

SEMESTER II
FOOD & NUTRITION

Saurashtra University Rajkot
First Year Bachelor of Home Science – Major: Food and Nutrition
SEMESTER - 2

PAPER NO.	COURSE	SUBJECTS	CREDIT			TOTAL HRS.	MARKS				EXAM DURATION	
			Theory	Practical	Total		CCE	PM	SEE	TM	Theory	Practical
1	Major Core Course CC3	FN P-1 Fundamentals of Food and Nutrition II	3	1	4	5	25	25	50	100	2.5 H	3 H
2	Major Core Course CC4	FN P-2 Food Packaging and Labeling	3	1	4	5	25	25	50	100	2.5 H	3 H
3	Minor Core Course MC2 Choose any one from the basket	Fundamentals of Clothing and Textile II	3	1	4	5	25	25	50	100	2.5 H	3 H
		Child Psychology	3	1	4	5	25	25	50	100	2.5 H	3 H
		Introduction of Home Management	3	1	4	5	25	25	50	100	2.5 H	3 H
		Heritage of Gujarat	3	1	4	5	25	25	50	100	2.5 H	3 H
4	Multi Disciplinary Course MD 2 Choose any one from the basket	Biology - II	3	1	4	5	25	25	50	100	2.5 H	3 H
		Introduction to Sociology - II	3	1	4	5	25	25	50	100	2.5 H	3 H
		Microbiolog.	3	1	4	5	25	25	50	100	2.5 H	3 H
5	Ability Enhancement AEC 2 Choose any one from the basket	Community Development and Extension	2	--	2	2	25	---	25	50	2 H	---
		Public Speaking	2	--	2	2	25	---	25	50	2 H	---
		English II	2	--	2	2	25	---	25	50	2 H	---
6	Skill Enhancement Course SEC 2 Choose any one from the basket	Bakery Science	2	--	2	2	25	---	25	50	2 H	---
		Stress Management -II	2	--	2	2	25	---	25	50	2 H	---
		Foreign Language - French	2	--	2	2	25	---	25	50	2 H	---
7	Value Added Course VAC 1 Choose any one from the basket	Environment Science	2	--	2	2	25	---	25	50	2 H	---
		NCC - I	2	--	2	2	25	---	25	50	2 H	---
		NSS – I	2	--	2	2	25	---	25	50	2 H	---
TOTAL			18	4	22	26	175	100	275	550		

B. Sc (HOME SCIENCE)				
YEAR	I	FUNDAMENTALS OF FOOD AND NUTRITION - II MAJOR CORE COURSE CC3 PAPER NO. 1	CREDIT	04 (03+01)
SEMESTER	II		HOURS/ WK	05 (03+02)
Total Marks: 100		Internal: 25	Theory: 50	Practical: 25

1. Course Outcomes દરેક વિષયની શરૂઆતમાં દર્શાવેલ છે? હા
2. Employability/Entrepreneurship/Skill Development પર કેન્દ્રિત થયેલ છે કે નહિ? હા
3. Value added Courses Imparting Transferable and Life Skills ના ગુણો ધરાવે છે? હા
4. Major ☒ Minor ☐ Skill Enhancement Courses ☐
Ability Enhancement Courses ☐ Value Added Courses ☐ Exit/ Vocational Courses ☐
5. Holistic Education ☐ Multidisciplinary ☐ Interdisciplinary ☐
6. દિવ્યાંગ માટે વિષય અંતર્ગત આનુસંગિક જોગવાઈ કરાયેલ છે ? ના
7. New India Literacy Programme (NILP) મુજબનો વિષય છે? હા
8. Swaam પ્લેટફોર્મ પરના MOOC વિષય પર આધારિત આ વિષય છે? ના
9. ઇન્ડિયનનોલેજસીસ્ટમ (IKS) પર આધારિત વિષય છે? ના

B. Sc (HOME SCIENCE)					
YEAR	I	FUNDAMENTALS OF FOOD AND NUTRITION - II MAJOR CORE COURSE CC3 PAPER NO. 1		CREDIT	04 (03+01)
SEMESTER	II			HOURS/ WK	05 (03+02)
Total Marks: 100		Internal: 25	Theory: 50	Practical: 25	
OBJECTIVES		1. The course enables the students to understand the role of various micronutrients and the effects 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 4. To develop the ability to improve the nutritional value of food.			
LEARNING OUTCOMES		Knowledge on nutrients, their sources, functions and selection of foods to avoid deficiency or excess of nutrients, and learning to select recipes rich in different nutrients and calculating their nutritional content – all these lay a foundation for a career in Nutrition and Dietetics.			
COURSE CONTENT: THEORY					
UNIT - I		The basic five food groups			
		• Cereals and Breads • Protein foods • Protective Vegetables and Fruits & Vitamin C rich Vegetables and Fruits • Other Vegetables and Fruits • Oils, Fats, Sugars			

