



C. U. Shah University, Wadhwan City
Faculty of Computer Science
Name of Program: Bachelor of Science in Information Technology
(B.Sc.IT)
Semester : II
W.e.f. June – 2016
Teaching & Evaluation Scheme

Sr. No	Subject Code	Subject Name	Teaching Hours/Week				Credits	Evaluation Scheme/Semester							
			Th	Tu	Pr	Total		Theory				Practical			Total Marks
								Sessional Exam		University Exam		Internal		Uni.	
								Marks	Hrs	Marks	Hrs	Pr	TW	Pr	
6	4CS02IEH2	Environmental Science and Health Aspects Awareness	-	2	-	2	1	-	-	-	-	-	50	-	50

Objectives: The importance of environmental science and environmental studies cannot be disputed. The need for sustainable development is a key to the future of mankind. Continuing problems of pollution, loss of forest, solid waste disposal, degradation of environment, issues like economic productivity and national security, Global warming, the depletion of ozone layer and loss of biodiversity have made everyone aware of environmental issues. It is clear that no citizen of the earth can afford to be ignorant of environment issues. Environmental management has captured the attention of health care managers. Managing environmental hazards has become very important.

Ch. No	Chapter Name	Course Contents	Lect. Hours
1	Multidisciplinary nature of environmental studies	Definition, scope and importance, need for public awareness	2
2	Natural Resources : Renewable and non-renewable resources	Natural resources and associated problems. a) Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forest and tribal people. b) Water resources : Use and over-utilization of surface and ground water, floods, drought, conflicts over water c) Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies. d) Food resources : World food problems, changes caused by agriculture and over-grazing, effects of modern agriculture, e) Energy resources : Growing energy needs, renewable and non renewable energy sources, f) Land resources: Land as a resource, land degradation, man induced landslides,. • Role of an individual in conservation of natural resources.	5
3	Ecosystems	• Concept of an ecosystem. • Structure and function of an ecosystem. • Producers, consumers and decomposers. • Energy flow in the ecosystem. • Ecological succession. • Food chains, food webs and ecological pyramids. • Introduction, types, characteristic	5

		features, structure and function of the following ecosystems :- a. Forest ecosystem b. Grassland ecosystem c. Desert ecosystem d. Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)	
4	Biodiversity and its conservation	Introduction – Definition : genetic, species and ecosystem diversity. • Biogeographically classification of India • Value of biodiversity : consumptive use, productive use.	5
5	Environmental Pollution	Definition • Cause, effects and control measures of :- a. Air pollution b. Water pollution c. Soil pollution d. Marine pollution e. Noise pollution f. Thermal pollution g. Nuclear hazards • Solid waste Management : Causes, effects and control measures of urban and industrial wastes. • Role of an individual in prevention of pollution.	5
6	Social Issues and the Environment	From Unsustainable to Sustainable development • Urban problems related to energy • Water conservation, rain water harvesting, watershed management • Resettlement and rehabilitation of people; its problems and concerns. Case Studies • Environmental ethics : Issues and possible solutions. • Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust. Case Studies. • Wasteland reclamation. • Consumerism and waste products. • Environment Protection Act. • Air (Prevention and Control of Pollution) Act. • Water (Prevention and control of Pollution) Act • Wildlife Protection Act • Forest Conservation Act	5
7	Human Population and the Environment	• Population growth, variation among nations. • Environment and human health. • Human Rights. • Value Education. • Women and Child Welfare. • Role of Information Technology in Environment and human health.	5
8	Field work	• Visit to a local area to document environmental assets river/ forest/grassland/hill/mountain • Visit to a local polluted site-Urban/Rural/Industrial/Agricultural • Study of common plants, insects, birds. • Study of simple ecosystems-pond, river, hill slopes, etc. (Field work Equal to 5 lecture hours)	3
9	Concept of Health & Health education	a) Concept of Health & Health education b) Health Education – Aims, Principles, Contents and Methods. c) Levels of Health Care in India, 3-Tier system of health care d) Positive health : Meaning & Spectrums e) Role of Heredity & Environment	5
10	Nutrition	a)Proximate Principles • Balance diet • Malnutrition b) Effects of Smoking, Drugs and Alcohol c) School Health services & Programme • Role of the P.E. Teacher, Principal and Doctor	5
11	Community & Environmental Health	• Pollution:- Its causes & effect on health i. Air Pollution ii. Water Pollution iii. Noise Pollution • Occupational Hazards • Housing • Population: - Policy, explosion, dynamics & family welfare Programme	5
		TOTAL	50