

## ENVIRONMENTAL SCIENCE

<b>Course Code</b>	23AC13301	<b>Year</b>	II	<b>Semester</b>	I
<b>Course Category</b>	Audit course	<b>Branch</b>	ME	<b>Course Type</b>	Theory
<b>Credits</b>	0	<b>L-T-P</b>	2-0-0	<b>Prerequisites</b>	Nil
<b>Continuous Internal Evaluation:</b>	30	<b>Semester End Evaluation:</b>	0	<b>Total Marks:</b>	30

### Course Outcomes

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

<b>CO1</b>	Apply advanced solutions to measure the threats and hazards in environment to link with human natural systems.(L3)
<b>CO2</b>	Analyze the ethical ,cultural and historical interactions between man and environment.(L4)
<b>CO3</b>	Analyze various environmental assets and record for better management(L4)
<b>CO4</b>	Analyze global issues to design and evaluate policies(L4)
<b>CO5</b>	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
<b>CO1</b>	2						2							
<b>CO2</b>		2					3							
<b>CO3</b>		3					3							
<b>CO4</b>		2					3							
<b>CO5</b>	2						2							

UNIT NO	Contents	Mapped COs
<b>I</b>	<b>INTRODUCTION TO ENVIRONMENT AND NATURAL RESOURCES</b> 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
<b>II</b>	<b>ECOSYSTEMS AND BIODIVERSITY</b> Structural and Functional components of an ecosystem and Ecological succession. Biodiversity: Values, Threats and Conservation	CO1 CO2
<b>III</b>	<b>ENVIRONMENTAL POLLUTION AND CONTROL</b> Environmental Pollution - Air Pollution, Water pollution, Soil pollution and Noise pollution with case studies. Solid waste Management.	CO3
<b>IV</b>	<b>GLOBAL ENVIRONMENT PROBLEMS &amp; GLOBAL EFFORTS AND EIA</b> Global warming, Ozone Depletion, Acid rains and Climate change. Environmental Impact Assessment & Environmental Management Plans	CO4 CO5
<b>V</b>	<b>SOCIAL ISSUES AND ENVIRONMENTAL LEGISLATION</b> From Unsustainable to Sustainable development. Population growth,	CO4 CO5

Environment and human health. Value Education. Women and Child Welfare. Environment Legislation	
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<b>Learning Recourses</b>
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<b>Text Books</b>
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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)

<b>Reference Books</b>
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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).