

ELECTIVE III (EC): INDUSTRIAL POLLUTION AND CONTROL

UNIT 1:

Importance of industries - Indian scene - Availability of the Raw materials and their transportation, solid, liquid and gaseous raw materials. Principles of purification and handling. Energy for industry and energy conservation concepts.

UNIT 2:

Tanneries: Production of leather, vegetable tanning and chrome tanning processes. Sources and characteristics of wastes. Effect of tannery effluent and other wastes on receiving bodies and treatment methods of the wastes. Sugar mills and Distilleries - their manufacturing processes, sources and characteristics of their wastes. On receiving bodies, Treatment of their wastes and disposal.

UNIT 3:

Paper and pulp mills manufacturing processes, sources and characteristics of wastes. Effect of wastes. Treatment processes of the wastes. Textile mills - manufacturing processes, sources and characteristics of wastes. Effects of the wastes on receiving bodies. Treatment of the wastes.

UNIT 4:

Cement industries - manufacturing process, sources of pollution and wastes. Effect of wastes. Control technique of pollution. Oil refineries and thermal power plants-processes involved. Sources of pollution characteristics of pollutants and their effects. Pollution control techniques.

UNIT 5:

Fertilizer industries: manufacturing processes, sources and characteristics of wastes and their effects. Treatment processes pharmaceutical plants: manufacturing processes sources and characteristics of wastes and their effects. Treatment of wastes.

REFERENCES

1. Austin ,G.T. 1977 Shreves' Chemical processes in industries. McGraw Hill Book Co., New York.
2. Khudesia ,V.P. 1986. Industrial pollution control.Pragati Prakasham,Meerut.
3. Mahajan S.P. 1986. Pollution Control in process industries. Tata McGraw Hill Co. Ltd., New Delhi.
4. Rao M.N. and Datta .1982 .Wastewater treatment. Oxford and IBH, New Delhi.
5. Sharma, B.K. 1991. Industrial Chemistry. Krishna Prakashan Mandir,Meerut.
6. Trivedy, B.K. 1991. Pollution control in industries. Enviro media publishing Co., Karad.