UNIT – II	Micro nutrients: Classification, sources, functions, RDA, deficiency and excess (in brief)
	• Vitamins – Fat soluble vitamins A, D, E, K Water soluble vitamin C and B-Complex • Minerals _ Calcium, phosphorus, magnesium, sodium, potassium, chlorine, iron, fluorine, iodine, copper, selenium, zinc
UNIT – III	Water
	Sources, water balance and requirement
UNIT – IV	Basic terminology used in food preparation
	• Pre-preparation – Peeling, scraping, paring, cutting, grating, steeping, centrifuging, emulsification, homogenization, germination, fermentation • Mixing terms – Beating, blending, cutting in, creaming, folding in
UNIT – V	Methods of food preparation
	• Boiling • Pressure cooking • Stewing • Poaching • Brewing • Braising • Solar cooking • Baking • Frying • Microwave cooking • Steaming • Roasting • Puffing
PRACTICALS	
1	Make a list of sources of micronutrients and their content per 100 g food source
2	Preparation of following recipes rich in (One each) • Vitamin A • Vitamin C • Vitamin B₁ • Vitamin B₂ • Vitamin B₃ • Folic acid • Calcium • Iron
3	Preparing recipes using different methods of cooking (One each) • Boiling • Pressure cooking • Steaming • Solar cooking • Baking • Frying - Deep frying, Shallow frying
REFERENCES	
1	S.R.Mudambi and M..Rajagopal (2007) Fundamentals of Foods, Nutrition and Diet Therapy, New Age International Publishers

2	Neelam Buddhdev, Bhavana Vaid (2004) Fundamentals of Foods and Nutrition, Pravin Prakashan
3	R. Rajlaxmi (1978) PrayuktaPoshan, University GranthNirman Board, Gujarat
4	Thangam E. Philip (1984) Modern Cookery - Vol. I Orient Longman Limited
5	M. Swaminathan (1979) Food Science and Experimental Foods, Ganesh and Co., Madras
6	F.P. Antia (1982) Clinical Dietetics and Nutrition, Oxford University Press
7	Swaminathan M (2000). Advanced Textbook on Foods and Nutrition, Vol I (2 nd ed.). Bangalore Printing and Publishing Ltd, Bangalore
8	Swaminathan M (2008). Essentials of Foods and Nutrition, Vol II. BAPPCO
9	B. Srilakshmi (2006) Nutrition Science, New Age International Publishers

B. Sc (HOME SCIENCE)				
YEAR	I	FOOD PACKAGING AND LABELLING	CREDIT	04 (03+01)
SEMESTER	II		HOURS/ WK	05 (03+02)
Total Marks: 100		Internal: 25	Theory: 50	Practical: 25

1. Course Outcomes દરેક વિષયની શરૂઆતમાં દર્શાવેલ છે? હા
2. Employability/Entrepreneurship/Skill Development પર કેન્દ્રિત થયેલ છે કે નહિ? હા
3. Value added Courses Imparting Transferable and Life Skills ના ગુણો ધરાવે છે? હા
4. Major ☒ Minor ☐ Skill Enhancement Courses ☐
Ability Enhancement Courses ☐ Value Added Courses ☐ Exit/ Vocational Courses ☐
5. Holistic Education ☐ Multidisciplinary ☐ Interdisciplinary ☐
6. દિવ્યાંગ માટે વિષય અંતર્ગત આનુસંગિક જોગવાઈ કરાયેલ છે ? ના
7. New India Literacy Programme (NILP) મુજબનો વિષય છે? હા
8. SwaShram પ્લેટફોર્મ પરના MOOC વિષય પર આધારિત આ વિષય છે? ના
9. ઇન્ડિયનનોલેજસીસ્ટમ (IKS) પર આધારિત વિષય છે? ના

