

"PVC" NSSK Govt. Polytechnic Bilaspur at Kalol (HP)

Planned Syllabus Coverage (Theory)

Subject: ESDM

Semester: 2nd

Branch: Electrical Engineering

Session: March 2022

S. No	No. of Lect.	Topic	Detail of Content	Reference Resources
1	02	Basics of Ecology	1. Basics of ecology, eco system and sustainable development	ESDM by Dr. Deepak Arora
2	04	Conservation of land, preservation of species	2. Conservation of land, preservation of species, prevention of advancement of deserts and lowering of water-table, rain water harvesting, deforestation-its effects and control measures	ESDM by Dr. Deepak Arora
3	05	Pollution	3. Pollution: Sources of Pollution-causes, effects and control measures of pollution (air, water, noise, soil, radioactive and nuclear) Units of measurement	ESDM by Dr. Deepak Arora
4	05	Pollution	Prevention of Pollution, Introduction to Cleaner production Technologies, introduction to Waste Minimization Tech.	ESDM by Dr. Deepak Arora
5	06	waste management Conservation	4. Solid waste management, classification of refuse material, sources, effects and control measures. Introduction to E-waste Management	ESDM by Dr. Deepak Arora
6	08	Energy efficiency	5. Conservation Energy: Introduction to Energy Management, Energy Conservation, Energy efficiency & its need. Introduction to Energy Conservation Act 2001 and Energy Conservation (Amendment) Act 2010 & its importance. Role of Non-Conventional Energy Resources (Solar Energy, Wind Energy, Bio Energy, Hydro Energy) in environmental protection.	ESDM by Dr. Deepak Arora
7	06	Role of Non-Conventional Energy Resources	6. Impact of Energy Usage on Environment: Global Warming, Green House Effect, Depletion of Ozone Layer, Acid Rain, Eco-friendly Material, Recycling of Material, Concept of Green Buildings	ESDM by Dr. Deepak Arora
8	04	Disasters	7. Basics of Disaster Management 7.1 Disasters-Basic Terminology: Concepts and definitions of Disaster, Hazard, Vulnerability, Risk, Capacity- Disaster and Development, and Disaster Management.	ESDM by Dr. Deepak Arora
9	04	Types of Disaster	7.2 Types, Trends, Causes, Consequences and Control of Disaster Geological Disasters: earthquakes, landslides, tsunami, mining; Hydro-Meteorological Disasters: floods, cyclones, lightning, thunder-storms, hail storms, avalanches, droughts, cold and heat waves. Disasters: epidemics, pest attacks, forest fire Technological Disasters: chemical, industrial, radiological, nuclear; Manmade Disasters: building collapse, rural and urban fire, road and rail ,nuclear, radiological, chemicals and biological disasters	ESDM by Dr. Deepak Arora
10	04	Global Disaster Trends	7.3 Disaster Management Disaster Management, Disaster risk reduction Pre-Disaster-Risk Assessment and Analysis, Risk Mapping, zoning and Micro-zoning Prevention and Mitigation of Disasters, Early Warning System; Preparedness, Capacity Development	ESDM by Dr. Deepak Arora

(Shabnam Sharma)
Signature of Teacher with Date

Sign. Of HOD/OIC