC – 18				
CODE;	BHS5dt1C184X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

• OBJECTIVE;

- 1) To understand the role of diet therapy.
- 2) Classify therapeutic diets and adaptation of normal diet
- 3) Learn the different modes of feeding
- 4) To gain knowledge on the dietary modifications for various diseases.
- 5) To acquire the ability to plan and prepare diets for various diseases.
- 6) Learn the assessment of patients' need, counseling, education of the patient and Follow-up

THEORY

Unit - 1

Dietetic Techniques and Patient Counseling

- Historical Data Of Patients
- Dietary Diagnosis And Tests For Nutritional Status Correlating Clinical And Dietary Information
- Patient Education And Counseling
- Follow Up Visits.

Unit - 2

Etiology Diagnosis and Dietary Management Of Patients With

- Diabetes Mellitus
- Liver Disease: 1. Viral Hepatitis 2. Cirrhosis Of Liver 3. Alcoholic Liver Disease 4. Cholecystitis , Cholelithiasis, Pancreatitis

- Anaemia : 1. Nutritional Anaemia 2. Sickle Cell Anaemia 3. Megaloblastic Anaemia 4. Pernicious Anaemia
- Cancer

Unit - 3

- **Risk Factors for Chronic Degenerative Disorder Diet for Healthy Living**

Unit - 4

- **Therapeutic Foods And Its Importance**

- Wheatgrass
- Spirulina
- Mushroom
- Flax Seeds
- Niger Seeds
- Drumstick Leaves
- Barley
- Chia Seed
- Amylase Rich Foods

PRACTICALS

1. Prepare A List Of Food Rich In

- Protein Sodium Fat Calcium Phosphorus Oxalic Acid In Each Food Exchange
- Cholesterol, SFA, PUFA, MUFA.

2. Planning and Preparation of Diet For Patient With

- Diabetes: 1) Normal Weight 2) Pregnancy
- Liver Diseases: 1) Hepatitis 2) Cirrhosis Of Liver
- Anaemia: 1) Nutritional Anaemia 2) Megaloblastic Anaemia
- Cancer 1) Oral Feeding 2) Tube Feeding

3. Plan and Prepare Recipes From Therapeutic Food Products

RECOMMENDED READINGS

1. Robinson C. H. – Normal and therapeutic Nutrition, The Oxford Uni. Press.
2. Williams S.R. – Nutrition and Diet Therapy, V.C. Mosby Co.
3. Anita F.P. – Clinical Nutrition and Dietetics, The Oxford Uni. Press.
4. Krause M.V. and Hinster M.- Food, Nutrition and Diet Therapy, W.B. Saunders
5. Vaid B. M. - Diet Therapy, Saurashtra University
6. Vaid B. M. - Therapeutic Nutrition, Saurashtra University
7. Vaid B. M – Dietetics, Saurashtra University

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 5

MAJOR	FOOD & NUTRITION HOME SCIENCE				
SUBJECT;	FOOD MICROBIOLOGY				
PAPER NO.;	05				
COURSE;	DSE - 9				
CODE;	BHS5fm0D095X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES;

- 1) Gain deeper knowledge of role of micro- organisms in human and environment.
- 2) Understand the importance of micro-organisms in food spoilage and to learn advanced Techniques used in food preservation.
- 3) Understand the criteria for microbiological safety in various food operations to avoid public health hazards due to contaminated foods.

Unit; - 1. Introduction to food microbiology

Unit; - 2. Rapid methods for detection of microbes -

Chemical Methods, Nucleic Acid Test, And Immunological Methods.

Unit;- 3. Food spoilage

Reasons for food spoilage food poisoning food borne infections

Unit;- 4 fermented food

Oriented fermented food

Food produced by microorganisms

Single cell proteins

Unit;- 5 Bakery

Microbes used in bakery

Useful and harmful microbes

Unit; - 6 milk microbiology

Pasteurization of Milk microbes used in Dairy industries cheese and ripening of Cheese

PRACTICALS;

- Study of different instrument used in microbiological laboratory
- Monochrome staining (wet mounting)
- Test of Milk by Methyline blue reduction test (MBRT)
- Gram staining of bacteria
- Study of permanent slides of micro organism
- Staining of microorganism from cured sample
- Visit to a pathological laboratory

RECOMMENDED READINGS

1. Food Microbiology – Frazier W.C.and Westhoff D.C.McGrawHill Inc.Ltd.
2. Modern Food Microbiology – Jay James M. Van Nostrand Reinhold Company Inc.
3. Peleczar and Reid – Microbiology McGraw-Hill Book Company New York

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 5

MAJOR	FOOD & NUTRITION HOME SCIENCE				
SUBJECT;	BIOCHEMISTRY				
PAPER NO.;	06				
COURSE;	DSE – 10				
CODE;	BHS5bioD106X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES;

This course will enable students to -

1. Develop an understanding of the principles of biochemistry (as applicable to human nutrition)
2. Obtain an insight into the chemistry of major nutrients and physiologically important compounds.
3. Understand the biological processes and systems as applicable to human nutrition.
4. Apply the knowledge acquired to human nutrition and dietetics.

UNIT; - 1 CARBOHYDRATE

- Definition
- Physical and chemical properties of carbohydrates
- D & L form
- Stereoisomerism – Optical activity
- Ring structures

Carbohydrate metabolism

- Reactions & energetic of
 - A. Glycolysis_Aerobic and anaerobic
 - B. Krebs Cycle

UNIT;- 2 PROTEINS AND AMINO ACIDS

- Classification and structure of amino acids
- Physical and chemical properties of amino acids

PROTEIN METABOLISM

- Transamination
- Deamination (Oxidative)
- Decarboxylation
- Urea cycle
- Protein synthesis.

UNIT; - 3 LIPIDS

Fatty Acids

- Classification of fatty acids
- Physical and chemical properties of amino acids
- Hydrogenation
- Halogenation
- Oxidation
- Biological oxidation

Fats

- Physical and chemical properties of fats
- Hydrolysis
- Saponification
- Acetylation
- Rancidity
- Acid number
- Iodine number
- Acetyl value

|

LIPID METABOLISM

- B - Oxidation of saturated fatty acid and it's energetic.
- Metabolism of ketone bodies and ketosis

UNIT;- 4 ENZYMES

- Importance and specificity.
- Chemical nature
- Classification and nomenclature
- Enzyme kinetics (factors affecting enzyme action)
- Coenzymes and isoenzymes.
- Inhibitors
- Clinical importance of enzymes

PRACTICALS;

1. Cole's method – Glucose, Lactose
2. Acid value
3. Iodine value
4. Glucose estimation by DNSA method
5. Protein estimation by Folin-Wu method
6. Preparation of casein from milk
7. Preparation of standard solution

RECOMMENDED READINGS.

1. Biochemistry - Powar and Chatwal 4th Edition (2000) Himalaya Publishing House Bombay.
2. Outlines of Biochemistry – E.C.Conn and P.K.Stumph (1995) John Willey & Sons, Replika Press Ltd. Delhi.
3. Harpers Illustrated Biochemistry – R.K.Murray, D.K. Gramner, P.A.Mayes, and V.W.Rodwell (2003) McGraw-Hill Publication.
4. Instant Notes Biochemistry – B.D.Hames & N.M.Hooper 2nd Edition (2003) Viva Books Pvt. Ltd. New Delhi.
5. Biochemistry – Stryer Freeman W.H. & Co.
6. Text Book of Biochemistry – West & Todd Amerind Publishing Co.Pvt.Ltd.

