



# GANDHI SCHOOL OF ENGINEERING

BHABANDHA, BERHAMPUR

**BRANCH- CIVIL ENGINEERING**

**SEMESTER- 3RD**

**SUBJECT- Th5. ENVIRONMENTAL STUDIES**

**NAME OF THE FACULTY-ER. SWADHIN MUND**

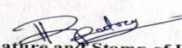
		Topic to be taken			Actual topic taken		
Sl. No	Topic/ Module	No. of period	Details of the topics	Date	Topic No.	Topic Name	Date
1	The Multidisciplinary nature of environmental studies	4	Definition, scope and importance, Need for public awareness.	01.08.2023 - 07.08.2023	1	Definition, scope and importance, Need for public awareness.	01.08.2023 03.08.2023 05.08.2023 07.08.2023

2	Natural Resources Renewable and non renewable resources:	12	<p>a) Natural resources and associated problems. ?  Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribalpeople.</p> <p>? Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems.</p> <p>? Mineral Resources: Use and exploitation, environmental effects of extracting and using mineralresources.</p> <p>? Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers-pesticides problems, water logging, salinity,.</p> <p>? Energy Resources: Growing energy need, renewable and non renewable energy sources, use of alternate energy sources, case studies.</p> <p>? Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, anddesertification.</p> <p>b) Role of individual in conservation of natural resources.</p> <p>c) Equitable use of resources for sustainable life styles.</p>	08.08.2023 - 26.08.2023	2	<p>a) Natural resources and associated problems.  ? Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribalpeople.</p> <p>? Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems.</p> <p>? Mineral Resources: Use and exploitation, environmental effects of extracting and using mineralresources.</p> <p>? Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity,.</p> <p>? Energy Resources: Growing energy need, renewable and non renewable energy sources, use of alternate energy sources, case studies.</p> <p>? Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, anddesertification.</p> <p>b) Role of individual in conservation of natural resources.</p> <p>c) Equitable use of resources for sustainable life styles.</p>	08.08.2023 10.08.2023 12.08.2023 14.08.2023 17.08.2023 19.08.2023 21.08.2023 22.08.2023
---	--	----	--	-------------------------	---	---	--

3	Systems	12	<ul style="list-style-type: none"> <li>☐ Concept of an eco system.</li> <li>☐ Structure and function of an eco system.</li> <li>☐ Producers, consumers,decomposers.</li> <li>☐ Energy flow in the eco systems.</li> <li>☐ Ecological succession.</li> <li>☐ Food chains, food webs and ecological pyramids.</li> <li>☐ Introduction, types, characteristic features, structure and function of the following eco system:</li> <li>☐ Forest ecosystem:</li> <li>☐ Aquatic eco systems (ponds, streams, lakes,rivers, oceans, estuaries).</li> </ul>	28.08.2023 - 11.09.2023	3	<ul style="list-style-type: none"> <li>☐ Concept of an eco system.</li> <li>☐ Structure and function of an eco system.</li> <li>☐ Producers, consumers,decomposers.</li> <li>☐ Energy flow in the eco systems.</li> <li>☐ Ecological succession.</li> <li>☐ Food chains, food webs and ecological pyramids.</li> <li>☐ Introduction, types, characteristic features, structure and function of the following eco system:</li> <li>☐ Forest ecosystem:</li> <li>☐ Aquatic eco systems (ponds, streams, lakes,rivers, oceans, estuaries).</li> </ul>	24.08.2023 26.08.2023 28.08.2023 29.08.2023 31.08.2023  02.09.2023  04.09.2023 07.09.2023
4	: Biodiversity and it's Conservation	8	<ul style="list-style-type: none"> <li>☐ Introduction-Definition: genetics, species and ecosystem diversity.</li> <li>☐ Biogeographically classification of India.</li> <li>☐ Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and optinvalues.</li> <li>☐ Biodiversity at global, national and local level. ☐ Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts.</li> </ul>	12.09.2023 - 30.09.2023	4	<ul style="list-style-type: none"> <li>☐ Introduction-Definition: genetics, species and ecosystem diversity.</li> <li>☐ Biogeographically classification of India.</li> <li>☐ Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and optinvalues.</li> <li>☐ Biodiversity at global, national and local level.</li> <li>☐ Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts.</li> </ul>	09.09.2023 11.09.2023 12.09.2023 11.09.2023 14.09.2023 16.09.2023 21.09.2023 23.09.2023 25.09.2023

