

## WORK PLAN (FEB-MAY 2018)

Course Name: AECC - EVS

Semester: II

Paper Name: **Environmental Science (English Medium)**

Faculty: **Dr. Jay Prakash Bhatt**

S.NO	WEEK	TOPICS TO BE COVERED
1.	16 -17 Feb	
2.	12-17 Feb	
3.	19-24 Feb	Unit 1 : Introduction <ul style="list-style-type: none"> <li>• Multidisciplinary nature of environmental studies;</li> <li>• Scope and importance; Need for public awareness.</li> <li>• Concept of Sustainability and sustainable development.</li> </ul>
4.	19-24 Feb	
5.	26 -1Mar	Unit 2 : Ecosystems <ul style="list-style-type: none"> <li>• What is an ecosystem? Structure and function of ecosystem;</li> <li>• Energy flow in an ecosystem: food chains, food webs, ecological pyramids</li> <li>• Ecological succession.</li> </ul>
6.	2-7 Mar	Mid Semester Break
7.	8-10 Mar	Unit 2 : Ecosystems <ul style="list-style-type: none"> <li>• Case studies of the following ecosystems :               <ol style="list-style-type: none"> <li>1. Forest ecosystem</li> <li>2. Grassland ecosystem</li> <li>3. Desert ecosystem</li> </ol> </li> <li>• Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)</li> </ul> Unit 3 : <ul style="list-style-type: none"> <li>• Natural Resources : Renewable and Non-renewable Resources</li> <li>• Land resources and landuse change; Land degradation, soil erosion and desertification.</li> </ul>
8.	12-17 Mar	Unit 3 : <ul style="list-style-type: none"> <li>• Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations.</li> <li>• Water : Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international &amp; inter-state</li> <li>• Energy resources : Renewable and non renewable energy sources, use of alternate energy sources, growing energy needs, case studies.</li> </ul>

9.	19-24Mar	Field Work Unit 4 : Biodiversity and Conservation <ul style="list-style-type: none"> <li>Levels of biological diversity : genetic, species and ecosystem diversity; Biogeographic zones of India; Biodiversity patterns and global biodiversity hot spots</li> </ul>
10.	26-31Mar	Unit 4 : Biodiversity and Conservation <ul style="list-style-type: none"> <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, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity.</li> </ul>
11.	2-7 April	Unit 4 : Biodiversity and Conservation <ul style="list-style-type: none"> <li>Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value</li> </ul>
12.	9-14 April	Unit 5 : Environmental Pollution <ul style="list-style-type: none"> <li>Environmental pollution : types, causes, effects and controls; Air pollution</li> </ul>
13.	16 -21April	Mid-term Class test (part of Internal Assessment)  Unit 5 : Environmental Pollution <ul style="list-style-type: none"> <li>water pollution,</li> <li>Soil, and noise pollution</li> </ul>
14.	23-28 April	Unit 5 : Environmental Pollution <ul style="list-style-type: none"> <li>Nuclear hazards and human health risks</li> <li>Solid waste management: Control measures of urban and industrial waste</li> <li>Pollution case studies.</li> </ul>
15.	30-5 May	Group presentations (part of Internal Assessment)
16.	7-12 May	Unit 6 : Environmental Policies & Practices <ul style="list-style-type: none"> <li>Climate change, global warming, ozone layer depletion and their impacts on human communities and agriculture</li> </ul>
17.	14-19 May	<ul style="list-style-type: none"> <li>acid rain and its impacts on human communities and agriculture</li> <li>Environment Laws: Environment Protection Act; Air (Prevention &amp; Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act.</li> </ul> Unit 7 : Human Communities and the Environment <ul style="list-style-type: none"> <li>Human population growth: Impacts on environment, human</li> </ul>

		health and welfare.
18.	21-26 May	<ul style="list-style-type: none"> <li>• Resettlement and rehabilitation of project affected persons; case studies. Disaster management: floods, earthquake, cyclones and landslides.</li> <li>• Environmental movements: Chipko, Silent valley, Bishnois of Rajasthan.</li> </ul>
19.	28-31 May	<ul style="list-style-type: none"> <li>• Environmental ethics: Role of Indian and other religions and cultures in environmental conservation.</li> <li>• Environmental communication and public awareness, case studies (e.g., CNG vehicles in Delhi).</li> </ul>