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 5

MAJOR	FOOD & NUTRITION HOME SCIENCE				
SUBJECT;	FOOD TECHNOLOGY AND PACKAGING				
PAPER NO.;	07A				
COURSE;	SE – 5				
CODE;	BHS5ftpSE57A				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

Objectives;

- 1) To make the students understand the importance of food additives and fortification.
- 2) To gain knowledge of food packaging and convenience food
- 3) To orient student to food safety laws and standards

Unit - 1

- Food Additives;- Meaning And Classification

Unit - 2

- Food Fortification
- Purpose Of Food Fortification
- Different Types Of Food Fortification

Unit - 3

Food Packaging

- Importance Of Food Packaging
- Different Types Of Food Packaging
- Advantages And Disadvantages

Unit; – 4 Food Safety Law And Food Standards

- Special Responsibilities As To Food Safety
- Responsibilities Of The Food Business Operator
- Designated Officer
- Powers & Liability Of Food Safety Officer
- General Provision Relating To Penalty

PRACTICALS

4. Preparation Of Different Masala And Its Packaging. (Any Two)
5. Preparation Of Dry Snacks And Its Packaging.(Any Two)
6. Planning And Preparation Of Fortified Food (Any Two)

- **Recommended Reading**

- 1. G. Subbulakshmi – Shobha A. Udipi, “Food Processing And Preservation”, New Age International Publisher.
- 2. Girdharilal, G.S. Siddappa – G.L. Tandon, Preservation Of Fruits And Vegetables.
- 3. M. Swaminathan, “Food Science, Chemistry and Experimental Foods”.
- 4. B. Lakhtariya – “Food Safety And Standard Act 2006 With Food Safety And Standard Rules, 2011”. The New Gujarat Law House Ahmedabad.

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 5

MAJOR	FOOD & NUTRITION HOME SCIENCE				
SUBJECT;	EVENT MANAGEMENT				
PAPER NO.;	07B				
COURSE;	SE – 5				
CODE;	BHS5em0SE57B				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES ;

To enable students to

- 1) To prepare student for project management to the creation and development of festivals and event.
- 2) To provide knowledge for event planning process and tools and strategy

Theory

Unit - 1 Introduction

- 1.1 Kinds of event management
- 1.2 Carrier in event management

Unit - 2 Event planning

- 2.1 Event scheduling
- 2.2 Develop strategies for success

- Make checklist
- Create budget
- Plan publicity
- Timing
- Organizing committee
- Role of official

- 2.3 Key tips in developing the event plan

Unit - 3 Event leadership

- 3.1 Growth opportunities for event leader
 - 3.2 Developing the carrier
- Mastering yourself
 - Effective timing management

- Financial and accounting skill
- Mastering in technology
- Human resource skill
- Event leadership carriers

Unit - 4 Step of Successful event management

- 4.1 Techniques of market research
- 4.2 Qualitative and quantitative research
- 4.3 Validity and reliability
- 4.4 Produce considering effective events
- 4.5 Event design
- 4.6 Creative process in event research
- 4.7 Needs assessments and analysis

PRACTICALS

- Arrange Any One Compition In Your College
Rangoli , Recipe , Mahendi
- Plan And Managed Any One Of Event At Your Level And Evaluate
Navaratri , Sports Week
- Celebrate Different Days

RECOMMENDED READINGS

- (1) Swarup K Goyal 2010 Adhyayan publishers and distributers Darya Ganj New Delhi
- (2) Allen J Jarris R &Huyasken M Event Management Syndey University of Technology

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 5

MAJOR	FOOD & NUTRITION HOME SCIENCE				
SUBJECT;	MATERNAL - CHILD HEALTH AND NUTRITION				
PAPER NO.;	07C				
COURSE;	SE – 5				
CODE;	BHS5mhnSE57C				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES;

1. To Sensitize Students On The Mother Child Dynamics
2. To Sensitize Students On The Various Aspects Of Reproductive Child Health And Nutrition
3. To Pick Whipped Students To Understand The Importance Of Maternal In Nutrition And Child Health

Unit - 1

Introduction To Maternal And Child Health And Nutrition

- 1 Rational And Goals Of MCHN
- 2 Nutrition Health Concerns Of Mother And Child And Concept Of Continuum Of Care
- 3 Importance Of Micronutrient Supplementation To Improve Maternal And Child Health
- 4 Organization Setup For MCH Care.

Unit - 2

Maternal Nutrition

1. Maternal Malnutrition and Lbw babies
2. Care During Pregnancy
- 3 Diagnosis Of Pregnancy And Components Of Full Antenatal Care
- 4 Maternal Nutrition In Pregnancy And Lactation Strategies For Preventing Anemia
- 5 Abnormal Pregnancy Complications In Early And Late Pregnancy

Unit - 3

Child Health

- 1 Care Of Newborn And Young Infant
2. Management Of Low Birth Weight Babies

- 3 Immunization Schedule And Introduction Of Newer Vaccines In Public Health
- 4 Childhood Morbidity And Role Of Under nutrition
- 5 Evidence-Based MCH Interventions To Improve Maternal And Child Health

Unit - 4

Child Nutrition

- 1 Growth And Development In Childhood
- 2 Essential Nutrition And Health Interventions To Prevent Undernutrition
- 3 Common Deficiency Disorder And Its Treatment
- 4 Importance Of Regular Growth Monitoring For Preventing Undernutrition And Management Of Mild To Moderate Malnutrition

PRACTICALS

- 1 Use Of Self Monitoring Technique At Household Level As A Nutrition Assessment Techniques(Glucometer, BP Instrument, Oxygen Saturation, Pulse, Use Of Lipsticks For Protein And Glucose In Urine)
2. Pregnancy Detection Test Using Kits
3. Blood Haemoglobin
4. Blood Glucose
5. Urinary Creatinine

Recommendation reading

- International child health ; a digest of current information
- Health care of women and children in developing countries by. Wallase,H.M.and G.IRI,K.'1990
- WHO(1999) Nutrition for health and development ; progress and prospectus on the Eve of the 21st century
- Rajpara M.R. 2012 maternal and child nutrition jaipur arravali prakashan

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 6

MAJOR	GENERAL HOME SCIENCE				
SUBJECT;	APPLIED PHYSIOLOGY				
PAPER NO.;	01				
COURSE;	CC – 19				
CODE;	BHS6ap0C191X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES

- Understanding the human physiology and scope of relevant issues
- Understand of different body system and its functions
- Understand alteration of structure and function of various organs and system in disease condition

Theory

Unit; - 1 Homeostasis

1 Concept of Homeostasis

2 Role of body system in maintaining Homeostasis

Unit; - 2 Digestion and absorption in the gastrointestinal tract

2.1 Digestion of various foods

- Carbohydrates
- Protein
- lipids

2.2 Absorption in large intestine and small intestine

Unit; - 3 Body temperature and temperature regulation

- Normal Body Temperature
- Heat Production And Heat Toss
- Regulation Of Body Temperature

Unit; - 4 Blood

4.1 Composition of Blood

4.2 Plasma, Plasma Protein and Its Functions

- 4.3 Blood Pressure and Factors Affecting To Blood Pressure
4, 4 Structure Of Heart Functional Tissue And Its Regulation

