

23AC1301: ENVIRONMENTAL SCIENCES
Syllabus

Course Code	23AC1301	Year	II	Semester	I
Course Category	Audit course	Branch	CE	Course Type	Theory
Credits	0	L-T-P	2-0-0	Prerequisites	Nil
Continuous Internal Evaluation:	30	Semester End Evaluation	Nil	Total Marks	30

Course Outcomes

After successful completion of the course, the student will be able to

CO1	Apply advanced solutions to measure the threats and hazards in environment to link with human natural systems. (L3)
CO2	Analyze the ethical ,cultural and historical interactions between man and environment.(L4)
CO3	Analyze various environmental assets and record for better management(L4)
CO4	Analyze global issues to design and evaluate policies(L4)
CO5	Apply system concepts to methodological social and environmental issues(L3)

Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations (H:High, M: Medium, L:Low)														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	2						2							
CO2		2					3							
CO3		3					3							
CO4		2					3							
CO5	2						2							

UNIT No.	Contents	Mapped COs
I	INTRODUCTION TO ENVIRONMENT AND NATURAL RESOURCES Introduction to environment. Natural resources & Management- Forest resources, Water resources, Mineral resources, Food resources, Energy resources - Uses, over-exploitation with case studies & Management	CO1 CO2
II	ECOSYSTEMS AND BIODIVERSITY Structural and Functional components of an ecosystem and Ecological succession. Biodiversity: Values, Threats and Conservation	CO1 CO2
III	ENVIRONMENTAL POLLUTION AND CONTROL Environmental Pollution - Air Pollution, Water pollution, Soil pollution and Noise pollution with case studies. Solid waste Management.	CO3
IV	GLOBAL ENVIRONMENT PROBLEMS & GLOBAL EFFORTS AND EIA Global warming, Ozone Depletion, Acid rains and Climate change. Environmental Impact Assessment & Environmental Management Plans	CO4 CO5

V	SOCIAL ISSUES AND ENVIRONMENTAL LEGISLATION From Unsustainable to Sustainable development. Population growth, Environment and human health. Value Education. Women and Child Welfare. Environment Legislation	CO4 CO5
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Learning Recourses
Text Books

1. Anubha Kaushik and C.P. Kaushik, Text book of environmental studies New Age International Publisher (2014).
2. Erach Barucha, Text book of environmental studies for undergraduates courses, published by – University Grants Commission, University Press (2005)
3. Anindita Basak, Environmental Studies. Pearson (2009)

Reference Books

1. D.K. Asthana and Meera Asthana, A Text book of Environmental Studies, S. Chand (2010).
2. P.M Cherry Solid and Hazardous waste Management, CBS Publisher (2016).
3. Charles H. Eccleston, Environmental Impact Assessment, CRC Press (2011).