

# बिरसा मुंडा ट्रायबल युनिवर्सिटी Birsa Munda Tribal University

राजपिपला, जि॰ नर्मदा Rajpipla, Dist. Narmda Established by Tribal Development Department, Govt. of Gujarat

## School of Arts B.A. (English) Programme

SUBJECT Code & Name: BA04VAENG1 ENVIRONMENTAL STUDIES

## **Teaching and Evaluation Scheme:**

Teaching Scheme				Examination Scheme  Component Weightage (%)			
L	T	P	Total	TH	PWE	TH	PWE
2	-	-	2	50	00	50	00

Programme Name	B.A.	
Semester	IV	
Course Code	BA04VAENG1	
Course Title	Environmental Studies	
Course Content Type (Th./Pr.)	Theory	
Course Credit	2	
Sessions+ Lab. Per Week	2	
Total Teaching/Lab. Hours	30 Hours	
* 2 Laboratory = 1 Session		

### **Learning Objectives**

- 1. The primary objectives of environmental studies are to foster awareness, impart knowledge, cultivate concern, and encourage action towards environmental protection and sustainable resource use
- 2. Aim to equip individuals with the knowledge, skills, and attitudes needed to understand and address environmental issues
- 3. Understanding how ecosystem, climate, and natural resources function
- 4. Applying the scientific method to investigate environmental issues

### Prerequisites (if any)

### Learning Outcomes

On the completion of this course, students will able to:

- 1. Demonstrate mastery of core ecological and physical science concepts and methods as they pertain to environmental problem-solving.
- 2. Demonstrate mastery of core social science concepts and methods as they pertain to environmental problem-solving.





## बिरसा मुंडा ट्रायबल युनिवर्सिटी Birsa Munda Tribal University

राजपिपला, जि॰ नर्मदा Rajpipla, Dist. Narmda Established by Tribal Development Department, Govt. of Gujarat

## School of Arts B.A. (English) Programme

- 3. Recognize and integrate the international, cross-cultural, and transdisciplinary nature of environmental problems in analyses and solutions.
- 4. Produce a culminating/multi-scale piece of work demonstrating the ability to synthesize concepts and methods to make a contribution to environmental solutions.
- 5. Apply proficiency in analytical methods, critical thinking, communication, and leadership skills sufficient to make a contribution in environmental and related fields.

	Contents	TEACHING
UNIT	TOPIC/SUB-TOPIC	HOURS
Ι	<ul> <li>Introduction of Environment</li> <li>Components of Environment,</li> <li>Man-Environment relationship</li> <li>Impact of Technology on the environment</li> <li>Environmental Degradation</li> <li>Ecology &amp; Ecosystems</li> <li>Components of ecosystem- Producers, Consumers and Decomposers</li> <li>Bio-Geo- Chemical Cycles, Hydrological Cycle, Carbon Cycle Oxygen Cycle, Nitrogen Cycle and Sulfur Cycle</li> <li>Energy Flow in Ecosystem</li> <li>Food Chains: Grazing, Detritus, &amp; Food webs</li> <li>Ecological Pyramids</li> <li>Major Ecosystems: Forest Ecosystem, Grassland Ecosystem, Desert Ecosystem, Aquatic Ecosystem, Estuarine Ecosystem.</li> </ul>	15
П	Natural Resources and pollution  Renewable Resources Solar energy, Wind energy and Biomass  Non-renewable Resources Fossil fuel Minerals Pollution: Air pollution Water pollution Soil pollution Noise pollution Thermal pollution Thermal pollution Current Environmental Global Issues: Global Warming & Green Houses Effects, Acid Rain, Depletion of Ozone Layer	15





## बिरसा मुंडा ट्रायबल युनिवर्सिटी Birsa Munda Tribal University

राजपिपला, जि॰ नर्मदा Rajpipla, Dist. Narmda Established by Tribal Development Department, Govt. of Gujarat

School of Arts B.A. (English) Programme

#### Reference Books

- 1. Pathfinder's Fundamentals of Ecology and Environment.
- 2. Environmental Studies: R. Rajagopalan, Oxford University Press
- 3. Environmental Pollution: Causes, Effects & Control by K.C Agrawal
- 4. Environmental Science by Richard T Wright & Bernard J Nebel
- 5. Environmental Science by Daniel B Botkin& Edward A Keller
- 6. Environmental Engineering & Management by Suresh K Dameja

## Web Resources

### Required Software(s) (if any)

L:: Lecture, T:: Tutorial, P:: Practical

**CCE:**: Continuous and Comprehensive Evaluation

A Property

(CCE Theory includes Mid Semester Examination, Assignment, MCQ quizzes, Seminar, Reflective notes, class participation, case analysis and presentation, slip tests (announced/surprised), attendance etc. or any combination of these)

PWE:: Practical Work Examination

(PWE includes Laboratory practical work, project work, viva simulation exercise work etc.)

SEE:: Semester End Evaluation