Unit;- 5 Nervous system

- 5.1 Types of Neuron
5.2 Transmission of Nerve Impulse in Nerve Fiber and Synapse

Unit; - 6 Modern methods of diagnosis

- X-Ray radiography
- Sonography
- Computed tomography or CAT
- Magnetic resonance imaging MRI
- Positron emission tomography
- Digital subtraction angiography
- Endoscopy

PRACTICAL;

- 1 Estimation of hemoglobin
- 2 Total counts of W.B.C. and R.B.C.
- 3 Differential count of W.B.C.
- 4 Measurement and comparison of blood pressure (After exercise and during rest)
- 4 Abnormalities of Urine
- 6 Measurement and comparison of body temperature and pulse rate
(After exercise and during rest)
- 7 Report of lecture/visit to diagnostic center

REFERENCE BOOKS

1. Human physiology – C.C.Chatterjee
2. Human Physiology – Agrawal
3. Text book of Medical Physiology – Guyton
4. Essentials of Medical physiology- K. sembulingam, prema Sembulingam
- Essentials of Medical Physiology- By- K Sembulingam ; Prema Sembulingam
Jaypee Brother Medical Publishers ltd
- Essentials of Medical Physiology- Guyton sanders, Oxford University, London
- Human Physiology-By C.B. Fox

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 6

MAJOR	GENERAL HOME SCIENCE				
SUBJECT;	HEALTH AND NUTRITION PROGRAMME AND POLICIES				
PAPER NO.;	02				
COURSE;	CC - 20				
CODE;	BHS6hnpC202X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES;

1. To know about nutrition and health status of India
2. To equip students necessary knowledge and skill required to manage health and nutrition programme in developing country
3. To develop skill for critical evaluation of existing nutrition and health programs

Unit 1

Concept of public Nutrition and Health education

1. Nutrition Education

- Training of professional worker of nutrition
- Training in nutrition for worker in other profession
- Channel of nutrition education of community

2 Health Educations

- Objectives of Health education
- Principles of health education
- Emphasis on Health education

Unit 2

Problem of under nutrition in India. Their implication

- Etiology ,Prevalence Clinical features
- Preventing strategies of
 1. Protein-energy malnutrition
 2. Nutritional Anemia
 3. Vitamin=A deficiency
 4. Iodine deficiency
 5. Zinc deficiency

6. Obesity
7. Heart diseases
8. Diabetes

Unit 3

Key program Nutrition and health

- ICDS
- Balwadi nutrition program
- Special nutrition program
- National nutritional anemia prophylaxis programme
- National profile access program for prevention of blindness due to Vitamin A deficiency
- National iodine deficiency disorder Control Programme
- Mid-Day- Meal program
- NIN, CFTRI
- UNICEF, CARE

Key program for health

- NRHM and NUHM (Mamta Divas- village health and nutrition day)
- Women's
- Total sanitation program
- The national water supply
- Rural Health Scheme
- National health policies
- ICAR, International Organizations in Community Nutrition and Health
FAO, WHO,

Unit - 4

Policies and nodal sectors concerned with nutrition and health

- Current National policies in India
- Gujarat state nutrition policy and national/state plan of action
- Role of various nodal sector
- Health policies of Gujarat

PRACTICALS

1. Demonstration of low cost nutritious recipes in community educate the community by different messages on nutrition and health

2 Themes and messages in nutrition and health education

• Themes in nutrition Education Theme; - nutrition during school age adolescence Adulthood and old age

• Themes in health education Theme; - preventing and treating common sickness

And problems

- Messages in nutrition and health education
 - Messages in nutrition education
 - Messages in health Education
 - How to improve relevance and effectiveness of a message

3 Communication media useful in nutrition and health Education

- Leaflet
- pamphlet
- folder
- Poster
- Chart
- Script writing

4. A Visit to nutritional programme run by government at local area (any one)

4. B Visit to health programme run by government at local area (any one)

RECOMMEDED READINGS

- Gibson(1992) Principles of nutritional assessment, New York, Oxford University Press
- Gopalan C (1989) Combating undernutrition – Basic issues and practical approaches. New Delhi, Nutrition foundation of India
- Gopaldas T., Sheshadri S. (1989) Nutrition Monitoring and Assessment, New Delhi Oxford University Press.
- Jlliffee DB and Jelliffe EP (1980) Community Nutritional Assessment Oxford University Press New Delhi
- Food and Nutrition Board(1995) National Plan of Action on Nutrition, Department of Women and Child Development, Ministry of HRD, Govt of India
- IGNOU - DNE – 2 Block – 6
- IGNOU DNE -3 Block – 6
- IGNOU DNE -3 Block – 2
- IGNOU DNE -2 Block – 6
- IGNOU Public Health Nutrition
- Preventive and Social medicine by Park & Park 21st Edition

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 6

MAJOR	GENERAL HOME SCIENCE				
SUBJECT;	CHANGING TRENDS IN EXTENSION				
PAPER NO.;	03				
COURSE;	CC – 21				
CODE;	BHS6cteC213X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES ;

1. To understand the changing concepts and meaning of Extension .
2. To understand the trends in extension approaches and models used in Extension.
3. To identify the development support system for Extension Education
4. To understand the Extension Education process.

CONTENT

UNIT - I : CONCEPTUAL ANALYSIS

1.1 Extension

1.1.1 Meaning

1.1.2 Changing concept

1.1.3 Components

1.2 Extension Education

1.2.1 Meaning

1.2.2 Process

1.2.3 Principles of learning Teaching

UNIT - II : EXTENSION MODELS AND APPROACHES

Model meaning

2.1.1. Technology - Innovation Transfer Model

2.1.2 Social Education Model

2.1.3 Indigenisation Model

2.1.4 Social Action/ Conscientization Model

2.1.5 Empowerment - Participation Model

2.1.6 Combination Models

UNIT III : NATIONAL EXTENSION SYSTEMS

Extension Efforts

3.2 CAR Extension Systems

3.3. Agricultural Universities, KVK

3.4 Extension System of Ministry of Rural Development

3.4.1. Department of Science and Technology

3.4.2. Department of Industries

3.4.3. Department of Women and Child development

3.5 Development work by NGO's

3.6 Government - NGO collaboration

UNIT - IV: EXTENSION EDUCATION PROCESS

4.1 Environment for learning

4.1.1. Role of Extension worker and communicator, Administrator

4.1.2. Role of the people

4.2. Role of the people

4.2.1. Passive participants

4.2.2. Complacent participants

4.2.3. Active participants

PRACTICAL:

1. To know about local organisation related in extension work like Vikas Jyot, BCC, Diamond Jubilee, Cottage Industries etc.
2. Visiting / to collect the information on DRDA / TDO government extension projects.
3. Preparing list of local organisations working for Extension from the Social Welfare Directory
4. Viewing Expert talk from online source on: extension organisations/worker to know their Functioning

REFERENCES:

1. Ahluwalia, M.S. (2000) : India's Economic Reforms and Development, Oxford University Press
2. Bhattacharya B. , : Urban Development in India, Shree publishing House Delhi.
3. Bose Ashish : India's Urbanisation, Institute of Economic growth, Delhi University.
4. Bhalsara J.F., Patterns of social life in Metropolitan areas.
5. Das Ram : Socio - economic Transformation of Millions through Rural development, 21st

Century Publishers, Meerut.

