# PCI4D002 ENVIRONMENTAL POLLUTION AND MANAGEMENT (4-0-0) (HONOR)

### Module-I

Man and environment, Their inter relationships. Types of environmental pollutants, their sources and effects.

Water Pollution and Control, water quality in surface water, BOD and COD, nitrification, eutrophication and its effects, bacterial contamination of water, toxins and heavy metals,

Ground water pollution, principal sources of ground water pollution

Marine pollution, toxic ocean pollutants, sewage disposal in ocean, cleanup of marine pollution **Module-II** 

Air pollution, Classification of air pollutants and their emission sources, air quality standards, transport and removal of air pollutants, indoor air pollution

#### **Module-III**

Noise pollution and control, Measurement of Noise Pollution, Assessment and measurement of sound, Sources of noise from automobiles and industrial operation and control measures

#### Module-IV

Industrial wastes and their treatment. Solid wastes, generation, collection, processing and disposal.

Environmental impact assessment and auditing. Introduction to Environmental standards, laws and policies. Global issues on environment, Waste minimization, Building environment services.

## **Text Books:**

1. Introduction to Environmental Science by Y Anjaneyulu, BS Publications.

2. Environmental Engineering by G Kiely, McGraw Hill

## **Reference Books:**

- 1. Environmental Studies from Crisis to Cure by R. Rajagopalan, Oxford University Press
- 2. Sewage Disposal and Air Pollution Engineering by S.K. Garg, Khanna Publication.
- 3. Principles of Environmental Science by Cunningham W.P. and Cunningham M.A. McGraw-Hill.
- 4. Basic Environmental Technology by J.A Nathanson, Prentice Hall of India, New Delhi.
- 5. Introduction to Environmental Engineering and Science by G.M. Masters and W.P Ela, Pearson Education.