B. Sc (HOME SCIENCE)					
YEAR	I	FOOD PACKAGING AND LABELLING		CREDIT	04 (03+01)
SEMESTER	II	MAJOR CORE COURSE CC4 PAPER NO. 2		HOURS/ WK	05 (03+01)
Total Marks: 100		Internal: 25	Theory: 50	Practical: 25	
OBJECTIVES		1. To make the students understand the importance of food fortification. 2. To gain knowledge of food packaging and convenience food 3. To orient students to food safety laws and standards 4. Know different packaging materials available			
LEARNING OUTCOMES		Students will gain knowledge on different types of packed foods available in market and gain knowledge of marketing of new foods and preservation principles - all these lay a foundation for a career in food industry and knowledge for starting new food packaging and processing industries.			
COURSE CONTENT: THEORY					
UNIT - I		Food Packaging			
		• Types and importance of food packaging • Material used for packaging • Qualities of packaging materials			
UNIT - II		Food Fortification			
		• Purpose and meaning of food fortification • Different fortified foods available in market			
UNIT - III		Food additives			
		• Meaning of food additives • Types of food additives			

UNIT – IV	Food safety laws and food standards
UNIT – V	Food adulteration
PRACTICALS	
1	Preparation of labeling and packing
2	Market survey of any ten fortified foods
3	Market survey of any ten foods in which food additives are used
4	Food adulteration testing of any ten foods
REFERENCES	
1	Sacharow S. and Grittin R (1980) Principals of Food packaging- AV Publication Co.
2	Briston and Neil: Packaging Management Government Press.
3	Roberston G.L. (1193) Food Packing: Principles and practice, marcel Dekker New-York.
4	Personal selling and Salesmanship, F.Y. B.Com. , C. Jamnadas & Co.
5	Marketing Management-1 BBA, Sem-3, B-6 Sham Prakashan

B. Sc (HOME SCIENCE)				
YEAR	I	INTRODUCTION TO HOME MANAGEMENT MINOR COURSE MC2 PAPER NO. 3	CREDIT	04 (03+01)
SEMESTER	II		HOURS/ WK	05 (03+02)
Total Marks: 100	Internal: 25	Theory: 50	Practical: 25	

1. Course Outcomes દરેક વિષયની શરૂઆતમાં દર્શાવેલ છે? હા
2. Employability/Entrepreneurship/Skill Development પર કેન્દ્રિત થયેલ છે કે નહિ? હા
3. Value added Courses Imparting Transferable and Life Skills ના ગુણો ધરાવે છે? હા
4. Major ☐ Minor ☒ Skill Enhancement Courses ☐
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5. Holistic Education ☐ Multidisciplinary ☐ Interdisciplinary ☐
6. દિવ્યાંગ માટે વિષય અંતર્ગત આનુસંગિક જોગવાઈ કરાયેલ છે ? ના
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8. Swadram પ્લેટફોર્મ પરના MOOC વિષય પર આધારિત આ વિષય છે? ના
9. ઇન્ડિયનનોલેજસીસ્ટમ (IKS) પર આધારિત વિષય છે? ના

B. Sc (HOME SCIENCE)				
YEAR	I	INTRODUCTION TO HOME MANAGEMENT MINOR COURSE MC2 PAPER NO. 3	CREDIT	04 (03+01)
SEMESTER	II		HOURS/ WK	05 (03+02)
Total Marks: 100		Internal: 25	Theory: 50	Practical: 25
OBJECTIVES		1. To know about factors involved in Home Management. 2. To create an awareness among the students about management in the family as well. 3. To recognize the role and responsibility of home makers		
LEARNING OUTCOMES		<u>On completion of this course, the students will be able to:</u> 1. Learn Home Management process 2. Identify fatigue and its solution 3. Effectively manage and plan home with management		
COURSE CONTENT: THEORY				
UNIT – I		Introduction to Home Management		
		• Introduction to home management • Meaning and definition of home management • Importance of home management • Scope in home management • Principles of home management • Aims of home management		
UNIT – II		Administrator of home		
		• Introduction • Qualities of Administrator/home maker		

UNIT – III	Role and responsibilities of administrator
	• Introduction • Responsibilities of administrator/home maker
UNIT – IV	Fatigue
	• Introduction • Types of fatigue • Ways to manage fatigue
PRACTICALS	
1	Prepare one day time plan for yourself
2	Self SWOT analysis – who am I?
3	Give some suggestions to manage physical and mental fatigue
REFERENCES	
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.
4.	ઠક્કર, એમ. પુજારા જે., (૨૦૦૧) "ગૃહવ્યવસ્થાનો પરિચય" પ્રવિણ પ્રકાશન, રાજકોટ
5	ગંડોત્રા, વી., મઝુમદાર જે. (૨૦૦૭) "ગૃહવ્યવસ્થાપન" અનડા બુક ડીપો, અમદાવાદ
6	Ranpara.J.(2023) "Fundamentals of Resource Management", Rajkot

