AIR POLLUTION
(Professional Elective-IV)

Course Code: 15CH1132	L	T	P	C
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Course Outcomes :

At the end of the Course, the Student will be able to:

CO 1 Recognize and explain different types of air pollutants in industry.

CO 2 Discuss effects of air pollution on humans, animals and plants.

CO 3 Compare different types of air pollution sampling methods.

CO 4 Select equipment for air pollution control in atmosphere.

CO 5 Outline specific gaseous pollutants in atmosphere to meet mission standards

UNIT-I   (8 Lectures)

Air Pollution: Introduction, Sources and Classification of Air Pollutants, Meteorology and Air Pollution, Industrial Plant Location and City Planning.

UNIT-II   (12 Lectures)

Effects of Air Pollution on Human Health, Effects of Air Pollution on Animals, Effects of Air Pollution on Plants, Economic Effects of Air Pollution.

UNIT-III   (8 Lectures)

Air Pollution Sampling and Measurement: Types of Pollutant Sampling and Measurement, Ambient Air Sampling, Stack Sampling, Analysis of Air Pollutants.

UNIT-IV   (12 Lectures)

Air Pollution Control Methods and Equipment: Control Methods,

Source Collection Methods, Cleaning of Gaseous Effluents, Particulate Emission Control, Selection of a Particulate Collector, Control of Gaseous Emissions.

UNIT-V   (10 Lectures)

Control of Specific Gaseous Pollutants: Control of Sulphur Dioxide Emission, Control of Nitrogen Oxides, Carbon Monoxide Control, Control of Hydrocarbons, Mobile Sources, Air Quality and Emission Standards.

TEXT BOOKS:

1.   M.N.Rao, H.V.N. Rao, "Air Pollution" Tata McGraw Hill Education Private Ltd., New Delhi, 2003.

2.   C.S. Rao, "Environmental Pollution Control Engineering", 2nd Edition, New Age International Publishers, New Delhi, 2006.

REFERENCES:

1.   Mahajan S.P, "Pollution Control in Process Industries", Tata McGraw Hill Education Private Ltd., New Delhi, 2004.

2.   Murali Krishna K.V.S.G., "Air Pollution and Control", Kaushal Co, Environmental Protection Society, Kakinada, India, 1995.