

**FACULTY OF COMPUTER APPLICATIONS**  
**Bachelor of Science (Information Technology)**

---

- **Sem.** 1
- **Subject Code** : 05BS0108
- **Subject** : Environmental Science
- **Course Objectives:**
  1. Understand the importance of environmental science
  2. Develop sensitivity to protect environment
  3. Understand individual responsibility for environment.
  4. Understand the individual role in Environment safety and pollution.
  5. Develop sensitivity of human population explosion & information technology welfare programs.
- **Prerequisites:** None

Unit No	Topics Covered	No of lectures required
<b>1</b>	<b>The Multidisciplinary nature of environmental studies:</b>  Basic Introduction of Environment and environment studies. Definition, Scope and importance, Need for public awareness	<b>05</b>
<b>2</b>	<b>Natural Resources:</b>  <b>Renewable and non-renewable resources:</b>  <b>Forest resources:</b> Use and Over-exploitation, Timber extraction, mining, dams and their effects on forest and tribal people.  <b>Water resources:</b> Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams benefits and problems.  <b>Mineral resources:</b> Use and exploitation, environmental effects of extracting and using mineral resources.	<b>07</b>

**FACULTY OF COMPUTER APPLICATIONS**  
**Bachelor of Science (Information Technology)**

	<p><b>Food resources:</b> World food problems, changes caused by agriculture and overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, salinity.</p> <p><b>Energy resources:</b> Growing energy needs, renewable and non-renewable energy sources, use of alternate energy sources.</p> <p><b>Land resources:</b> Land as a resource, land degradation, man induced landslides, soil erosion and desertification.</p> <p>-Role of an individual in conservation of natural resources.</p>	
<b>3</b>	<p><b>Ecosystems:</b></p> <p>Concept of an ecosystem, Structure and function of an ecosystem, Producers, consumers and decomposers, Energy flow in the ecosystem</p>	<b>06</b>
<b>4</b>	<p><b>Environment Pollution:</b></p> <p>Causes&amp; effects and control measures of environmental pollution :</p> <p>air pollution, water pollution, soil pollution, marine pollution, noise pollution, thermal pollution, nuclear pollution.</p>	<b>06</b>
<b>5</b>	<p><b>Human Population and the Environment :</b></p> <p>Population growth, variations among nations.</p> <p>Population explosion-Family welfare Programme.</p> <p>Environment and human health.</p>	<b>06</b>

**FACULTY OF COMPUTER APPLICATIONS**  
**Bachelor of Science (Information Technology)**

**Course Outcomes:** At the end of the syllabus students will be able to understand

1. Understand and realize the multi-disciplinary nature of the environment science & relationship between man and environment.
2. Understand the relevance and importance & protection of the natural resources in the sustenance of life on earth and living standard.
3. Comprehend the importance & responsibility of environment protection control measure.
4. Identification of different types of environmental pollution and safety measures.
5. To correlate the exploitation of population and role of information technology in environment.

**Text Book:**

1. Textbook of Environmental Studies for Undergraduate Courses by ErachBharucha Second edition, 2013 Publisher: Universities Press (India) Private Ltd, Hyderabad.

**Reference Books:**

2. De A.K., Environmental Chemistry, Wiley Eastern Ltd.
3. Agarwal, K.C.2001 Environmental Biology, Nidi Publ.Ltd.Bikaner.
4. Environmental Studies by Dr. Suresh K Dhameja, 2007 Published by : S K Kataria& Sons New Delhi

**Web References :**

1. <https://www.ugc.ac.in/oldpdf/modelcurriculum/env.pdf>

**App References :**

1. [https://play.google.com/store/apps/details?id=com.educationapps.environmental&hl=en\\_U](https://play.google.com/store/apps/details?id=com.educationapps.environmental&hl=en_U)

**FACULTY OF COMPUTER APPLICATIONS**  
**Bachelor of Science (Information Technology)**

**Syllabus Coverage from text /reference book & web/app reference:**

Unit #	Chapter Numbers
1	Unit-1 ( 1.1 ,1.2 )
2	Unit-2 ( 2.1 ,2.2,2.3 )
3	Unit-3 (3.1 ,3.2,3.3,3.4 (3.4.1 to 3.4.5) )
4	Unit-5 ( 5.1,5.2)
5	Unit-7 (7.1,7.2,7.3)