B. Sc. (HOME SCIENCE)				
YEAR	I	BIOLOGY – II	CREDIT	04 (03+01)
SEMESTER	II		MULTIDISCIPLINARY COURSE MD 2	HOURS/ WK
		PAPER 4		
Total Marks: 100		Internal: 25	Theory: 50	Practical: 25

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3. Value added Courses Imparting Transferable and Life Skills ના ગુણો ધરાવે છે? હા
4. Major ☐ Minor ☐ Skill Enhancement Courses ☐
Ability Enhancement Courses ☐ Value Added Courses ☐ Exit/ Vocational Courses ☐
5. Holistic Education ☐ Multidisciplinary ☒ Interdisciplinary ☐
6. દિવ્યાંગ માટે વિષય અંતર્ગત આનુસંગિક જોગવાઈ કરાયેલ છે ? ના
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B. Sc. (HOME SCIENCE)					
YEAR	I	BIOLOGY - II		CREDIT	04 (03+01)
SEMESTER	II	MULTIDISCIPLINARY COURSE MD 2 PAPER 4		HOURS/ WK	05 (03+02)
Total Marks: 100		Internal: 25	Theory: 50	Practical: 25	
OBJECTIVES		This course will enable student to understand general structure and functions of various systems in human body			
LEARNING OUTCOMES:		Better understanding of human body for future carrier options.			
COURSE CONTENT: THEORY					
UNIT - I		Skeleton System			
		• Functions of skeletal system • Different Bones • Types of Joints & their functions			
UNIT - II		Circulatory System			
		• Composition & functions of blood • Structure of Heart & its function			
UNIT - III		Nervous System			
		• Central nervous System, different parts of Brain & its function. • Spinal cord & Reflex arch • General studies of all sensory organs			
UNIT - IV		Endocrine Glands			
		• Hormones & function of. Pituitary Gland, Thyroid gland, Para Thyroid Gland, Adrenal Gland, Pancreas, Testis & Ovary			
UNIT - V		Reproductive System			
		• Male & female reproductive system			

- Menstruation, puberty and menopause

PRACTICALS

- 1 Demonstration and preparation of stained fresh blood smear and identification of blood cell
- 2 Identification of different bones of human skeleton
- 3 Identification of different organ and its function - Reproductive system of female
- 4 Identification of different organ and its function - Reproductive system of male
- 5 To study structure of Heart & its functions
- 6 To study different parts of brain and its function

REFERENCES

- 1 An introduction to Biology by A.R.Chavan
- 2 Jivvignan By S.N. Parikh
- 3 Outline of Botany by J F Almida and D.D. Mulan
- 4 A modern Introduction to Zoology by C.J. George

B. Sc (HOME SCIENCE)				
YEAR	I	COMMUNITY DEVELOPMENT AND EXTENSION ABILITY ENHANCEMENT COURSE AEC 2 PAPER NO. 5	CREDIT	02 (02+00)
SEMESTER	II		HOURS/ WK	02 (02+00)
Total Marks: 50		Internal: 25	Theory: 25	Practical: ---

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4. Major ☐ Minor ☐ Skill Enhancement Courses ☐
Ability Enhancement Courses ☒ Value Added Courses ☐ Exit/ Vocational Courses ☐
5. Holistic Education ☐ Multidisciplinary ☐ Interdisciplinary ☐
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7. New India Literacy Programme (NILP) મુજબનો વિષય છે? હા
8. Swaam પ્લેટફોર્મ પરના MOOC વિષય પર આધારિત આ વિષય છે? ના
9. ઇન્ડિયનનોલેજસીસ્ટમ (IKS) પર આધારિત વિષય છે? ના

