

COURSE TITLE	ENVIRONMENTAL STUDIES
COURSE CODE	07BA2208
COURSE CREDITS	3

Objective:

- 1 To develop awareness and responsibility towards environmental protection by understanding ecosystems, pollution, natural resources, and population issues, and exploring sustainable solutions to environmental problems.

Course Outcomes: After completion of this course, student will be able to:

- 1 Apply concepts of environment, its components, ecology, and ecosystems to interpret natural processes and human-environment interactions.
- 2 Apply environmental legislation to real-life scenarios
- 3 Evaluate sustainable alternatives for resource use and pollution control.
- 4 Analyze environmental issues to suggest context-specific eco-friendly practices

Pre-requisite of course:NA

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
3	0	0	50	30	20	0	0

Contents : Unit	Topics	Contact Hours
1	Introduction to Environment Environment and its component, Impact of technology on environment,, Ecology – objectives and classification, Ecosystem-structure and functions, Energy flow in ecosystem, Food chain, food Web, Ecological Pyramids, Biodiversity and its conservation, Biogeographical classification of India, Importance of Environmental Education, Environmental ethics, Circular Economy	12
2	Human Population and Environment Population and environmental degradation, actors Affecting Human Settlement, Overpopulation, Population explosion - Cause, Effects & Control, Impact of population on the economics, Methods of Population forecasting, Demographic transition	10
3	Environmental Resources and Pollution Resources: Forest resources, Energy resources, Water Resources, and Land Resources, Pollution: Water pollution, Air Pollution, Noise Pollution, Solid and hazardous waste, Marine Pollution, Thermal pollution, Problems & ways to address them - Greenhouse Effect, Global warming, ozone layer depletion, Climate change, Acid Rain and recycling of waste.	13

Contents : Unit	Topics	Contact Hours
4	Environmental Legislation Water (Prevention and Control of Pollution) Act 1974, Environment (Protection) Act, 1986, Air (Prevention and Control of Pollution) Act, 1981, Wildlife Protection Act, Forest Conservation Act., Kyoto Protocol, Montreal Protocol, Stockholm Convention, Intergovernmental Panel on Climate Change, Governmental bodies for Environmental protection	10
Total Hours		45

Textbook :

- 1 Environmental Science, Chiras, Daniel, D., Jones and Bartlett Learning, 2018
- 2 Textbook of Environmental Studies for Undergraduate Courses, Erach Bharucha, Universities Press (India) Private Ltd., 2013

References:

- 1 Environmental Science: In Context, Environmental Science: In Context, Alok Dhawan & Vishal K. Mehta, Oxford University Press, 2017
- 2 Environmental Studies: A Global Perspective, Environmental Studies: A Global Perspective, Basak, Anindita., Pearson Publication, 2018

Suggested Theory Distribution:

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery					
Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking / Creative
0.00	15.00	40.00	25.00	20.00	0.00

Instructional Method:

- 1 Lecture method combined with discussion
- 2 Use of ICT tools
- 3 Assignments
- 4 Presentations
- 5 Workshops
- 6 Expert lectures
- 7 Self-study

Supplementary Resources:

- 1 www.epa.gov

Supplementary Resources:

- 2 www.nationalgeographic.com/environment
- 3 www.nature.org/en-us/