6. Desai vasant (1988) Rural Development, Himalaya Pub. House, Bombay.
7. Dreze J. and Sen A.K. (1995) : India economic Development and social Opportunity, Oxford University Press.
8. Gulati A. : Indian agriculture and open economy
9. Hussain N. : Tribal India today, Harran Publishing house.
10. Kindervalter S. (1979) Non formal education as an Empowering process, Centre for international education 285, Hill House South Amherst, Massachusetts 01003, USA , University of Massachusetts.
11. Krishna K.L. : Industrial Growth and Diversification
12. Levine K. (1985) : the social context of Literacy, London R.K.P.
13. M.B. Nanavati and Anjana J.J. : Indian Rural policies
14. Pillai K.S. (1993) ABC of non formal education, Indian Adult education Association, New Delhi.

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 6

MAJOR	GENERAL HOME SCIENCE				
SUBJECT;	INDIAN TRADITIONAL TEXTILE				
PAPER NO.;	04				
COURSE;	CC - 22				
CODE;	BHS6ittC224X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
	03	01	04	THEORY	PRACTICAL
				03	03
				06	

OBJECTIVES;

1. Study of textile craft
2. To improve knowledge about Woven, Embroidery, Printed ,Dyed textile
3. Status of Handloom & Handicraft

THEORY

Unit: 1 Study of Textile Crafts of India: with reference to history, production centers, Techniques, designs, colors and products

- Benaras Brocades
- Jamdanis
- Baluchars
- Pathani
- Chanderi
- Kanjivarm
- Vichitrapuri
- Patpola, Badhni, Laheria

Unit: 2 Woven Shawls

- Kashmir
- Panjabi

- Kachhchi
- Arunachal

Unit: 3 Embroidered Textiles-

- Kanthas of Bengal
- Phulkari of Punjab
- Kashmiri work of Kashmir
- Gujarat embroideries
- Shadow work of Lakhaunav

Unit: 4 Painted and Printed textiles

- Kalamkari of Andhra Pradesh
- Dabu printing of Rajasthan
- Ajarakh of Gujarat
- Ikats of Gujarat
- Bandhani of Gujarat

PRACTICAL

1. Embroidery stitches of traditional embroideries – Any Three

- 1) Kanthas of Bengal
- 2) Phulkari of Punjab
- 3) Kashmiri work of Kashmir
- 4) Gujarat embroideries
- 5) Chikankari of Uttar Pradesh
- 6) Applique work of Bihar

2. Traditional textile crafts (Power Point Presentation- any one)

3. Collection of Painted/printed Photograph/ Picture

4. Visit to craft centers

1. Khadi unit
2. Handloom industry

3. Handicraft sector

RECOMMENDED READINGS

1. Care and Presentation of Museum projects Agarwal, O.P., 1977, – II, NRL
2. Handicrafts of India, Chattopadhyaya, K.D., 1995, Wiley Eastern Limited, N Delhi

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 6

MAJOR	GENERAL HOME SCIENCE				
SUBJECT;	ADOLESCENT RELATION AND WELL BEING				
PAPER NO.;	05				
COURSE;	DSE - 11				
CODE;	BHS6arwD115X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES;

- 1) Student Will Gain Knowledge About The Adolescents" Relations And Well-Being.
- 2) Students Will Gain Knowledge About Development Of Adolescent.
- 3) To Impart Skill And Knowledge About The Adolescent Problems And Remedies For Them.

Theory

Unit: 1 Information About Adolescent

- 1.1 Introduction And Concept Of Adolescent
- 1.2 Puberty : Concept And Characteristics Of Puberty
- 1.3 Characteristic Of Adolescent Period
- 1.4 Development Task Of Adolescent Period
- 1.5 Need Of Adolescent Period
- 1.6 Problems Of Adolescent Period : Its Cause And Solution

Unit: 2 Developments Of Adolescent

- 2.1 Physical Development In Adolescent (Sexual Maturity)
- 2.2 Psychological Attitudes And Response In Adolescent
- 2.3 Social Development In Adolescent : Parents/Family, Peers, Friendship, Interpersonal Relation
- 2.4 Emotion Maturity In Adolescent Period
- 2.5 Cognitive Development: Reasoning Power/Wisdom

Unit: 3 Adolescent Education

- 3.1 Introduction And Concept Of Adolescent Education
- 3.2 Need Of Adolescent Education
- 3.3 Role Of Parents In Adolescent Education
- 3.4 Role Of Teacher In Adolescent Education
- 3.5 Approaches Of Adolescent Education
- 3.6 Counseling In Adolescent Period

Unit: 4 Related Issues Of Adolescent

- 4.1 Reproduction Health
- 4.2 Anemia- A Health Problem Adolescent Period
- 4.3 Addiction In Adolescent Period
- 4.4 Sexuality In Adolescent Period

Practical

- 1- Prepare A Media : Adolescent Related Topic
(e.g. Chart/Poster/Booklet/Leaflet/Video/PPT Etc.)
- 2- Group Dissection/Expert Lecture (Any One Topic)
 - 2.1 Problems of Adolescent Period: Its Cause And Solution
 - 2.2 Control of Drug Abuse
 - 2.3 Family Planning
 - 2.4 Sexually Transmitted Disease
- 3 - Method of Promoting Well Being: Adolescence Counseling
- 4- Collect Information of Government Schemes for Teenage /Adolescent

RECOMMENDED READINGS

- 1- Manthei, R. (1997). Counselling: The skills of finding solutions to problems. London: Routledge.
- 2- Sharma, N. (2009). Understanding Adolescence, New Delhi: National Book Trust.
- 3- Rice, F. P. (2007). Adolescent: Development, Relationships and Culture.
- 4- Santrock, J. W. (2010). Life Span Development: A Topical Approach, New Delhi: Tata
- 5- ડૉ. વિનુભાઈ મ. પટેલ અને ડૉ. આરતી પ્ર. કસ્વેકર (2003) તાદૃશ્ય શિક્ષણ અને પ્રજનન સ્વાસ્થ્ય

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 6

MAJOR	GENERAL HOME SCIENCE				
SUBJECT;	FAMILY FINANCIAL MANAGEMENT				
PAPER NO.;	06				
COURSE;	DSE - 12				
CODE;	BHS6ffmD126X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES:-

To Enable the Students To –

1. To Understand The Internal And External Factors Affecting Financial Decision.
2. Be Able To Use To Make Wise Use of Money.
3. Develop An Appreciation Of Role Of Successful Financial Management In Satisfying Family Living.

Theory:-

Unit – 1: Family Income and Expenditure

1. Meaning and Definition of Family Income.
2. Types of Income: Money Income, Real Income and Psychic Income
3. Meaning and Definition of Family Expenditure
4. Types of Expenditure
5. Factors Influencing Variations In Family Expenditure

Unit – 2: Financial Management

1. Definition of Budget
2. Types of Budget
3. Steps in Preparing a Budget
4. Record Keeping
5. Characteristics of Record Keeping
6. Advantages of Record Keeping
7. Methods of Record Keeping

Unit – 3: Savings and Investments

1. Meaning Of Saving
2. Objective Of Saving

3. Types of Savings: Bank, Insurance, Post Office, Provident Fund, Pension
4. Meaning of Investments
5. Objective of Investments
6. Types Of Investments: Investment In Family And Jewellery , Interest Bearing Investment, Shares and Debenture, Rent Bearing Investment, Property & Housing Etc.

