



# GUJARAT TECHNOLOGICAL UNIVERSITY

**Bachelor of Engineering**

**Subject Code: 3161310**

**Semester – VI**

**Subject Name: Environmental Legislation and Audit**

**Type of course: Professional Elective Course**

**Prerequisite: -- Basic knowledge of legislation.**

**Rationale:** Knowledge of existing regulations of the country regarding environmental protection is necessary for practicing environmental engineers. Hence the purpose of this subject is to impart the students the knowledge of existing environmental regulations, application of which will be required in their professional life.

### Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE (E)	PA (M)	ESE (V)	PA (I)	
3	1	0	4	70	30	0	0	100

### Content:

Sr. No.	Content	Total Hrs
1	<b>Introduction:</b> a. Historical perspective b. Constitutional perspective c. International protocols/principles d. Law making process e. Common Environmental Law	3
2	<b>Water (Prevention and Control of Pollution) Act 1974:</b> Familiarization with important sections and clauses of Act, Lacunae	4
3	<b>Air (Prevention and Control of Pollution) Act 1981:</b> Familiarization with important sections and clauses of Act, Lacunae	4
4	<b>Water Cess Act 1977:</b> Familiarization with important sections and clauses of Act, Lacunae	2
5	<b>Environmental Protection Act 1986:</b> Familiarization with important sections and clauses of Act, Lacunae	2
6	<b>Notifications under EPA 1986:</b> a. The Hazardous Waste (Management and Handling) Rules; 1989, 2002, 2016 and amendments b. The Biomedical Waste (Management and Handling) Rules; 1998, 2016 and amendments c. Coastal Regulation Zone Rules and amendments d. E-waste Management Rules 2016 e. Plastic Waste Management Rules 2016 f. Municipal Solid Wastes (Management & Handling) Rules 2016 g. Noise Pollution (regulation and control) Rules 2000, 2017 and amendments h. Construction & Demolition Waste Management Rules 2016	16
7	National Green Tribunal Act 2010:Familiarization with important sections and clauses of Act The Public Liability Insurance Act 1991 and amendments	4
8	Introduction to ISO 14000, 14001	2
9	<b>Environmental Audit:</b> a. Definitions, objectives and benefits	5



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Sr. No.	Content	Total Hrs
	b. Audit procedures: Pre audit activities; activities of site and post audit activities c. Environmental Audit Scheme as implemented by GPCB under the instructions of Hon. Gujarat High Court.	

### Suggested Specification table with Marks (Theory): (For BE only)

Distribution of Theory Marks					
R Level	U Level	A Level	N Level	E Level	C Level
20	20	20	10		

Legends: R: Remembrance; U: Understanding; A: Application, N: Analyze and E: Evaluate C: Create and above Levels (Revised Bloom's Taxonomy)

Note: This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

### Reference Books:

1. Constitution of India
2. Water (Prevention and Control of Pollution) Act 1974 and its amendments 1978; 1988.
3. Air (Prevention and Control of Pollution) Act 1981; 1987 and its amendments
4. Water Cess Act; 1977; 1992
5. Environmental Protection Act; 1986 & its amendments
6. Environmental Law and Policy in India by Armin Rozencaranz; Shyam Divan and Marhta L. Noble; Tripathi Publications ISO 14000.
7. Environmental Auditing – CPCB Publication

### Course Outcomes:

Sr. No.	CO statement	Marks Weightage
CO1	Describe historical and constitutional perspective of environmental legislation and common law making process.	10
CO2	Implement the provisions of Water Act, Air Act, Water Cess Act at industry level for their compliance	25
CO3	Identify the elements of Environmental Protection Act and notifications made under it and outline the role of National Green Tribunal	45
CO4	Organize the Environmental audit of industries and explain the provisions of ISO 14000 & 14001	20

### Tutorials:

1. Assignments related to provisions under Water (Prevention and Control of Pollution) Act 1974
2. Assignments related to provisions under Air (Prevention and Control of Pollution) Act
3. Assignments related to provisions under Environmental Protection Act; 1986
4. Assignments related to provisions under Water Cess Act; 1977
5. Assignments related to provisions under The Hazardous Waste (Management and Handling) Rules
6. Assignments related to provisions under The Biomedical Waste(Management and Handling) Rules
7. Assignments related to provisions under Construction & Demolition Waste Management Rules
8. Assignments related to provisions under The Public Liability Insurance Act;
9. Assignments related to provisions under Coastal Regulation Zone
10. Assignments related to provisions under National Green Tribunal Act.
11. Questions based on ISO 14000.
12. Questions based on Environmental Audit.