B. Sc (HOME SCIENCE)					
YEAR	I	COMMUNITY DEVELOPMENT AND EXTENSION		CREDIT	02 (02+00)
SEMESTER	II	ABILITY ENHANCEMENT COURSE AEC 2 PAPER NO. 5		HOURS/ WK	02 (02+00)
Total Marks: 50		Internal: 25	Theory: 25	Practical: ---	
OBJECTIVES		1. Make students aware of the approaches to development 2. Understand the existing support structure for development 3. Understand the role of Non Government Organization in community			
LEARNING OUTCOMES		1. Students can get an opportunity in any demonstrative programme for community development. 2. Students can get an opportunity in any self employed activities which are run by NGOs. 3. To start self help groups and financial accruals can be made. 4. 4. Students with knowledge can be absorbed in government projects.			
COURSE CONTENT: THEORY					
UNIT I		Community Development			
		• Definition, Types, Planning - large scale - central level planning, small scale - local level planning • The purposes of community development, Process of community development • Extension Education and importance of extension			
UNIT II		Community Development in India			
		• Evolution of community development in India since independence • Structure and function of community development at different levels			
UNIT III		Home Science and community development			
		• Scope of Home Science Extension for meaningful participation in community development in India			

UNIT IV	Support structures and their functions
	• Central Social Welfare Board • State social Welfare Board • National level voluntary agencies such as SEWA, KVIC
UNIT V	Community Development Programme Approaches
	• Minimum needs • Integrated • Area Development Programmes • Multipurpose • Antyodaya approach (Sevagram Project) • Target group (Employment for the Unemployed) • Participatory approach/ Growth development approach
REFERENCES	
1	Dhama O.P. Bhatnagar O.P., Extension and Communication for Development Second Edition, Oxford and IBH Publishing Co. Pvt. Ltd. New Delhi
2	Ray G.L. Extension Communication and Management Oxford and IBH Publishing
3	Sandhu A., Extension Programme Planning Oxford and IBH Publishing
4	Sharma S.R. New Perspective on Extension Education, Book Enclave, Jaipur
5	Waghmare S.K. Teaching Extension Education Prashant Publisher V.V.Nagar , Gujarat

B. Sc (HOME SCIENCE)				
YEAR	I	BAKERY SCIENCE	CREDIT	02 (02+00)
SEMESTER	II		HOURS/ WK	02 (02+00)
Total Marks: 50		Internal: 25	Theory: 25	Practical: ---
SKILL ENHANCEMENT COURSE SEC 2 PAPER NO. 6				

- Course Outcomes દરેક વિષયની શરૂઆતમાં દર્શાવેલ છે? હા
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- Value added Courses Imparting Transferable and Life Skills ના ગુણો ધરાવે છે? હા
- Major ☐ Minor ☐ Skill Enhancement Courses ☒
Ability Enhancement Courses ☐ Value Added Courses ☐ Exit/ Vocational Courses ☐
- Holistic Education ☐ Multidisciplinary ☐ Interdisciplinary ☐
- દિવ્યાંગ માટે વિષય અંતર્ગત આનુસંગિક જોગવાઈ કરાયેલ છે ? ના
- New India Literacy Programme (NILP) મુજબનો વિષય છે? હા
- SwaShram પ્લેટફોર્મ પરના MOOC વિષય પર આધારિત આ વિષય છે? ના
- ઇન્ડિયનનોલેજસીસ્ટમ (IKS) પર આધારિત વિષય છે? ના

B. Sc (HOME SCIENCE)					
YEAR	I	BAKERY SCIENCE		CREDIT	02 (02+00)
SEMESTER	II	SKILL ENHANCEMENT COURSE SEC 2 PAPER NO. 6		HOURS/ WK	02 (02+00)
Total Marks: 50		Internal: 25	Theory: 25	Practical: ---	
OBJECTIVES		1. Understand basic concepts of baking. 2. To provide avenues for self employment. 3. To provide trained professionals in commercial units.			
LEARNING OUTCOMES		By learning this course students have opportunity to open their own bakery unit and they have job opportunity in commercial units of bakery.			
COURSE CONTENT: THEORY					
UNIT I		Basic concepts of Bakery - Importance of bakery industry. - Importance of health & hygiene in bakery industry.			
UNIT II		Basic Ingredients used for bakery items. - Ingredients used for bakery items- Refined flour, leavening agents, salt, sugar, fat, eggs, moisturising agents, liquids, improvers and preservatives. - Points to be considered while making bakery items.			
UNIT III		Common bakery faults and corrective measures for various bakery products.			
UNIT IV		Bakery equipments – Types, Selection, Operations and maintenance			
UNIT V		Practical Training in Baking of - Cake - Biscuits – Sweets & Namkin			

	3. Nankhatai / Cookies
	4. Brawny
REFERENCES	
1	Dubey, S.C. (2007). Basic Baking 5 th Ed. Chanakya Mudrak Pvt. Ltd. Raina et.al. (2010). Basic food preparation-A Complete Manual. 4th Ed. Orient Black Swan Ltd.
2	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.
3	Dr Keshav Kamaliya (2010) Bakery Vignan & Udhog.
4	Bakery Vangioni Banavat – Hand book by Junagadh Krushi University, Junagadh.