Unit – 4: Banking

1. Bank-Definition
2. Kinds of Bank
3. Functions of Bank
4. Types of Account and Other Utility Services

PRACTICALS:

1. Find Out Our Family Annual Money Income And Write 10 Suggestions To Increase Real Income.
2. Prepare the Project of Any Two Methods Of Record Keeping For 15 Days
(1) Card Method (2) Diary Method (3) Note-Book Method (4) File Method (5) Envelop Method
3. Know The Bank Procedure Of Opening The Account , Depositing Money , Withdrawing Money , Writing Cheques And Other Utility Services E.G. Loan , Fixed Deposit , Core Banking , Function Of ATM , Credit / Debit Card Etc.
4. Know The Types Of Pension Schemes Of Government.

REFERENCES:

- 1) Management For Modern Families : By Gross Cranall And Knoli
- 2) Management In Family Living : By Nickell P And Dorsey
- 3) Modern Economics Theory By Kewal Krishna Sachdev
- 4) Personal Finance : By Lawrence Gitman

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 6

MAJOR	GENERAL HOME SCIENCE				
SUBJECT;	SOFTWARE IN PRINT MEDIA				
PAPER NO.;	07A				
COURSE;	SE – 6				
CODE;	BHS6spmSE67A				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES:

1. To develop understanding regarding the role of various Print Media in development communication
2. To develop understanding regarding the growth and development of Print Media
3. To develop skills in the production of software in Print Media.

Theory

UNIT - I: PRINT MEDIA

- 1.1 Origin, growth and development of the Print Media
- 1.2 Characteristics of Print Media
- 1.3 Role of Print Media
- 1.4 Functions and limitations of Print Media

UNIT - II: VISUAL COMMUNICATION

- 2.1 Meaning and Importance of visual communication
- 2.2 Forms of visual communication
- 2.3 Different visual materials for communication
 - Scope of their use in developmental communication
- 2.4 Principles underlying preparation of visual materials
- 2.5 Barriers of effective visual communication

UNIT - III: PRESS

3.1 Newspapers

3.1.1 Their role as mass media

3.1.2 Content and its selection

3.1.3 News and Features - responsible reporting, News stories, Turning news into Features

3.1.4 Editorials - Principles of editing

3.2 Magazines

3.2.1 Their role as mass media

3.2.1 Various types of magazines

3.3 Textbooks

3.4 Press and Public Relations

UNIT IV: GRAPHIC ARTS

4.1 Basic principles of Graphic Reproduction

4.2 Types of printing - Design and Layout

PRACTICALS:

1. Content analysis of newspaper and periodicals for development messages and type Of presentation.
2. TO KNOW printing press to get exposed to different types of printing.
3. Collect the Information about Graphic Art Layout

REFERENCES:

1. Agarwal Binod C.et.al (1989) : Communication revolution : A study of video penetration in India Mimeo, , Development and Educational Research Organization, Ahmedabad, India
2. Bhagat R. (1993): Role of Mass Media in developing rural women, women and Science, Indian Science Congress Association.
3. Bradley, Sarah Murray (1995) : How people use pictures. An amoted Bibliography and Review for development workers, London, U.K.
4. Chakravarty S. (1997): Press and Media : The global Dimensions. Kanishka Pub. New Delhi.
5. Kumar K. (1995): Media Education Communication Policy, Himalaya Pub. House, Bombay.
6. Mc Givney, Veronica and Murray Fravees (1991) : Adult Education in

Development, Methods and Approaches from Changing Societies, Leicester, U.K., National Institute of Adult and Continuing Education.

7. Mehta D.S. (1992) : Mass Communication and Journalism in India, Allied Pub. Ltd., New Delhi.
8. Modi Bella (1991) : Designing Messages for Developmental Communication, Sage Pub. , New Delhi.
9. Rayudu C.S. (1993) : Media & Communication Management , Himalay Pub. Bombay.
10. Roy G.L. (1991) Extension Communication Management, Naya Prakashan, Calcutta.
11. Srinivasan Lyra (1990) : Tool for community Participation - A Manual for Training , Trainers in participatory techniques, New York, PROWWESS / UNDP Technical Series Park Inc.
12. Zietlyn Jonathan (1980) : Low cost Printing for development, Inter mediate.
13. Mass Media in India (1994) ; Pub. Division , Ministry of Information and Broadcasting , Govt. of India.

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 6

MAJOR	GENERAL HOME SCIENCE				
SUBJECT;	CANTEEN MANAGEMENT				
PAPER NO.;	07B				
COURSE;	SE – 6				
CODE;	BHS6cm0SE67B				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES;

1. To Provide practical experience in actual management skill of canteen.
2. To Understand interior designing in canteen.
3. To understand the management principles of canteen.
4. To Develop management skill for entrepreneurship development.
5. To analyze the small scale industry and business related to canteen.

THEORY

Unit-1 Introduction of canteen management

- 1.1 Meaning and history of canteen
- 1.2 Essential steps of canteen management
- 1.3 Stages of canteen management: Planning, Organizing, Directing, Coordinating, Controlling, Evaluating

Unit- 2 Menu planning, food service, cost and serving balance in canteen Management

- 2.1 Introduction, Definition, Meaning and need of menu planning in canteen
- 2.2 Steps of menu planning in canteen preparation
- 2.3 Principles and types of menu planning in canteen management
- 2.4 Types of food service
- 2.5 Importance of food cost control
- 2.6 Factors affecting on food cost control

Unit – 3 Training and account keeping for helpers in canteen management

3.1 Meaning of training

3.2 Need of training for canteen management

3.3 Planning of training programmes for helpers

3.4 Aims and types of account keeping

Unit – 4 Interior decoration of canteen in relation to selection of --

Colour, Lighting, Music, Window curtains, Pictures, Table setting, Floor covering, Flower arrangement, Furniture, and Wall covering.

PRACTICALS:

1. Planning of your own college canteen for students. Allot various duties to the students in group, like cook, sanitary officers, accountant, cashier, pantry, purchaser, helpers etc. Write in systematic way.
2. Running your own college canteen for requirement.
(i.e. one day/three days/ one week)
3. Arrange table setting and prepare menu card for tea party/ buffet/ children party/ any other occasion.
4. Project work:
Visit to or collect information of Hostel/Hotel/Restaurant/Mess and prepare report in detail with: Area of the food institute, use of furnishing, menu card, furniture arrangement, staff and their duty (Cook, manager, receptionist, cashier, waiters, servants etc.), dress code for workers (if any), storage area, interior designing, accounting system, sanitation & hygiene, atmosphere of the food institute and other details, if any.

REFERENCES:

- 1) Malhan S & Sethi M.(Second edition 1993), Catering Management An Integrated Approach, New Delhi:Willey Eastern Limited
- 2) Kazarian E., Food Service Facilities Planning (Second Edition 1983), Van Nostrand Reinhold Company, Newyork.
- 3) Brain J. and Lenox M. Hotel Hostel and Hospital House Keeping(Second Edition, Reprint 1987) New Delhi : Gulab Vaziran; for Arnold Heinamann Publishers(India) Pvt. Ltd. 110029
- 4) Y.P. Singh, Effective Food Service Management (2002), New Delhi: Anmol Publications Pvt. Ltd.

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 6

MAJOR	GENERAL HOME SCIENCE				
SUBJECT;	WEAVING AND KNITTING				
PAPER NO.;	07C				
COURSE;	SE – 6				
CODE;	BHS6wakSE67C				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVE;

1. To develop ability to recognize different woven designs.
2. To develop ability to create different weaving and knitting samples.

