



GUJARAT TECHNOLOGICAL UNIVERSITY

Master of Engineering Syllabus

Subject Code: 3726504

Subject Name: Environmental Laws and Audit

WEF Academic Year:	2023-24
Semester:	II
Category of the Course:	Program Elective II

Prerequisite:	Basics of Environmental studies
Rationale:	Knowledge of existing regulations of the country regarding environmental protection is necessary for practicing environmental engineers. Environmental law is the collection of laws, regulations, agreements that governs how humans interact with their environment.

Course Scheme:

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

Course Content:

Sr. No.	Course Content	No. of Hours	% of Weightage
A	ENVIRONMENTAL LAWS		
1	Introduction: Highlights 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	10%
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	14%
3	Air Act, 1981: Familiarization with important sections and clauses of the Act; Amendments to Air Act 1981; Air rules.	4	10%
4	Environmental Protection Act, 1986: Familiarization with important sections and clauses of the Act; Amendments to EPA, 1986.	4	10%



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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; -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.	8	19%
6	Public Liability Insurance Act, 1991; The National Green Tribunal Act, 2010.	2	5%
7	Case Studies: Study of important features of notable environmental court cases.	2	5%
B	ENVIRONMENTAL AUDIT		
1	Philosophy of Environmental Audit, Definitions, Benefits, Objectives	2	5%
2	Audit Procedures: Pre-Audit Activities, Activities at site and Post audit activities,	4	10%
3	Material Mass Balance and Water balance	2	5%
4	Environmental Audit scheme as implemented by GPCB under the instructions of Hon. Gujarat High Court; Case studies. Reporting Environmental Audit Findings - Importance of Environmental Audit Report to industry, public and the governments.	4	10%
Total		42	100

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
10. Environmental Legislation in India by K.R. Gupta



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Course Outcome:

After Completion of the Course, Student will able to:

No	Course Outcomes
01	Apply constitutional provisions with respect to environmental protection
02	Implement the provisions of various environmental acts and Rules
03	Interpret and relate application of procedure to carry out the Environmental Audit for various industries

*RM: Remember, UN: Understand, AP: Apply, AN: Analyse, EL: Evaluate, CR: Create

List of Experiments/:

1. Questions related to important sections and clauses of Water Act, 1974; Air Act, 1981; Environmental Protection Act, 1986; Rules and Notification under EPA1986; PLI Act, 1991; NGT Act, 2010; Environmental Audit, Case studies related to Environmental Legislation & Audit.
2. Case study of legislative dispute
3. Case study of environment audit

List of Open-Source Software/learning website:

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

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