

**Course structure U.G.Semester-1 Session 2021-22**

<b>Month</b>	<b>Unit</b>	<b>Topic Covered</b>	<b>Number of Classes</b>	<b>Objective</b>	<b>Outcome</b>	<b>Teaching tools, References, etc.</b>
<b>November 2021</b>	<b>Unit 1 :</b> Introduction to Environmental Studies	<ul style="list-style-type: none"> <li>• Definition, scope and importance.</li> <li>• Concept of sustainability and sustainable development.</li> </ul>	6	To develop and acquire knowledge and conceptual understanding about the subject.	Helps students understand its significance, become aware of its relevance, feel empowered to take action, think critically about information dissemination, and engage more deeply with related societal issues.	Google Meet, Google Classroom, Reference books, websites, Slides of Power Point Presentation.
<b>December 2021</b>	<b>Unit 2:</b> Ecosystems  <b>Unit 3 :</b> Natural Resources : Renewable and non-renewable resources	<ul style="list-style-type: none"> <li>• What is an ecosystem?</li> <li>• Structure and function of ecosystem;</li> <li>• Energy flow in an ecosystem, food chains, food webs and ecological pyramid.</li> <li>• Natural resources and associated problems.</li> <li>• Land resources and land-use change; Land degradation, soil erosion and desertification.</li> <li>• Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations.</li> </ul>	6	<p>To develop inquiring minds and curiosity about the assets of natural resources and appreciate the benefits of the natural resources</p> <p>To acquire knowledge and conceptual understanding about the physical and biological components of the ecosystem and their interactions.</p>	<p>Empowers students with awareness, responsibility, problem-solving skills, and a commitment to sustainable actions, ensuring the protection and preservation of our environment for current and future generation</p> <p>Helps students understand their structure, function, and components like producers, consumers, and decomposers. They learn about energy flow, food chains, webs, and ecological pyramids, fostering awareness, appreciation, critical thinking, and a sense of stewardship towards conserving biodiversity and maintaining healthy ecosystems.</p>	Google Meet, Google Classroom, Reference books, websites, Slides of Power Point Presentation.

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<p><b>January 2022</b></p>	<p><b>Unit 4:</b> Biodiversity and its conservation</p> <p><b>Unit 5:</b> Environmental Pollution</p>	<ul style="list-style-type: none"> <li>• Levels of biological diversity : genetic, species and ecosystem diversity; biodiversity hotspots</li> <li>• India as a mega--- biodiversity nation; Endangered and endemic species of India,</li> <li>• Threats to biodiversity: Habitat loss, poaching of wildlife, man---wildlife conflicts.</li> <li>• Conservation of biodiversity: In situ and Ex situ conservation of biodiversity.</li> <li>• Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value.</li> <li>• Environmental pollution: types, causes, effects and controls;</li> <li>• Air, water, soil and noise pollution Nuclear hazards and human health risks</li> <li>• Solid waste management</li> </ul>	<p>8</p>	<p>To acquire knowledge and conceptual understanding about biodiversity and appreciate its values. To develop scientific inquiry for the threats to biodiversity and develop investigative measures to cope up the problems.</p> <p>To enable students to understand the main ideas and concepts of environmental pollution and apply them to solve the problems due to over utilization of the resources.</p> <p>To develop inquiring minds and curiosity about the proper management of urban and rural solid waste.</p>	<p>Equips students with an understanding of biodiversity and its value, India's rich bio-geographical diversity, the significance of biodiversity hotspots, the threats it faces, and the importance of conservation efforts. This fosters awareness, appreciation, and a sense of responsibility for preserving biodiversity</p> <p>Students cultivates awareness, knowledge, problem-solving skills, and a sense of responsibility towards environmental conservation. It empowers students to actively participate in sustainable practices and contribute to addressing environmental challenges.</p>	<p>Google Meet, Google Classroom, Reference books, websites, Slides of Power Point Presentation.</p>
<p><b>February 2022</b></p>	<p><b>Unit 6 :</b> Social Issues and the Environment</p>	<ul style="list-style-type: none"> <li>• Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture</li> <li>• Environment Laws: Environment Protection Act;</li> <li>• Air (Prevention &amp; Control of Pollution) Act;</li> <li>• Water (Prevention and</li> </ul>	<p>2</p>	<p>To acquire knowledge and conceptual understanding about various legal provisions for safeguarding the environment. To enable students to understand the main ideas of issues related to enforcement of these laws.</p>	<p>Students enhances their understanding of environmental laws, issues, and the importance of public awareness. It empowers them to advocate for stricter enforcement and actively participate in environmental conservation</p>	<p>Google Meet, Google Classroom, Reference books, websites, Slides of Power Point Presentation.</p>

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	control of Pollution) Act; • Wildlife Protection Act; Forest Conservation Act. • International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD)			efforts, fostering a sense of civic responsibility.	
	<p style="text-align: center;"><b>PROJECTS</b></p> <p>Projects consist of 2 field work in their own locality.</p> <p style="text-align: center;"><b>Assignment and MCQ based Test</b></p>	3	<p>To provide opportunity to integrate academic knowledge with application skills at progressively higher levels of performance and responsibility.</p> <p>To gather relevant information about student performance or progress.</p>	<p>This helps in assessing knowledge, developing skills, applying learning, receiving feedback, improving academic performance, and preparing for future careers.</p>	<p>Google Meet, Google Classroom, Reference books, websites, Slides of Power Point Presentation</p> <p>MCQ in Google Form</p>
<b>U.G. 1<sup>ST</sup> SEMESTER EXAMINATION 2021 (Assignment based) 28-02-2022</b>					

#### References:

##### English Version

1. Essential Environmental Studies
2. A textbook of Environmental Studies
3. A textbook of Environmental Studies

- S.P. Misra, S.N. Pandey
- Erach Bharucha
- Dr. D.K.Asthana, Dr. Meera Asthana**

##### Hindi Version

1. Paryavaran Adhayan

Erach Bharucha

##### Bengali Version

1. Snatak Paribesh Shiksha
2. Snatak Paribesh Bidya
3. Paribesh
4. Paribesh Bidya Ahyapak

- Chowdhury, Giri, Santra**
- Arindam Ghosh
- Dr. Anish Chattopadhyay
- N.C. Lahiri

<https://www.earthclipse.com/environment/types-and-threats-to-natural-resources.html>

<https://www.britannica.com/science/ecosystem>

<https://www.greenfacts.org/en/biodiversity/l-3/1-define-biodiversity>.

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<https://greencleanguide.com/environmental-pollution-control-water-air-and-land/>

<http://www.mondaq.com/india/x/624836/Waste+Management/Environment+Laws+In+India>

<https://paa2007.princeton.edu/papers/7192>

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