

ENVIRONMENTAL MANAGEMENT AND AUDIT

Course Code	20CE2702A	Year	IV	Semester	I
Course Category	Open Elective-4	Offering Branch	ME	Course Type	Theory
Credits	3	L – T – P	3 – 0 – 0	Prerequisites	20MC1301 - Environmental Science
Continuous Internal Evaluation	30	Semester End Evaluation	70	Total Marks	100

Course Outcomes

Upon successful completion of the course, the student will be able to:

CO1	Illustrate basic knowledge on solid waste management	L2
CO2	Demonstrate the handling of biomedical waste and its disposal	L3
CO3	Distinguish the E-waste sources, problems, control measures and E-waste rules	L3
CO4	Outline the basic principles of EIA.	L2
CO5	Understand the activities in environmental auditing.	L2

Contribution of Course outcomes towards achievement of Program outcomes & Strength of correlations (High:3, Medium: 2, Low:1)

	PO1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
CO 1	2	2	2				2						2	2
CO 2	2	2	2				2						2	2
CO 3	3	3	3				2						3	2
CO 4	2	2	2				2						2	2
CO 5	2	2	2				2						2	2
Avg .	2	2	2				2						2	2

Syllabus

UNIT NO	Contents	Mapped CO
I	INTRODUCTION TO SOLID WASTE MANAGEMENT Sources and types of municipal solid wastes-waste generation rates-factors affecting generation, characteristics, segregation of solid wastes – source reduction of waste – objectives of waste processing, elements of solid waste management –public role in solid waste management.	CO1

II	BIOMEDICAL WASTE MANAGEMENT Definition-Sources-Classification of biomedical waste – Objectives of Biomedical waste management-segregation-containers for biomedical waste- Labelling Collection-Transport-Disposal methods	CO2
III	E-WASTE MANAGEMENT E-waste: Sources- Types- components; Collection process- Segregation- Disposal methods; Effect on air, water and soil; Health hazards; Role of individual for E-waste management. Current E-waste Management Rules	CO3
IV	ENVIRONMENTAL IMPACT ASSESSMENT (EIA) Introduction-Definition-Scope-Objectives of EIA-Basic EIA Principles, Classification of EIA-Life Cycle Assessment-Environmental Policy of India. Baseline Data Acquisition: Environmental Inventory- Rapid EIA.	CO4
V	ENVIRONMENTAL AUDIT INTRODUCTION Environmental audit Significance for Industry-Elements of Environmental audit. Process of environmental audit-Pre audit- Activity -Activities at site- Post audit.	CO5

Learning Resources

Text Books

1. Agarwal, K.M., Sikdar, P.K., Deb., S.C (2005) A Text Book of Environment, Macmillan India Limited.
2. Sharma, R.D. (1976), Organisational Management, Light and Life Publishers, New Delhi.
3. Varma and Agarwal, Theory & practice of Management Forward Book Depot, New Delhi

Reference Books

1. Kovntz, H and C. Danvel (1978): Essential of management, second edition, Tata Mc Graw Hill publishing company, New Delhi.
2. Erickson, P.A. (1977) Environmental Impact Assessment – Principles and Erickson, P.A. (1977)

E-Resources & other digital material

<http://nptel.ac.in>