

# **AMI08 ENVIRONMENTAL MONITORING INSTRUMENTS**

## **UNIT-1 POLLUTANTS PRODUCED BY HUMAN AND INDUSTRIAL ACTIVITIES**

- 1.1 need for monitoring classification- ambient environmental monitoring
- 1.2 Source monitoring- in plan environmental monitoring- personal monitoring.

## **UNIT-2 AIR POLLUTION**

- 2.1 Different air pollutants- effects- monitoring and abatement conductivity
- 2.2 Coulometry- electrochemical cell- piezoelectric-optical methods – instruments and case study.

## **UNIT-3 WATER POLLUTION**

- 3.1 Water pollutants- health hazards.
- 3.2 Detection techniques emission spectroscopy- atomic absorption spectroscopy
- 3.3 Polarography- chromatography computer methods- waste water treatment.

## **UNIT-4 SOIL POLLUTION**

- 4.1 Industrial solid pollutants- pesticides
- 4.2 Their effect on agricultural products- salinity nutrients- residuals- monitoring- control.

## **UNIT-5 NOISE POLLUTION AND MEASUREMENT**

- 5.1 The effect of noise on human beings and environment – source of noise- method to measure and reduce the noise.

### **References Books:**

1. S.P. Mahajan – Pollution Control in Process Industries – Tata McGraw Hill.
2. J . F. Andrew,P. Briggs and S.H. Jankrins – Instrumentation for Control and Automation for water – waste water Treatment System – Pergamon Press
3. C.S. Arthur – Air Pollution – Academic Press.