B. Sc (HOME SCIENCE)				
YEAR	I	ENVIRONMENT SCIENCE	CREDIT	02 (02+00)
SEMESTER	II		HOURS/ WK	02 (02+00)
Total Marks: 50		Internal: 25	Theory: 25	Practical: ---
		VALUE ADDED COURSE VAC1 PAPER NO. 7		

1. Course Outcomes દરેક વિષયની શરૂઆતમાં દર્શાવેલ છે? હા
2. Employability/Entrepreneurship/Skill Development પર કેન્દ્રિત થયેલ છે કે નહિ? હા
3. Value added Courses Imparting Transferable and Life Skills ના ગુણો ધરાવે છે? હા
4. Major ☐ Minor ☐ Skill Enhancement Courses ☐
Ability Enhancement Courses ☐ Value Added Courses ☒ Exit/ Vocational Courses ☐
5. Holistic Education ☐ Multidisciplinary ☐ Interdisciplinary ☐
6. દિવ્યાંગ માટે વિષય અંતર્ગત આનુસંગિક જોગવાઈ કરાયેલ છે ? ના
7. New India Literacy Programme (NILP) મુજબનો વિષય છે? હા
8. SwaShram પ્લેટફોર્મ પરના MOOC વિષય પર આધારિત આ વિષય છે? ના
9. ઇન્ડિયનનોલેજસીસ્ટમ (IKS) પર આધારિત વિષય છે? ના

9. ପରିବେଶ ବିଜ୍ଞାନ (Environment Science) ଏବଂ ପ୍ରାକୃତିକ ସମ୍ବଳ (Natural Resources)

B. Sc (HOME SCIENCE)					
YEAR	I	ENVIRONMENT SCIENCE		CREDIT	02 (02+00)
SEMESTER	II	VALUE ADDED COURSE VAC1 PAPER NO. 7		HOURS/ WK	02 (02+00)
Total Marks: 50		Internal: 25	Theory: 25	Practical: ---	
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			
LEARNING OUTCOMES		1. Students will be aware about environment conservation and protection 2. Students will learn about laws and policies 3. students will be aware about role of our religion in environment protection			
COURSE CONTENT: THEORY					
UNIT - I		Environmental Science & Ecosystem - Scope and Importance			
		• Introduction • Definition and Types of Environment • Components of Environment • Types of Ecosystems • Food Chain and Food Web • Carbon, nitrogen, Oxygen Cycle			

UNIT - II	Natural Resources
	• Introduction • Classification of natural resources renewable and non renewable • Principal Natural Resources and their associated problems and conservation in brief • Forest, Water, Mineral, Food, Energy and Land Resources
UNIT - III	Environmental Pollution
	• Introduction • Types, Causes, Effects and Control of Air, Water, Soil, Noise Pollution • Human Interference of Environment and Public Awareness • Social Issues and Environment • Global Warming, Green House Effect, Depletion of Ozone layer
UNIT - IV	Biodiversity and Sustainable Development
	• Importance of Biodiversity • Threats to Biodiversity • Role of Indian and other religions and cultures in environmental Conservation and sustainable development
UNIT - V	Environment Protection Movements in India
	• Chipko, Silent Valley, Bishnois of Rajasthan, Narmada Bachao, Appiko Movement, Tehri Dam Conflict, Jungle Bachao Andolan
REFERENCES	
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2	Chetan Singh Mehta (2000), Environmental Protection and the Law, New Delhi: Ashish Publishing house.
3	M.H.Tyagi (2005), Global Environmental issues Jaipur: Raj Publishing House
4	Williams Melvin, Nutrition for health, fitness and sports, 2004 Mc Graw Hill.
5	Joshi AS, Nutrition and Dietetics 2010, Tata Mc. Graw Hill
6	પર્યાવરણસાથી- સેન્ટર ફોર એન્વાયર્નમેન્ટ એજ્યુકેશન) CEE Ahmedabad)