# Course Structure ENVS U.G.Semester-1 Session 2019-20

Unit	Topic Covered	Number of Classes	Objective		Teaching tools, References, etc.
Unit 1: Introduction to Environmental Studies Unit 2: Ecosystems	<ul> <li>Definition, scope and importance.</li> <li>Concept of sustainability and sustainable development.</li> <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> </ul>	4	To develop and acquire knowledge and conceptual understanding about the subject.  To develop inquiring minds and curiosity about the assets of natural resources and appreciate the benefits of the natural resources	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.
Unit 3: Natural Resources: Renewable and non-renewable resources  Unit 4: Biodiversity and its conservation	<ul> <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> <li>Levels of biological diversity: genetic, species and ecosystem diversity; biodiversity hotspots</li> <li>India as a megabiodiversity nation; Endangered and endemic species of India,</li> <li>Threats to biodiversity: Habitat loss, poaching of wildlife, manwildlife conflicts.</li> <li>Conservation of biodiversity: In situ and Ex situ conservation of biodiversity.</li> <li>Ecosystem and biodiversity services: Ecological, economic,</li> </ul>	6	To acquire knowledge and conceptual understanding about the physical and biological components of the ecosystem and their interactions.  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.	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  Equips students with an understanding of biodiversity and its value, India's rich biogeographical 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	Google Meet, Google Classroom, Reference books, websites, Slides of Power Point Presentation.

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	social, ethical, aesthetic and Informational value.		LIVVS O.G.Semester-1 Session 2		
Unit 5: Environmental Pollution	<ul> <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>	2	To enable students to understand the main ideas and concepts of environmental pollution and apply them to solve the problems due to overutilization of the resources.  To develop inquiring minds and curiosity about the proper management of urban and rural solid waste.	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.	Google Meet, Google Classroom, Reference books, websites, Slides of Power Point Presentation
Unit 6 : Social Issues and the Environment	<ul> <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 control of Pollution) Act;</li> <li>Wildlife Protection Act; Forest Conservation Act.</li> <li>International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD)</li> </ul>	2	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.	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 efforts, fostering a sense of civic responsibility.	Google Meet, Google Classroom, Reference books, websites, Slides of Power Point Presentation.
	PROJECTS Projects consist of 2 field work in their own locality.	2	To provide opportunity to integrate academic knowledge with application skills at progressively higher levels of performance and responsibility.  To acquire knowledge and	This helps in assessing knowledge, developing skills, applying learning, receiving feedback, improving academic performance, and preparing for future careers.	Google Meet, Google Classroom, Reference books, websites, Slides of Power Point Presentation.

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	conceptual understanding	
	about various aspects about	
	Human Population and related	
	problems.	

## U.G. 1<sup>ST</sup> SEMESTER EXAMINATION 2020 (Assignment based) 19-03-2021

### References:

### **English Version**

1. Essential Environmental Studies S.P. Misra, S.N. Pandey

2. A textbook of Environmental Studies Erach Bharucha

Dr. D.K.Asthana, Dr. Meera Asthana 3. A textbook of Environmental Studies

**Hindi Version** 

1. Paryavaran Adhayan Erach Bharucha

**Bengali Version** 

Chowdhury, Giri, Santra 1. Snatak Paribesh Shiksha

2. Snatak Paribesh Bidya Arindam Ghosh

3. Paribesh Dr. Anish Chattopadhyay

4. Paribesh Bidya Ahyapak N.C. Lahiri

https://www.eartheclipse.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.

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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