

# GUJARAT TECHNOLOGICAL UNIVERSITY

## ENVIRONMENTAL MANAGEMENT (18)

ENVIRONMENTAL AUDIT AND LEGISLATION

**SUBJECT CODE: 2721808**

SEMESTER: II

**Type of course:** Environmental Management

**Prerequisite:** Environmental Terminologies

**Rationale:** To provide a detailed knowledge regarding legal provision related to environmental protection.

**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)			
					ESE	OEP	PA	RP		
3	2#	2	5	70	30	20	10	10	10	150

**Content:**

Sr. No.	COURSE CONTENT	Total Hrs	% Weightage
<b>[A]</b>	<b>ENVIRONMENTAL AUDIT</b>		
1	Philosophy of Environmental Audit, Definitions, Benefits, Objectives	2	4.76
2	Audit Procedures : Pre-Audit Activities, Activities at site and Post audit activities,	2	4.76
3	Material Mass Balance and Water balance	4	9.52
4	Solid waste estimation	6	14.3
5	Cost of Environmental audit & effectiveness of Environmental audit.	2	4.76
<b>[B]</b>	<b>LEGISLATION</b>		
1	Introduction : Overview of constitution of India; Fundamentals duties and rights; State center and concurrent lists of subjects. Historical legislative background of environmental concerns in different Acts, including IPC, Administrative mechanisms for environmental protection at state and central level.	2	4.76
2	Water Act, 1974 : Familiarization with important sections and clauses of the Act; Comments on certain provisions, lacunae; Amendments to the Water Act 74; Water rules.	4	9.52
3	Water Cess Act, 1977: Familiarization with important sections and clauses of the Act; Amendments to Cess Act 1977.	2	4.76
4	Air Act, 1981: Familiarization with important sections and clauses of the Act; Amendments to Air Act 1981; Air rules.	4	9.52
5	Environmental Protection Act, 1986: Familiarization with important sections and clauses of the Act; Amendments if any; Environmental rules; Hazardous waste rules;	6	14.3

6	Different Notifications under EPA 1986 namely PLI Act 1991, Biomedical Waste Rules 1998 and others..	8	19.04
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### 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 Motor Vehicle Act, (Amended), 1989
5. The Water Cess Act, 1977
6. The Environmental Protection Act, 1986
7. Amendments and notifications published under above Acts
8. Environmental Law and policy in India, Armin Rozencaranz, Shyam Divan Marhta L. Noble, Tripathi publication
9. Commentary on Environmental Legislation: By Lal
10. Environmental Legislation: V Krishnamurti

### Course Outcome:

After learning the course the students should be able to:

1. Display the knowledge of constitutional provisions with respect to environmental protection.
2. Support the industries in achieving compliance with environmental laws and regulations.
3. Support the industries in obtaining the clearance for starting new project.
4. Apply the knowledge of ISO 14000 for obtaining certification.

**List of Experiments:** 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, Water Cess Act, 1977, Notification under EPA 1986, Environmental Audit, case studies related to environment

### Open Ended Problems:

### List of Open Source Software/learning website:

1. Gpcb.gov.in
2. Envfor.nic.in

**Review Presentation (RP):** The concerned faculty member shall provide the list of peer reviewed Journals and Tier-I and Tier-II Conferences relating to the subject (or relating to the area of thesis for seminar) to the students in the beginning of the semester. The same list will be uploaded on GTU website during the first two weeks of the start of the semester. Every student or a group of students shall critically study 2 papers, integrate the details and make presentation in the last two weeks of the semester. The GTU marks entry portal will allow entry of marks only after uploading of the best 3 presentations. A unique id number will be generated only after uploading the presentations. Thereafter the entry of marks will be allowed. The best 3 presentations of each college will be uploaded on GTU website.