THEORY

Unit: 1 Weaving

- 1.1 Introduction to weaving
- 1.2 Term used in weaving
- 1.3 Classification of weaves
 - i. Basic weaves (plain, rib, basket, twill, satin and sateen)
 - ii. Decorative weave (crape, leno, dobby, jacquard, pile, double cloth)

Unit: 2 Looms

- 2.1 Classification of loom
- 2.2 Handloom and power loom
- 2.3 Simple loom and its parts and working

Unit: 3 Knitting

- 3.1 Technology
- 3.2 Types of knits (flat, circular, finger, loop, lace and cable knitting)
- 3.3 Designing of knit

Unit: 4 Non Woven fabrics

- 4.1 Introduction
- 4.2 Non woven fabric forming techniques

PRACTICAL

- 1) Make samples of various plain weave and their derivatives
(With draft and peg plan-Rib and Basket weave)
- 2) Make samples of twill derivatives.
(Right hand, left hand, diamond and herring bone Twill)
- 3) Make a samples of satin and sateen.
- 4) Make a sample of two needle samples (any six)
- 5) Constructive article by using method like – Hand weaving, Knitting, Crochet and Macramé. (Any one)

RECOMMENDED READINGS

- 1) Wynne Andrea, (1997) MOTIVATE (Macmillan Texts for Industrial Vocational And Technical Education) Macmillan education Ltd.
- 2) RastogiMeenakshi (2009), Fibers and yarn, Sonali Publications, New Delhi
- 3) Dr.VeenaSamani-Introduction to Textile

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 6

MAJOR	FOOD & NUTRITION HOME SCIENCE				
SUBJECT;	PHYSIOLOGY				
PAPER NO.;	01				
COURSE;	CC – 19				
CODE;	BHS6phyC191X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

Objectives;

- Understanding the human physiology and scope of relevant issues
- Understand of different body system and its functions
- Understand alteration of structure and function of various organs and system in disease condition

Theory

Unit; - 1 Homeostasis

1 Concept of Homeostasis

2 Role of body system in maintaining Homeostasis

Unit; - 2 Digestion and absorption in the gastrointestinal tract

2.1 Digestion of various foods

- Carbohydrates
- Protein
- lipids

2.2 Absorption in large intestine and small intestine

Unit; - 3 Body temperature and temperature regulation

- Normal Body Temperature
- Heat Production And Heat Toss
- Regulation Of Body Temperature

Unit; - 4 Blood

4.1 Composition of Blood

4.2 Plasma, Plasma Protein and Its Functions

- 4.3 Blood Pressure and Factors Affecting To Blood Pressure
4, 4 Structure Of Heart Functional Tissue And Its Regulation

Unit;- 5 Nervous system

- 5.1 Types of Neuron
5.2 Transmission of Nerve Impulse in Nerve Fiber and Synapse

Unit; - 6 Modern methods of diagnosis

- X-Ray radiography
- Sonography
- Computed tomography or CAT
- Magnetic resonance imaging MRI
- Positron emission tomography
- Digital subtraction angiography
- Endoscopy

PRACTICAL;

- 1 Estimation of hemoglobin
- 2 Total counts of W.B.C. and R.B.C.
- 3 Differential count of W.B.C.
- 4 Measurement and comparison of blood pressure (After exercise and during rest)
- 5 Abnormalities of Urine
- 6 Measurement and comparison of body temperature and pulse rate (After exercise and during rest)
- 7 Report of lecture/visit to diagnostic center

REFERENCE BOOKS

1. Human physiology – C.C.Chatterjee
2. Human Physiology – Agrawal
3. Text book of Medical Physiology – Guyton
4. Essentials of Medical physiology- K. sembulingam, prema Sembulingam
Jaypee Brother Medical Publishers ltd
5. Essentials of Medical Physiology- Guyton sanders, Oxford University, London
6. Human Physiology-By C.B. Fox

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 6

MAJOR	FOOD & NUTRITION HOME SCIENCE				
SUBJECT;	FOOD SCIENCE – 2				
PAPER NO.;	02				
COURSE;	CC – 20				
CODE;	BHS6fs2C202X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES

- 1) To impart knowledge pertaining to the basic properties of food.
- 2) To provide basic understanding of principles behind food and also with processing Technology used for different foods.
- 3) Understand the application of science principles to experimental study of foods.
- 4) Develop food preparations and evaluate by sensory methods.
- 5) Select food to meet your requirements both in terms of food quality as well as cost.

Unit 1;-

Food acceptability

Appearance factor, kinesthetic factor and flavour factor judged by sensory organs

Unit 2;-

Sensory evaluation of food

Definition practical requirement for conducting sensory test classification of sensory methods difference test ranking test

Unit 3;-

Evaluation of food by objective methods

3.1 classification

3.2 objective methods for assessing food qualities such as chemical methods physico-chemical methods microscopical examination microbiological examination assessment of textural characteristic of course such as appearance colour volume wettability sand retention tenderness of foods rheology of foods .

Unit 4 :-

Colloidal system in foods

4.1 definitions difference between colloid suspension and solution

4.2 types of colloidal dispersion properties of colloidal dispersion

4.3 Dispersion of substance in food preparations

Practicals:-

- **Sensory evaluation of foods by difference test**

A) Paired comparison test

B) Triangle test

C) Duo-trio test

- **Sensory evaluation by rating test**

A) Ranking test

B) Two sample difference test

C) Multiple sample difference test

D) Hedonic test

E) Numerical scoring test

F) Composite scoring test

RECOMMENDED READINGS

1) N Shukuntala Manay, M. Sadaksharaswamy, "Foods –Facts and Principles.

2) M Swaminathan "Food Science and Experimental Food."

3) Peckham G C. "Foundation of Food Preparation" The Mcmillan Co. 1962

4) Norman P N "Food Science" The A V I Publishing Co. 1982

5) Charley H "Food Science" John Wiley and Sons 1982

6) Griswold RM "The Experimental Study of Foods" Houghtan Migglin Co. 1962

7) Lowe B "Experimental Cookery" John Wiley and Sons.1965

8) ANC-1 Nutrition for the Community- Practical manual Part-1 IGNOU.

9) ANC-04 IGNOU.

10) CCCD-02 IGNOU.

11) Srilaxmi- Food Science.

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 6

MAJOR	FOOD & NUTRITION HOME SCIENCE				
SUBJECT;	COMMUNITY HEALTH AND NUTRITION PROGRAM AND POLICES				
PAPER NO.;	03				
COURSE;	CC – 21				
CODE;	BHS6chnC213X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

Objective:

- To educate nutrition problem and planning
- To educate about nutritional implication
- To educate about Key Program in health and other sectors

Unit - 1

Nutrition Education Program Planning Implementation and Evaluation.

- Need for Nutrition and Health Education Programmes.
- Essentials of Nutrition and Education Planning.
- Planning and Implementation of Nutrition education Programme.
- Evaluation of Nutrition education Programmes

Unit - 2

National problems that are implications and related Nutrition Programmes

Etiology prevalence, clinical feature and strategies of

- Protein energy malnutrition
- Nutritional anaemia
- Vitamin A deficiency
- Iodine deficiency
- Zinc deficiency
- Obesity e
- Heart disease
- Diabetes

Unit - 3

National nutritional programmes

- Integrated Child Development Service (ICDS)

- Mid day Meal programme
- National Anemia Control Programme
- Vitamin A Prophylaxis programme
- Iodine deficiency Disorder Control Programme International nutritional programmes
- UNICEF
- Care
- National Institute of Nutrition(NIN)
- ICAR
- CFTRI
- ICMR

Unit - 4

Key Program in health and other sectors contributory to Nutrition

Objectives and key strategies

- National Rural Health Management (NRHM)
- National Urban Health Management(NUHM)
- Mamta Divas
- Total sanitation programme.

