



VIDHYADEEP UNIVERSITY
VIDHYADEEP INSTITUTE OF PHARMACY, ANITA, SURAT



B. PHARMACY SEMESTER: II

Subject Name: ENVIRONMENTAL SCIENCES* (NUE)

Subject Code: BP205TT

Scope: Environmental Sciences is the scientific study of the environmental system and the status of its inherent or induced changes on organisms. It includes not only the study of physical and biological characters of the environment but also the social and cultural factors and the impact of man on environment.

Course Outcomes: Upon completion of this course the student should be able to

CO	STATEMENTS
C112.1	To understand multidisciplinary nature of environmental studies
C112.2	To discuss renewable and non-renewable resources
C112.3	To describe natural resources and its associated problems
C112.4	To explain structure and function of an ecosystem
C112.5	To impart knowledge of forest ecosystem, grassland ecosystem, desert ecosystem and aquatic ecosystems
C112.6	To summarize various types of Pollution.

Teaching Scheme and Examination Scheme:

Teaching Scheme (hr/ Week)				Evaluation Scheme			
Theory	Tutorial	Practical	Total	Internal	External	Internal	External
				Theory Exam		Practical Exam	
2	0	2	2	15	35	00	00

Sr No	Course content	(hr)
1	The Multidisciplinary nature of environmental studies: NATURAL RESOURCES Renewable and non-renewable resources: Natural resources and associated problems Forest resources; b) Water resources; c) Mineral resources; d) Food resources; e) Energy resources; f) Land resources: Role of an individual in conservation of natural resources	7
2	Ecosystems: Concept of an ecosystem. Structure and function of an ecosystem. Introduction, types, characteristic features, structure and function of the ecosystems: Forest ecosystem; Grassland ecosystem; Desert ecosystem; Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)	7
3	Environmental Pollution: Air pollution; Water pollution; Soil pollution	7

Recommended Books (Latest Editions)

1. Y.K. Sing, Environmental Science, New Age International Pvt, Publishers, Bangalore.
2. Agarwal, K.C. 2001 Environmental Biology, Nidi Publ. Ltd. Bikaner.
3. Bharucha Erach, The Biodiversity of India, Mapin Publishing Pvt. Ltd., Ahmedabad – 380 013, India,
4. Brunner R.C., 1989, Hazardous Waste Incineration, McGraw Hill Inc. 480p.
5. Clark R.S., Marine Pollution, Clarendon Press Oxford.
6. Cunningham, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T. 2001, Environmental Encyclopedia, Jaico Publ. House, Mumbai, 1196p.
7. De A.K., Environmental Chemistry, Wiley Eastern Ltd. 8. Down of Earth, Centre for Science and Environment.