

# Bhoj Reddy Engineering College for Women: Hyderabad

## Department of Engineering Chemistry

Lesson plan of faculty member for the academic year 2017–18

Class: II B Tech

Branch - Section: IT-B

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	13 July 2017
2	Food chain ,Food web	15 July 2017
3	Ecological pyramids, Flow of Energy	20 July 2017
4	Biogeochemical cycles , hydrological and gaseous cycles	22 July 2017
5	Biogeochemical cycles - sedimentary cycles	24 July 2017
6	Bio magnification, Bio accumulation, carrying capacity	27 July 2017
7	Ecosystem values ,Services	29 July 2017
<b>UNIT-II Natural resources</b>		
8	Classification, Water resources- over utilization of surface and ground water	31 July 2017
9	Floods	03 August 2017
10	Droughts	05 August 2017
11	Dams – benefits & problems	07 August 2017
12	Mineral resources ,use and exploitation,	10 August 2017
13	Environmental effects of extracting and using mineral resources	12 August 2017
14	Energy resources, growing energy needs	17 August 2017
15	Alternate energy source – case studies	19 August 2017
16	Renewable and non renewable energy sources	21 August 2017
17	Land resources & Forest resources	24 August 2017
<b>UNIT- III Biodiversity and Biotic resources</b>		
18	Introduction, Definition & classification of Biodiversity	26 August 2017
19	Values of Biodiversity, India as a mega diversity nation	28 August 2017
20	Threats to biodiversity- habitat loss, poaching of wild life, man wild life conflicts	31 August 2017
21	Conservation of bio-diversity- insitu and ex-situ, National bio diversity act Hotspots of bio-diversity	04 September 2017
<b>UNIT- IV Environmental pollution &amp; control technologies</b>		
22	Classification of pollution	09 September 2017
23	Air pollution – primary and secondary pollutants, automobile and Industrial pollution	11 September 2017
24	Ambient air quality standards , water pollution :	14 September 2017
25	sources and types of pollution, drinking water standards	16 September 2017
26	Soil pollution: sources and types, impacts of modern agricultural, Degradation of soil	18 September 2017
27	Noise pollution : sources and health Hazards, standards	21 September 2017
28	Solid waste: municipal solid waste management, composition, Characteristics of e-Waste and its management	23 September 2017
29	Pollution control technologies	05 October 2017
30	Pollution control technologies wastewater Treatments Primary, Secondary and Tertiary	07 October 2017
31	Overview of air pollution control technologies,	09 October 2017
32	Concepts of bioremediation, Global environmental problems and global efforts	12 October 2017
33	Climate change and impacts on human environment , Ozone depletion, Ozone depleting substances (ODS)	14 October 2017

34	Deforestation and desertification	16October 2017
35	International convention/protocols ; Kyotoprotocol, Earth summit, Montreal protocol	19 October 2017
<b>UNIT- V Environmental policy, legislation and EIA</b>		
36	Environmental protection act, Protection act, legal aspects Air act-1981, water act, forest act, Wild life Act, Municipal solid waste management and handling rules	21October 2017
37	Hazardous waste management and handling rules, biomedical waste management and handling rules	23 October 2017
38	Impacts of air water biological and Socio economical aspects, Strategies for risk assessment, concepts of EMP	26 October 2017
39	Concept of Sustainable Development, Population and its explosion , Crazy consumerism , Environmental Education Urban sprawl	28 October 2017
40	Ethics, Concept of Green Human health, environmental Building	30 October2017
41	Ecological foot print Life Cycle assessments	02 November2017
42	Low carbon life style	06November2017

**Text books:**

1. Environmental Studies by Erach Bharucha & R Rajagopalan.

Name and signature of the faculty: K Supriya

Name and signature of Head – Chemistry faculty: K Sandhya