PRACTICALS;-

- Visit to ICDS programme
- Visit to midday meal programme
- Communication media useful in nutrition and health Education
- Leaflet
- pamphlet
- folder
- Poster
- Chart
- Script writing

RECOMMEDED READINGS

- •Gibson(1992) Principles of nutritional assessment, New York, Oxford University Press
- Gopalan C (1989) Combating undernutrition – Basic issues and practical approaches. New Delhi, Nutrition foundation of India
- Gopaldas T., Sheshadri S. (1989) Nutrition Monitoring and Assessment, New

- Delhi Oxford University Press.
- Jlliffee DB and Jelliffe EP (1980) Community Nutritional Assessment Oxford University Press New Delhi
- Food and Nutrition Board(1995) National Plan of Action on Nutrition,
- Department of Women and Child Development, Ministry of HRD, Govt of India
- IGNOU - DNE – 2 Block – 6
- IGNOU DNE -3 Block – 6
- IGNOU DNE -3 Block – 2
- IGNOU DNE -2 Block – 6
- IGNOU Public Health Nutrition
- Preventive and Social medicine by Park & Park 21st Edition

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 6

MAJOR	FOOD & NUTRITION HOME SCIENCE				
SUBJECT;	DITETICS -2				
PAPER NO.;	04				
COURSE;	CC – 22				
CODE;	BHS6dt2C224X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES;

- 1) To understand the applications of principles of diet therapy**
- 2) Plan and prepare diets for different diseases**
- 3) To understand and use functional foods in diet therapy**

Unit – 1,

Etiology, Diagnosis and Dietary Management of Patients With

1. Cardiovascular disease :

- Hypertension
- Atherosclerosis
- Bypass surgery and heart attack

2. Renal disorders

- Glomerulonephritis
- Nephrotic Syndrome
- Renal Failure
- Dialysis
- Renal Calculi

Unit – 2,

Dietary Management in Special Conditions

- Pre And Post Operative Patients
- Bone Disorders
- Allergy
- Burns
- Metabolic Disorders : Disease Of Adrenal Cortex, Thyroid, Parathyroid, Gout, Spontaneous Hypoglycemia, Phenylketonuria

Unit – 3,

Interactions between Drugs, Nutrients And Nutritional Status

Unit -4,

Prebiotics And Probiotics :

Introduction, Types, Role in Health and Disease,

Functional Characteristic and Applications

PRACTICALS;

1. Planning and preparation of diets for patients with

- Cardiovascular Disease --- A. Hypertension B. Atherosclerosis C. Heart Attack D. After Bypass Surgery
- Renal Disorders --- A. Acute Nephritis B. Chronic Renal Failure C. Dialysis D. Renal Calculi
- Metabolic Disorders--- A. Gout B. Hypothyroidism C. Spontaneous Hypoglycemia D. Phenylketonuria

2. List of Pre and Probiotic Foods.

RECOMMENDED READINGS

1. Anderson, Dibble, Tukki, Mitchell, Rynbergen – NUTRITION IN HEALTH AND DISEASE, 17TH Edi, J.B. Lippincott Co. USA.
2. B. Srilakshmi – DIETETICS, 3rd Edi, New Age International (P) Ltd. Publisher, New Delhi
3. Carol West Suitor, Merriyl Forbes, Crowley – Nutrition – Principles and application in Health Promotion, 2nd Edi J.E Lippincott Co. Philadelphia
4. Clifford R Anderson – MODERN WAYS TO HEALTH, Southern Publishing Association, Nashville Tennessee.
5. Corinne H Robinson, Marilyn R Lawler – Normal and Therapeutic Nutrition, 17th Edi Oxford and IBH Publishing Co., New Delhi
6. Dr. R. Kumar, Dr. Meenal Kumar – Guide To Healthy Living, Deep and Deep Publications Pvt. Ltd., New Delhi.
7. FOODS THAT HARM FOODS THAT HEAL Reader's Digest Association Ltd.,
8. F.P. Antia and Philip Abraham – Clinical Dietetics and Nutrition, 4th Edi, Oxford University Press, New Delhi
9. Kathleen Mahan, Sylvia Stamp – Food, Nutrition and Diet Therapy – 11th Edi, W.B. Saunders Co., Philadelphia

10. M. Swaminathan – ESSENTIALS OF FOODS AND NUTRITION, Bappco, Bangalore
11. Mini Sheth, Swati Parnami, Ruch Vaidya, Role of Prebiotics in Health and Diseases, Scietific Reports Series No. 8, UGC/DSA Program of F.N. Department, M.S. University, Baroda
12. Peggi S. Standfield and Y.H. Hui NUTRITION AND DIET THERAPY – SELF INSTRUCTIONAL MODULES, 4TH Edi W.B. Saunders Co., Philadelphia
13. Shubhangini A. Joshi – NUTRITION AND DIETITICS, TATA Mc Graw Hill Publishing Co., Ltd New Delhi
14. S.R. Williams – ESSENTIALS OF NUTRITION AND DIET THERAPY, 5TH Edi, Times Mirror / Mosby College Publishing, Boston.
15. SOME THERAPETUTIC DIETS, NIN, Hyderabad
16. Vaid B. M. - Diet Therapy, Saurashtra University
17. Vaid B. M. - Therapeutic Nutrition, Saurashtra University

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 6

MAJOR	FOOD & NUTRITION HOME SCIENCE				
SUBJECT;	FOOD ANALYSIS				
PAPER NO.;	05				
COURSE;	DSE – 11				
CODE;	BHS6fa0D115X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
	03	01	04	THEORY	PRACTICAL
				03	03
				06	

OBJECTIVES

1. To know the principles and applications of different techniques used in food and nutrition research
2. To gain knowledge about different instruments used
3. To enable the students to familiarize with different methods of investigation used in food analysis

Unit; - 1 - Sampling

- Sampling Techniques
- Preparation of sample
- Reporting results

Unit; - 2 - General methods of analysis of food

- Densitometry
- Food Rheology
- Viscosity
- pH Metry

Unit; - 3 - Separation technique

- Paper Chromatography
- Thin layer chromatography
- Gas liquid chromatography
- Electrophoresis

Unit; - 4 – Tracer techniques

- Use of radioactive isotopes in biology and medicine and food

Unit; - 5 principals operation and use of techniques

- **Colorimetry**
- **Flame photometry**
- **Fluorimetry**

Unit; - 6 to study different parts , structure , principal , working and use of Instrument

- Soxhlet apparatus , Oven , centrifuge machine , balances , water bath , Hot plate

PRACTICALS

1. Separation techniques for identification of amino acids or sugars

- Thin layer chromatography
- Paper Chromatography

2. Estimation in food

- Moisture
- Crude fiber
- Calcium
- Ascorbic acid

3. Analysis of

- Milk (Protein, fat, total solids)
- Fats and oils (Acid value, Saponification value, iodine value,)
- Honey (Reducing sugar)
- Tea (Tannin)
- Spices (Ash)
- Grains (Gluten content in wheat flour)
- Pulses
- Coffee
- Cold drinks/Soft drinks
- Butter
- h. cold drinks soft drinks

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 6

MAJOR	FOOD & NUTRITION HOME SCIENCE				
SUBJECT;	PUBLIC NUTRITION AND HEALTH CARE				
PAPER NO.;	06				
COURSE;	DSE – 12				
CODE;	BHS6pnhD126X				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

Objectives;

- To Orient Students to the basic principles of public nutrition.
- To gain skills in planning and conducting NHC projects.

