ENVIRONMENTAL STUDIES
[As per Choice Based Credit System (CBCS) scheme]
(Effective from the academic year 2015 -2016)
SEMESTER - I/II

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>IA Marks</th>
<th>Exam Marks</th>
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<tbody>
<tr>
<td>15CIV18/15CIV28</td>
<td>10</td>
<td>40</td>
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<tr>
<td>Number of Lecture Hours/Week</td>
<td>02</td>
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<tr>
<td>Total Number of Lecture Hours</td>
<td>25</td>
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Course Objectives:
1. To identify the major challenges in environmental issues and evaluate possible solutions.
2. Develop analytical skills, critical thinking and demonstrate socio-economic skills for sustainable development.
3. To analyze an overall impact of specific issues and develop environmental management plan.

Module - 1
Impacts of Agriculture & Housing Impacts of Industry, Mining & Transportation Environmental Impact Assessment, Sustainable Development.  

Module - 2
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<tr>
<th>Module -3</th>
<th>Environmental Pollution – Water Pollution, Noise pollution, Land Pollution, Public Health Aspects.</th>
<th>2 Hours</th>
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<td></td>
<td>Global Environmental Issues: Population Growth, Urbanization, Land Management, Water &amp; Waste Water Management.</td>
<td>3 Hours</td>
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| Module -4 | Air Pollution & Automobile Pollution: Definition, Effects – Global Warming, Acid rain & Ozone layer depletion, controlling measures. | 3 Hours |
|           | Solid Waste Management, E - Waste Management & Biomedical Waste Management - Sources, Characteristics & Disposal methods. | 2 Hours |

| Module - 5 | Introduction to GIS & Remote sensing, Applications of GIS & Remote Sensing in Environmental Engineering Practices. | 2 Hours |
|           | Environmental Acts & Regulations, Role of government, Legal aspects, Role of Non-governmental Organizations (NGOs), Environmental Education & Women Education. | 3 Hours |

**Course Outcome:**

Students will be able to,

1. Understand the principles of ecology and environmental issues that apply to air, land, and water issues on a global scale,

2. Develop critical thinking and/or observation skills, and apply them to the analysis of a problem or question related to the environment,

3. Demonstrate ecology knowledge of a complex relationship between biotic and abiotic components

4. Apply their ecological knowledge to illustrate and graph a problem and describe the realities that managers face when dealing with complex issues

**Text Books:**


3. R Rajagopalan, “Environmental Studies – From Crisis to Cure”, Oxford University Press, 2005,


Reference Books:


