| Month | Unit | Topic Covered | Number of Classes | Objective | | Teaching tools, References, etc. |
|--------------|---|---|-------------------------|--|--|--|
| Decembe r | Unit 1: Introduction to Environmental Studies Unit 2: Ecosystems | Definition, scope and importance. Concept of sustainability and sustainable development. What is an ecosystem? Structure and function of ecosystem; Energy flow in an ecosystem, food chains, food webs and ecological pyramid. | 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 Presentatio n. |
| January | Unit 3: Natural Resources: Renewable and non-renewable resources Unit 4: Biodiversity and its conservation | Natural resources and associated problems. Land resources and land-use change; Land degradation, soil erosion and desertification. Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations. Levels of biological diversity: genetic, species and ecosystem diversity; biodiversity hotspots India as a megabiodiversity nation; Endangered and endemic species of India, Threats to biodiversity: Habitat loss, poaching of wildlife, manwildlife conflicts. Conservation of biodiversity: In situ and Ex situ conservation of biodiversity. | 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 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 | Google Meet, Google Classroom, Reference books, websites, Slides of Power Point Presentatio n. |

| | | Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value. | | | | |
|----------|--|---|---|---|--|---|
| | Unit 5: Environmental Pollution | Environmental pollution: types, causes, effects and controls; Air, water, soil and noise pollution Nuclear hazards and human health risks Solid waste management | 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 Presentatio n |
| February | Unit 6 : Social Issues and the Environment | Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. | 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 | Google Meet, Google Classroom, Reference books, websites, Slides of Power Point Presentation. |

| | International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD) | | | civic responsibility. | |
|----------|--|----------|--|--|---|
| | 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 conceptual understanding about various aspects about Human Population and related problems. | 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. |
| March202 | U.G. 1 ST SEMESTER E | XAMINATI | ON 2020 (Assignment based) 19 | 9-03-2021 | |

References:

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2. A textbook of Environmental Studies Erach Bharucha

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

Hindi Version

1. Paryavaran Adhayan Erach Bharucha

Bengali Version

1. Snatak Paribesh Shiksha Chowdhury, Giri, Santra

2. Snatak Paribesh Bidya Arindam Ghosh

3. Paribesh Dr. Anish Chattopadhyay

4. Paribesh Bidya Ahyapak N.C. Lahiri

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