

# Bhoj Reddy Engineering College for Women: Hyderabad

## Department of Engineering Chemistry

Lesson plan of faculty member for the academic year 2018–19

Class: II B Tech

Branch - Section: ECE-A

Semester: I

Subject: Environmental Science and Technology

Lectures per week: 3

Lecture Number	Topics to be covered	Date (s)
<b>UNIT-I Ecosystems</b>		
1	Definition, classification, function	11 July 2018
2	Food chain ,Food web	12 July 2018
3	Ecological pyramids, Flow of Energy	14 July 2018
4	Biogeochemical cycles , hydrological and gaseous cycles	18 July 2018
5	Biogeochemical cycles - sedimentary cycles	19 July 2018
6	Bio magnification, Bio accumulation, carrying capacity	21 July 2018
7	Ecosystem values ,Services	25 July 2018
<b>UNIT-II Natural resources</b>		
8	Classification, Water resources	26 July 2018
9	over utilization of surface and ground water	28 July 2018
10	Floods	01 August 2018
11	Droughts	02 August 2018
12	Dams – benefits & problems	04 August 2018
13	Mineral resources ,use and exploitation,	08 August 2018
14	Environmental effects of extracting and using mineral resources	09 August 2018
15	Energy resources, growing energy needs	11 August 2018
16	Alternate energy source – case studies	16 August 2018
17	Renewable and non renewable energy sources	18 August 2018
18	Land resources & Forest resources	23 August 2018
<b>UNIT- III Biodiversity and Biotic resources</b>		
19	Introduction, Definition & classification of Biodiversity	25 August 2018
20	Values of Biodiversity, India as a mega diversity nation	29 August 2018
21	Threats to biodiversity- habitat loss, poaching of wild life, man wild life conflicts	30 August 2018
22	Conservation of bio-diversity- insitu and ex-situ	01 September 2018
23	National bio diversity act Hotspots of bio-diversity	08 September 2018
<b>UNIT- IV Environmental pollution &amp; control technologies</b>		
24	Classification of pollution	12 September 2018
25	Air pollution – primary and secondary pollutants, automobile and Industrial pollution	15 September 2018
26	Ambient air quality standards , water pollution :	19 September 2018
27	sources and types of pollution, drinking water standards	20 September 2018
28	Soil pollution: sources and types, impacts of modern agricultural, Degradation of soil	22 September 2018
29	Noise pollution : sources and health Hazards, standards	26 September 2018
30	Pollution control technologies Solid waste: municipal solid waste management, composition, Characteristics of e-Waste and its management	27 September 2018
31	Pollution control technologies wastewater Treatments Primary, Secondary and Tertiary	29 September 2018
32	Overview of air pollution control technologies,	03 October 2018
33	Concepts of bioremediation, Global environmental problems and global efforts	04 October 2018
34	Climate change and impacts on human environment , Ozone depletion, Ozone depleting substances (ODS)	06 October 2018

35	Deforestation and desertification, International convention/protocols ; Kyotoprotocol, Earth summit, Montreal protocol	10 October 2018
36	Environmental protection act, Protection act, legal aspects forest act, Air act-1981, water act.	11 October 2018
<b>UNIT- V Environmental policy, legislation and EIA</b>		
37	Wild life Act, Municipal solid waste management and handling rules	13 October 2018
38	Hazardous waste management and handling rules, biomedical waste management and handling rules	24 October 2018
39	Impacts of air water biological and Socio economical aspects, Strategies for risk assessment, concepts of EMP	25 October 2018
40	Concept of Sustainable Development	27 October 2018
41	Population and its explosion , Crazy consumerism	31 October 2018
42	Environmental Education Urban sprawl	01 November2018
43	Human health, environmental Ethics	03 November2018
44	Concept of Green Building	08 November2018
45	Ecological foot print Life Cycle assessments, Low carbon life style	10 November2018

**Text books:**

1. Environmental Studies by Erach Bharucha & R Rajagopalan.

Name and signature of the faculty: R Divya Bharathi

Name and signature of Head - Chemistry faculty:K Sandhya