BSP203					Elements of Environmental Studies					
Teaching Scheme					Examination Scheme					
L	T	P	C	Hrs/Week	Theory			Practical		Total Marks
					MS	ES	IA	LW	LE/Viva	
3	0	0	3	3	25	50	25	--	--	100

COURSE OBJECTIVES

- To understand basic concepts of environment such as ecology, biodiversity, natural resources and global warming.
- To make students aware about the environmental systems and environmental issues in scientific, cultural, and social realms.
- To develop ability to work effectively on complex problems involving multiple competing stakeholders and agendas.
- To think across and beyond existing disciplinary boundaries, mindful of the diverse forms of knowledge and experience that arise from human interactions with the world around them.

UNIT 1 INTRODUCTION TO ENVIRONMENTAL STUDIES **12 Hrs.**

Importance of environmental Studies, multidisciplinary nature, Ecology and Ecosystem, types of ecosystems, functioning of an ecosystem; Biodiversity – its importance, threats and conservation; Natural Resources – Forest, Water, Mineral, Energy, Minerals, environment and human health.

UNIT 2 ENVIRONMENTAL POLLUTION **10 Hrs.**

Causes, effects and control measures of air pollution, water pollution, soil pollution, marine pollution, noise pollution, thermal pollution and Nuclear hazards, Solid waste Management: Causes, effects and control measures of urban and industrial wastes, role of an individual in prevention of pollution, pollution case studies, Disaster management: floods, earthquake, cyclone and landslides.

UNIT 3 ENVIRONMENTAL LEGISLATION AND PUBLIC AWARENESS **08 Hrs.**

Environment Protection Act, Wildlife Protection Act, Issues involved in enforcement of environmental legislation, Public awareness, Environmental impact assessment.

UNIT 4 SOCIAL ISSUES AND THE ENVIRONMENT **12 Hrs.**

Climate change, global warming, acid rain, ozone layer depletion, Water conservation, rain water harvesting, Urban problems related to energy, Sustainable development, Resettlement and rehabilitation of people; its problems and concerns. Case Studies, Environmental ethics: Issues and possible solutions.

Max. 42 Hrs.

COURSE OUTCOMES

On completion of the course, student will be able to

CO1 - Understand core concepts and methods from ecological and physical sciences and their application in environmental problem-solving.

CO2: Knowledge of the environment and the role of human beings in shaping the environment

CO3: Critically examine the interlink between development and the environment.

CO4: Develop the skills in solving various real world problems in environmental studies.

CO5: Identify the multiple scales, actors, and stakes of an issue

CO6: Apply concepts and methodologies to analyse and understand interactions between social and environmental processes.

TEXT/REFERENCE BOOKS

1. Rao, M. N. & Rao H. V. N., Air Pollution, Mc Graw Hill.
2. Dave, D. & Katewa, S. S., Textbook of Environmental Studies, Cengage Learning, 2e.
3. Bharucha Erach, Textbook for Environmental Studies, UGC New Delhi: Universities Press.
4. Clark, R. S., Marine Pollution, Clanderson Press Oxford.
5. Daniel B. Botkin & Edwards A. Keller, Environmental Science, Wiley INDIA edition.
6. Miller T. G. Jr., Environmental Science, Clengage Learning, India.
7. Odum E. P., Fundamentals of Ecology, W. B. Saunders Co, USA.
8. Wagner K. D., Environmental Management, W. B. Saunders Co, USA
9. Trivedi R. K., Handbook of Environmental Laws, Rules and Guidelines, Compliances and Standards, Vol I & II.
10. Rajagopalan, R., Environmental Studies, Oxford University Press.

END SEMESTER EXAMINATION QUESTION PAPER PATTERN

Max. Marks: 100 **Exam Duration: 3 Hrs**

Part A/Question: <Details> <> Marks

Part B/Question: <Details> <> Marks