Theory

Unit - 1

Concept and Scope of Public nutrition.

- Definition and multi disciplinary nature of public nutrition
- Concept and scope.
- Role of public nutritionist

Unit - 2

Health Care of the community

- Concept of health care.
- Different levels of Healthcare.
- Health care services at different levels.

Unit - 3

Public Nutrition and Health Education

Objectives, Principles and Need of Public Nutrition and Health Education

Unit - 4

Themes and Messages in Nutrition and Health Education

- Themes in nutrition education

Nutrition during school age, adolescence, adulthood and old age

- Themes in health education

Preventing and Treating common sickness and problems. Messages in nutrition and health education

- Messages in nutrition education
- Messages in health education
- How to improve relevance and effectiveness of a message.

Practicals;

1. Planning and preparation of snacks for
 - Protein energy malnutrition
 - Vitamin A deficiency
 - nutritional anemia
 - calcium deficiency
2. Prepare messages to educate the community by making different messages on nutrition and health for vulnerable groups; pregnant women, lactating women, infant, adolescence and old age
3. Visit to any National program or organization working on nutrition and Health

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 6

MAJOR	FOOD & NUTRITION HOME SCIENCE				
SUBJECT;	FOOD SERVICES AND FANCY COOKERY				
PAPER NO.;	07A				
COURSE;	SE – 6				
CODE;	BHS6fsfSE67A				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

Objective;

- To know different methods of cooking
- To know about ingredient
- To know about continental cooking & serving

Unit - 1.

- Purpose of cooking food
- Importance of spices in Indian cookery
- Beverages classification and functions.

Unit - 2

Cooking Material

- Foundation Ingredients
- Fat
- Raising agent
- Egg
- Salt
- Liquid
- Flavoring and seasoning agent
- Thickening agent

Unit - 3

Changes during Cooking

- Cellulose and Peptic substance; water content , carbohydrates
- Loss of Nutrients during cooking; mechanical loss, solvent action of water,
- oxidation and chemical composition

- Effect of cooking on pigments.

Unit - 4

Planning of Meals

- History of Menu
- Factors affecting menu planning
- Types of Menu planning

Practicals;

Planning, Preparing and Serving any two of the following dishes

- Indian dishes
- Chinese dishes
- Continental dishes
- Italian dishes

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 6

MAJOR	FOOD & NUTRITION HOME SCIENCE				
SUBJECT;	CANTEEN MANAGEMENT				
PAPER NO.;	07B				
COURSE;	SE – 6				
CODE;	BHS6cm0SE67B				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

OBJECTIVES

To enables students

1. To Provide practical experience in actual management skill of canteen.
2. To Understand interior designing in canteen.
3. To understand the management principles of canteen.
4. To Develop management skill for entrepreneurship development.
5. To analyze the small scale industry and business related to canteen.

THEORY

Unit-1 Introduction of canteen management

1.1 Meaning and history of canteen

1.2 Essential steps of canteen management

1.3 Stages of canteen management: Planning, Organizing, Directing, Coordinating, Controlling, Evaluating

Unit- 2 Menu planning, food service, cost and serving balance in canteen management

2.1 Introduction, Definition, Meaning and need of menu planning in canteen

2.2 Steps of menu planning in canteen preparation

2.3 Principles and types of menu planning in canteen management

2.4 Types of food service

2.5 Importance of food cost control

2.6 Factors affecting on food cost control

Unit – 3 Training and account keeping for helpers in canteen management

3.1 Meaning of training

3.2 Need of training for canteen management

3.3 Planning of training programmes for helpers

3.4 Aims and types of account keeping

Unit – 4 Interior decoration of canteen in relation to selection of --

Colour, Lighting, Music, Window curtains, Pictures, Table setting, Floor covering, Flower arrangement, Furniture, and Wall covering.

PRACTICALS:

1. Planning of your own college canteen for students. Allot various duties to the students in group, like cook, sanitary officers, accountant, cashier, pantry, purchaser, helpers etc. Write in systematic way.
2. Running your own college canteen for requirement. (i.e. one day/three days/ one week)
3. Arrange table setting and prepare menu card for tea party/ buffet/ children party/ any other occasion.
4. Project work:

Visit to or collect information of Hostel/Hotel/Restaurant/Mess and prepare report in detail with: Area of the food institute, use of furnishing, menu card, furniture arrangement, staff and their duty (Cook, manager, receptionist, cashier, waiters, servants etc.), dress code for workers (if any), storage area, interior designing, accounting system, sanitation & hygiene, atmosphere of the food institute and other details, if any.

References:

- 1) Malhan S & Sethi M.(Second edition 1993), Catering Management An Integrated Approach, New Delhi:Willey Eastern Limited
- 2) Kazarian E., Food Service Facilities Planning (Second Edition 1983), Van Nostrand Reinhold Company, Newyork.
- 3) Brain J. and Lenox M. Hotel Hostel and Hospital House Keeping(Second Edition, Reprint 1987) New Delhi : Gulab Vaziran; for Arnold Heinamann Publishers(India) Pvt. Ltd. 110029
- 4) Y.P. Singh, Effective Food Service Management (2002), New Delhi: Anmol Publications Pvt. Ltd.

T. Y. B. Sc. (HOME SCIENCE) SEMESTER – 6

MAJOR	FOOD & NUTRITION HOME SCIENCE				
SUBJECT;	BAKERY SCIENCE				
PAPER NO.;	07C				
COURSE;	SE – 6				
CODE;	BHS6bs0SE67C				
CREDITS;	THEORY	PRACTICAL	TOTAL	TOTAL CONTACT HRS	
				THEORY	PRACTICAL
	03	01	04	03	03
				06	

Objectives

- To know about baking
- To know about baking technique

Unit 1 Introduction

A) Properties and functions of basic ingredients used in baked goods

- Flour
- Eggs
- Moisturizing agents (milk, water, buttermilk)
- Baking fats
- Sugar
- Leavening agents (yeast, baking powder)
- Other raw ingredients (essence, color, fruits, dry fruits)

B) Scales and measurement used in bakery making

- Use of weighing scale
- Measuring cups
- Measuring glass
- Measuring spoon

Unit 2 Bread making

- Raw material used
- Different methods of bread making

- Characteristics of bread
- Problems in bread making

Unit 3 Biscuits and cookies making

- Raw material used
- Different methods of preparation
- Characteristics of biscuits and cookies
- Problems in biscuits and cookies making

Unit 4 Cake making

- Raw material used
- Different methods of preparation
- Characteristics of cakes
- Problems in cake making

Practical

Making of any two types of

1. **Bread**
2. **Cookies**
3. **Biscuit**
4. **Cakes**

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Theory Paper Style for B.Sc. Home Science

કુલ ગુણ : - ૫૦	કુલ ગુણ :- ૩૫
સમય:- ૨.૦૦ કલાક	સમય :- ૧.૫ કલાક
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