



GUJARAT TECHNOLOGICAL UNIVERSITY

Master of Engineering
Subject Code: Program Elective IV
Semester – II

Subject Name: ENVIRONMENTAL LEGISLATION AND AUDIT

Type of course: Environmental Management

Prerequisite: Basics of Environmental studies

Rationale: Knowledge of existing regulations of the country regarding environmental protection is necessary for practicing environmental engineers.

Teaching and Examination Scheme:

Teaching Scheme			Credits C	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE (E)	PA (M)	ESE (V)	PA (I)	
3	0	2	4	70	30	30	20	150

Content:

Sr. No.	Content	Total Hrs
[A]	ENVIRONMENTAL LEGISLATION	
1	Introduction : Overview of legal system and basic concepts ; History of Environmental Law; Overview of Constitution of India & its perspective to environment; General principles in Environmental law; Environmental concerns in IPC, Cr.PC, Torts; Major international treaties, conventions and conferences related to environmental legislation.	4
2	Water Act, 1974 : Familiarization with important sections and clauses of the Act; Comments on certain provisions, lacunae; Amendments to the Water Act 1974; Water rules.	6
3	Air Act, 1981: Familiarization with important sections and clauses of the Act; Amendments to Air Act 1981; Air rules.	4
4	Environmental Protection Act, 1986: Familiarization with important sections and clauses of the Act; Amendments to EPA, 1986.	4
5	Rules & Notifications under EPA 1986 and its amendments if any: -Biomedical Waste Management Rules, 2016; -Solid Waste Management Rules, 2016; -Hazardous And Other Wastes (Management and Transboundary Movement) Rules, 2016; -Plastic Waste Management Rules, 2016;	8



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	-E-waste (Management) Rules, 2016; -Construction and Demolition Waste Management Rules, 2016; - Coastal Regulation Zone Notification, 2011; -Noise Pollution (Regulation and Control) Rules, 2000; -The Batteries (Management and Handling) Rules, 2001.	
6	Public Liability Insurance Act, 1991; The National Green Tribunal Act, 2010.	2
7	Case Studies: Study of important features of notable environmental court cases.	2
[B]	ENVIRONMENTAL AUDIT	
1	Philosophy of Environmental Audit, Definitions, Benefits, Objectives.	2
2	Audit Procedures : Pre-Audit Activities, Activities at site and Post audit activities,	4
3	Material Mass Balance and Water balance	2
4	Environmental Audit scheme as implemented by GPCB under the instructions of Hon. Gujarat High Court; Case studies.	4

Reference Books:

1. Constitution of India
2. The Water (Prevention and Control of Pollution) Act, 1974
3. The Air (Prevention and Control of Pollution) Act, 1981
4. The Environmental (Protection) Act, 1986
5. Amendments and notifications published under above Acts
6. Environmental Law and policy in India, Armin Rozencaranz, Shyam Divan Marhta L. Noble, Tripathi publication
7. Commentary on Environmental Legislation: By Lal
8. Environmental Legislation: V Krishnamurti
9. Environmental Auditing – CPCB Publication

Course Outcomes:

Sr. No.	CO statement	% Mark Weightage
CO-1	Understand constitutional provisions with respect to environmental protection	20%
CO-2	Understand and implement the provisions of various environmental acts and Rules	50%



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CO-3	Understand the procedure to carry out the Environmental Audit for various industries	30%
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List of Experiments/Tutorials:

Term work will comprise of assignments on the questions related to important sections and clauses of Water Act, 1974; Air Act, 1981; Environmental Protection Act, 1986; Rules and Notification under EPA 1986; PLI Act, 1991; NGT Act, 2010; Environmental Audit, Case studies related to Environmental Legislation & Audit.

Major Equipment: -----

List of Open Source Software/learning website:

1. www.gpcb.gujarat.gov.in
2. www.cpcb.nic.in
3. www.moef.nic.in