ACADEMIC LESSON PLAN OF WINTER 2021

Discipline: ELECTRICAL	Semester: 3rd sem (Sec-A)	Name of the Teaching Faculty: Sigma Ray
Subject: Environmental Studies	No. of days/per week class allotted:4p/week Tutorial:1p/week	Semester From: 1st Oct 2021 to 8th Jan 2022 No. of weeks:14 weeks
Week	Class Day	Theory Topics
1st	1st	1.1 Definition, scope and importance.
	2nd	1.2 Need for public awareness.
	3rd	2.1 Natural resources and associated problems.
	4th	2.1.1. Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people.
2nd	1st	2.1.2. Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems.
	2nd	2.1.3. Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.
	3rd	2.1.4. Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity.
	4th	2.1.5. Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies.
3rd	1st	2.1.6. Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification. 2.2 Role of individual in conservation of natural resources.
	2nd	2.2 Role of individual in conservation of natural resources.
	3rd	2.3 Equitable use of resources for sustainable life styles.
	4th	3.1. Concept of an eco system.
4th	1st	3.2. Structure and function of an eco system. 3.3. Producers, consumers, decomposers.
	2nd	3.4. Energy flow in the eco systems.
	3rd	3.5. Ecological succession. 3.6. Food chains, food webs and ecological pyramids.
	4th	3.7. Introduction, types, characteristic features, structure and function of the following eco system
5th	1st	3.8. Forest ecosystem.
	2nd	3.9. Aquatic eco systems (ponds, streams, lakes, rivers, oceans)
	3rd	4.1. Introduction-Definition: genetics, species and ecosystem diversity.
	4th	4.2. Biogeographically classification of India.
6th	1st	4.3. Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and optin values.
	2nd	4.4. Biodiversity at global, national and local level. (Conti…)
	3rd	4.4. Biodiversity at global, national and local level.
	4th	4.5. Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife

		conflicts.
7th	1st	5.1. Definition Causes, effects and control measures.
	2nd	5.1.1 Air pollution.
	3rd	5.1.2 Water pollution.
	4th	5.1.3 Soil pollution
8th	1st	5.1.4 Marine pollution.
	2nd	5.1.5 Noise pollution.
	3rd	5.1.6 Thermal pollution.
	4th	5.1.7 Nuclear hazards.
9th	1st	5.2. Solid waste Management: Causes, effects and control measures of urban and industrial wastes. (Conti…)
	2nd	5.2. Solid waste Management: Causes, effects and control measures of urban and industrial wastes.
	3rd	5.3. Role of an individual in prevention of pollution.
	4th	5.4. Disaster management: Floods, earth quake, cyclone and landslides.
10th	1st	6.1. Form unsustainable to sustainable development.
	2nd	6.2. Urban problems related to energy.
	3rd	6.3. Water conservation, rain water harvesting, water shed management.
	4th	6.4. Resettlement and rehabilitation of people; its problems and concern.
11th	1st	6.5. Environmental ethics: issue and possible solutions.
	2nd	6.6. Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies. (Conti…)
	3rd	6.6. Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies.
	4th	6.7. Air (prevention and control of pollution) Act.
12th	1st	6.8. Water (prevention and control of pollution) Act.
	2nd	6.9. Public awareness.
	3rd	7.1. Population growth and variation among nations. (Conti…)
	4th	7.1. Population growth and variation among nations.
13th	1st	7.2. Population explosion- family welfare program.
	2nd	7.3. Environment and human health. (Conti..)
	3rd	7.3. Environment and human health.
	4th	7.4. Human rights.
14th	1st	7.5. Value education
	2nd	7.6. Role of information technology in environment and human health. (Conti..)
	3rd	7.6. Role of information technology in environment and human health.
	4th	Discussion about population explosion effects on environment

Signature of Teaching Faculty

ACADEMIC LESSON PLAN OF WINTER 2021

Discipline: ELECTRICAL	Semester: 3rd sem (Sec-B)	Name of the Teaching Faculty: Sigma Ray
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Week	Class Day	Theory Topics
1st	1st	1.1 Definition, scope and importance.
	2nd	1.2 Need for public awareness.
	3rd	2.1 Natural resources and associated problems.
	4th	2.1.1. Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people.
2nd	1st	2.1.2. Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems.
	2nd	2.1.3. Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.
	3rd	2.1.4. Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity.
	4th	2.1.5. Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies.
3rd	1st	2.1.6. Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification. 2.2 Role of individual in conservation of natural resources.
	2nd	2.2 Role of individual in conservation of natural resources.
	3rd	2.3 Equitable use of resources for sustainable life styles.
	4th	3.1. Concept of an eco system.
4th	1st	3.2. Structure and function of an eco system. 3.3. Producers, consumers, decomposers.
	2nd	3.4. Energy flow in the eco systems.
	3rd	3.5. Ecological succession. 3.6. Food chains, food webs and ecological pyramids.
	4th	3.7. Introduction, types, characteristic features, structure and function of the following eco system
5th	1st	3.8. Forest ecosystem.
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	4th	Discussion about population explosion effects on environment

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