

**Syllabus for Bachelor of Technology** 

# Subject Code: 01EN1101 Subject Name: Basics of Environmental Studies B. Tech. Year- I (Semester - 1)

**Objective :** Students should gain basic understanding of Environment and environmental issues.

#### **Course Outcomes :**

After completion of this course, student will be able to:

- 1. Understand and realize the multidisciplinary nature of Environment & its components.
- 2. Know the importance of natural resources for the sustainable development of life.
- 3. Understand the effect of growing population on the Environment.
- 4. Classify the different types of pollution and measure to control pollution
- 5. Learn about the Environmental issues faced globally and various steps taken globally to solve such Environmental issues.

#### **Teaching and Examination Scheme :**

Teaching Scheme			Credits	Examination Marks					
				Theory Marks			Practical Marks		Total
THEORY	TUTORIAL	PRACTICAL	С	ESE(E)	IA	CSE	Viva (V)	Term Work (TW)	Marks
2	0	0	0	50	30	20	0	0	100

## **Content :**

Sr. No.	Content	Total Hrs.
1	Introduction and Ecology Introduction to Environment, Ecology – scope and classifications, Ecosystem - Concept and types, Environmental degradation, Impact of humans on environment, role of environmental education	06
2	<b>Population and Environment</b> Factors Affecting Human Settlement, Define Over Population & Explain the Cause, Effect on Environment & Control of it, Methods of Population forecasting	05
3	Environmental Resources Forest resources, Energy resources, Water Resources and Land Resources	06
4	<b>Environmental Pollution</b> Water pollution, Air & Noise Pollution, Environmental sinks, solid and hazardous waste, E-waste & Biomedical waste, Introduction to Green chemistry	06



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5	<b>Global Environmental Issues</b> Greenhouse Effect, Global warming, ozone layer depletion, Climate change, Acid Rain, Global Efforts to control issues	03
6	Governmental bodies for Environmental protection	02

#### **Distribution of Theory Marks**

<b>R</b> Level	U Level	A Level	N Level	E` Level	C Level
20	30	25	15	10	

Legends: R: Remember; U: Understand; A: Apply; N: Analyze; E: Evaluate; C: Create

#### **Reference books :**

- 1. Basics of Environmental Studies by U K Khare, 2011 Published by Tata McGraw Hill
- 2. Environmental Science A Global Concern by William P. Cunningham and Mary Ann Cunningham Published by Tata Mc Graw Hill

## **Instructional Method :**

- 1. The course delivery method will depend upon the requirement of content and need of students. The teacher in addition to conventional teaching method by black board, may also use any of tools such as demonstration, role play, Quiz, brainstorming, MOOCs etc.
- 2. The internal evaluation will be done on the basis of continuous evaluation of students in the laboratory and class-room.
- 3. Students will use supplementary resources such as online videos, NPTEL videos, ecourses, Virtual Laboratory