5	Environmental Pollution.	18	<p>Definition Causes, effects and control measures of:</p> <p>a) Air pollution.</p> <p>b) Water pollution.</p> <p>c) Soil pollution</p> <p>d) Marine pollution</p> <p>e) Noise pollution.</p> <p>f) Thermal pollution</p> <p>g) Nuclear hazards. Solid waste Management: Causes, effects and control measures of urban and industrial wastes.</p> <p>Role of an individual in prevention of pollution.</p> <p>Disaster management: Floods, earth quake, cyclone and landslides.</p>	03.10.2023 - 04.11.2023	5	<p>Definition Causes, effects and control measures of:</p> <p>a) Air pollution.</p> <p>b) Water pollution.</p> <p>c) Soil pollution</p> <p>d) Marine pollution</p> <p>e) Noise pollution.</p> <p>f) Thermal pollution</p> <p>g) Nuclear hazards. Solid waste Management: Causes, effects and control measures of urban and industrial wastes.</p> <p>Role of an individual in prevention of pollution. Disaster management: Floods, earth quake, cyclone and landslides.</p>	<p>26.09.2023</p> <p>30.09.2023</p> <p>03.10.2023</p> <p>05.10.2023</p> <p>07.10.2023</p> <p>09.10.2023</p> <p>10.10.2023</p> <p>12.10.2023</p> <p>16.10.2023</p> <p>17.10.2023</p> <p>19.10.2023</p> <p>31.10.2023</p>
6	Social issues and the Environment	12	<p>☐ Form unsustainable to sustainable development.</p> <p>☐ Urban problems related to energy.</p> <p>☐ Water conservation, rain water harvesting, water shed management.</p> <p>☐ Resettlement and rehabilitation of people; its problems and concern.</p> <p>☐ Environmental ethics: issue and possible solutions.</p> <p>☐ Climatechange, globalwarming,acidrain,ozonelayerdepletion, nuclear accidents and holocaust, case studies.</p> <p>☐ Air (prevention and control of pollution) Act.</p> <p>☐ Water (prevention and control of pollution) Act.</p> <p>☐ Public awareness.</p>	06.11.2023 - 25.11.2023	6	<p>☐ Form unsustainable to sustainable development.</p> <p>☐ Urban problems related to energy.</p> <p>☐ Water conservation, rain water harvesting, water shed management.</p> <p>☐ Resettlement and rehabilitation of people; its problems and concern.</p> <p>☐ Environmental ethics: issue and possible solutions.</p> <p>☐ Climatechange, globalwarming,acidrain,ozonelayerdepletion, nuclear accidents and holocaust, case studies.</p> <p>☐ Air (prevention and control of pollution) Act.</p> <p>☐ Water (prevention and control of pollution) Act.</p> <p>☐ Public awareness.</p>	<p>02.11.2023</p> <p>04.11.2023</p> <p>06.11.2023</p> <p>07.11.2023</p> <p>09.11.2023</p> <p>11.11.2023</p> <p>16.11.2023</p> <p>18.11.2023</p> <p>20.11.2023</p> <p>21.11.2023</p>

7	Human population and the environment	9	<ul style="list-style-type: none"> <li>☐ Population growth and variation among nations.</li> <li>☐ Population explosion- family welfare program.</li> <li>☐ Environment and humanhealth.</li> <li>☐ Human rights.</li> <li>☐ Value education</li> <li>☐ Role of information technology in environment and human health.</li> </ul>	28.11.2023 - 12.12.2023	7	<ul style="list-style-type: none"> <li>☐ Population growth and variation among nations.</li> <li>☐ Population explosion- family welfare program.</li> <li>☐ Environment and humanhealth.</li> <li>☐ Human rights.</li> <li>☐ Value education</li> <li>☐ Role of information technology in environment and human health.</li> </ul>	23.11.2023 25.11.2023 28.11.2023 30.11.2023 02.12.2023 04.12.2023 07.12.2023 09.12.2023
---	--------------------------------------	---	--	-------------------------	---	--	--

  
 Signature and Stamp of HOD:  
 HOD  
 Civil Engg.  
 Gandhi School of Engg.  
 Berhampur (Gm.)

Signature & Stamp of HOD

Remarks	

--	--





[illegible]