

GANDHI INSTITUTE OF TECHNOLOGY AND MANAGEMENT

LessonPlan

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| Name of the Program | DIPLOMA IN MECHANICAL ENGINEERING | | | |
| Course Name | ENVIRONMENTAL STUDIES | | Course Code | Th.5 |
| Course Year | SECOND | Semester | 3RD | Academic Period 2022-23 |
| No. of Classes allotted per Week | 05 | Planned Classes Required to Complete the Course | | 60 |

| SL NO | TOPICS TO BE COVERED | MODULE | NO. OF HOURS REQUIRED | MODE OF TEACHING |
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| 1 | DEFINITION, SCOPE AND IMPORTANCE OF ENVIRONMENTAL STUDIES | 1 | 1 | 1. LM 2. IM |
| 2 | NEED FOR PUBLIC AWARENESS | | 1 | |
| 3 | RENEWABLE AND NON-RENEWABLE RESOURCES | 2 | 1 | 1. LM 2. IM |
| 4 | NATURAL RESOURCES AND ASSOCIATED PROBLEMS | | 1 | |
| 5 | FOREST RESOURCES: USE AND OVER-EXPLOITATION, DEFORESTATION | | 1 | |
| 6 | CASE STUDIES, TIMBER EXTRACTION, MINING, DAMS AND THEIR EFFECTS ON FORESTS AND TRIBAL PEOPLE | | 1 | |
| 7 | WATER RESOURCES: USE AND OVER-EXPLOITATION OF SURFACE AND GROUNDWATER | | 1 | |
| 8 | FLOOD, DROUGHT, CONFLICT OVER WATER, DAMS' BENEFITS AND PROBLEMS | | 1 | |
| 9 | MINERAL RESOURCES: USE AND EXPLOITATION | | 1 | |
| 10 | ENVIRONMENTAL EFFECTS OF EXTRACTING AND USING MINERAL RESOURCES | | 1 | |
| 11 | FOOD RESOURCES: WORLD FOOD PROBLEMS, CHANGE CAUSED BY AGRICULTURE AND OVER-GRAZING | | 1 | |
| 12 | EFFECTS OF MODERN AGRICULTURE, FERTILISERS-PESTICIDES PROBLEMS, WATER LOGGING, SALINITY | | 1 | |
| 13 | ENERGY RESOURCES: GROWING ENERGY NEED, USE OF ALTERNATIVE ENERGY RESOURCES, CASE STUDIES | 1 | | |
| 14 | LAND RESOURCES: LAND AS A SOURCE, LAND DEGRADATION, MAN INDUCES LANDSLIDES, SOIL EROSION AND DESERTIFICATION | 1 | | |
| 15 | ROLE OF INDIVIDUAL IN CONSERVATION OF NATURAL RESOURCES | 1 | | |
| 16 | EQUITABLE USE OF RESOURCES FOR SUSTAINABLE LIFESTYLE | 1 | | |
| 17 | CONCEPT OF ECO-SYSTEM, STRUCTURE OF ECOSYSTEM | 3 | 1 | 1. LM 2. IM |
| 18 | FUNCTION OF ECOSYSTEM, ENERGY FLOW IN ECOSYSTEM | | 1 | |
| 19 | FOOD CHAINS, FOOD WEBS AND ECOLOGICAL PYRAMIDS | | 1 | |
| 20 | ECOLOGICAL SUCCESSION | | 2 | |
| 21 | INTRODUCTION, TYPES, CHARACTERISTIC FEATURES, STRUCTURE AND FUNCTION OF THE FOREST ECOSYSTEM | | 1 | |

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| 22 | INTRODUCTION ,TYPES,CHARACTERISTIC FEATURES,STRUCTURE AND FUNCTION OF THE AQUATIC ECOSYSTEM (PONDS,STREAMS,LAKES,RIVERS,OCEANS,ESTUARIES) | | 3 | |
| 23 | BIODIVERSITY:INTRODUCTION,DEFINITION,GENETICS, SPECIES AND ECOSYSTEM DIVERSITY,BIOGEOGRAPHICALLYCLASSIFICATION OFINDIA | 4 | 1 | 1.LM 2.IM |
| 24 | VALUE OF BIODIVERSITY:CONSUMPTIVE USE,PRODUCTIVEUSE,SOCIALETHICAL,AESTHETIC ANDOPTINVALUE | | 1 | |
| 25 | BIODIVERSITY AT GLOBAL ,NATIONAL AND LOCAL LEVEL.THREATS TO BIODIVERSITY:HABITAT LOSS,POACHINGOFWILDLIFE,MANWILDLIFE CONFLICTS | | 1 | |
| 26 | DEFINITION,CAUSE,EFFECTS AND CONTROL MEASURESOFAIRPOLLUTION&WATERPOLLUTION | 5 | 1 | 1.LM 2.IM |
| 27 | DEFINITION,CAUSE,EFFECTS AND CONTROL MEASURESOFSOILPOLLUTION&MARINEPOLLUTION | | 1 | |
| 28 | DEFINITION,CAUSE,EFFECTS AND CONTROL MEASURESOFNOISE&THERMALPOLLUTION | | 1 | |
| 29 | DEFINITION,CAUSE,EFFECTS AND CONTROL MEASURES OFNUCLEAR HAZARDS | | 1 | |
| 30 | SOLIDWASTEMANAGEMENT:CAUSES,EFFECTSAND CONTROLMEASURESOFURBANANDINDUSTRIAL WASTES | | 1 | |
| 31 | ROLEOFANINDIVIDUALINPREVENTIONOF POLLUTION.DISASTER MANAGEMENT:FLOOD,EARTHQUAKE,CYCLONEAND LANDSLIDES | | 2 | |
| 32 | FROM UNSUSTAINABLE TO SUSTAINABLE DEVELOPMENT,URBAN PROBLEMS RELATED TO ENERGY | 6 | 1 | 1.LM 2.IM |
| 33 | WATER CONSERVATION,RAIN WATER HARVESTING,WATER SHED MANAGEMENT.RESETTLEMENTANDREHABILITATION OFPEOPLE;ITSPROBLEMSANDCONCERN | | 2 | |
| 34 | ENVIRONMENTAL ETHICS:ISSUE AND POSSIBLE SOLUTIONS,CLIMATE CHANGE,GLOBAL WARMING,ACIDRAIN,OZONELAYERDEPLETION | | 1 | |
| 35 | NUCLEAR ACCIDENTS AND HOLOCAUST,CASE STUDIES,AIR(PREVENTION AND CONTROL OF POLLUTION)ACT | | 1 | |
| 36 | WATER(PREVENTIONANDCONTROLOFPOLLUTION) ACT,PUBLICAWARENESS | | 1 | |
| 37 | POPULATIONGROWTHANDVARIATIONAMONG NATIONS,POPULATIONEXPLOSION-FAMILYWELFARE PROGRAM | | 7 | |
| 38 | ENVIRONMENT AND HUMAN HEALTH ,HUMAN RIGHTS,VALUE EDUCATION,ROLE OF IT IN ENVIRONMENTANDHUMANHEALTH | 1 | | |

SignatureoftheFaculty

SignatureoftheHoD