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| <b>COURSE TITLE</b>   | <b>BASICS OF ENVIRONMENTAL STUDIES</b> |
| <b>COURSE CODE</b>    | <b>01EN1101</b>                        |
| <b>COURSE CREDITS</b> | <b>0</b>                               |

**Objective:**

- 1 To impart training regarding preparing for and making an effective presentation
- 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.
- 6 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 and 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.

**Pre-requisite of course:** Students should gain basic understanding of Environment and environmental issues.

**Teaching and Examination Scheme**

| <b>Theory Hours</b> | <b>Tutorial Hours</b> | <b>Practical Hours</b> | <b>ESE</b> | <b>IA</b> | <b>CSE</b> | <b>Viva</b> | <b>Term Work</b> |
|---------------------|-----------------------|------------------------|------------|-----------|------------|-------------|------------------|
| 2                   | 0                     | 0                      | 50         | 30        | 20         | 0           | 0                |

| <b>Contents : Unit</b> | <b>Topics</b>  | <b>Contact Hours</b> |
|------------------------|--|----------------------|
| 1                      | <b>Introduction and Ecology</b><br>Introduction to Environment, Ecology – scope and classifications, Ecosystem -Concept and types, Environmental degradation, Impact of humans on environment, role of environmental education | 6                    |
| 2                      | <b>Population and Environment</b><br>Factors Affecting Human Settlement, Over Population - Cause, Effect on Environment & Control of it, Methods of Population forecasting   | 5                    |

| <b>Contents :<br/>Unit</b> | <b>Topics</b>   | <b>Contact<br/>Hours</b> |
|----------------------------|---|--------------------------|
| 3                          | <b>Environmental Resources</b><br>Forest resources, Energy resources, Water Resources and Land Resources  | 6                        |
| 4                          | <b>Environmental Pollution</b><br>Water pollution, Air & Noise Pollution, Environmental sinks, solid and hazardous waste, E-waste & Biomedical waste, Introduction to Green chemistry | 6                        |
| 5                          | <b>Global Environmental Issues</b><br>Greenhouse Effect, Global warming, ozone layer depletion, Climate change, Acid Rain, Global Efforts to control issues                           | 3                        |
| 6                          | <b>Governmental bodies for Environmental protection</b><br>Governmental bodies for Environmental protection   | 2                        |
| <b>Total Hours</b>         |   | <b>28</b>                |

**Textbook :**

- 1 Environmental Science A Global Concern, William P. Cunningham and Mary Ann Cunningham, Tata Mc Graw Hill, 2011

**References:**

- 1 Basics of Environmental Studies , Basics of Environmental Studies , U K Khare, Tata McGraw Hill, 2011

**Suggested Theory Distribution:**

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

| Distribution of Theory for course delivery and evaluation |                   |              |                |                 |   |
|---|-------------------|--------------|----------------|-----------------|---|
| <b>Remember /<br/>Knowledge</b>                           | <b>Understand</b> | <b>Apply</b> | <b>Analyze</b> | <b>Evaluate</b> | <b>Higher order<br/>Thinking /<br/>Creative</b> |
| 40.00   | 30.00             | 20.00        | 10.00          | 0.00            | 0.00  |

**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, e-courses, Virtual Laboratory

**Supplementary Resources:**

- 1 [https://onlinecourses.nptel.ac.in/noc19\\_ge22/preview](https://onlinecourses.nptel.ac.in/noc19_ge22/preview)