



(Shri Ramkrishna Seva Mandal's)
ANAND COMMERCE COLLEGE

An Autonomous College (2025-26 to 2034-35)
(Affiliated to Sardar Patel University)
NAAC ACCREDITED "A" GRADE (3.04 CGPA)
ISO 9001:2015



Syllabus As Per NEP 2020 With Effect From the Academic Year 2025-2026

Bachelor of Computer Applications
BCA Semester – II

Course Code	UCA02VABCA08A	Title of the Course	Environment Studies
Total Credits of the Course	2	Hours per Week	2
Course Objectives	1. Understand the scope of environmental studies and key environmental components and cycles. 2. Explain ecosystem structure, functions, and classification of natural resources.		


Course Content		
Unit	Description	Weightage* (%)
1.	Introduction to Environmental Studies and Ecosystems <ul style="list-style-type: none">• Definition, Scope, and Importance of Environmental Studies• Multidisciplinary Nature of Environmental Studies• Components of the Environment:<ul style="list-style-type: none">○ Atmosphere○ Hydrosphere○ Lithosphere○ Biosphere• Biogeochemical Cycles:<ul style="list-style-type: none">○ Carbon Cycle○ Nitrogen Cycle• Concept of Sustainability and Sustainable Development	35% 11 Hr.
2.	Unit 2: Ecosystem Structure and Functions <ul style="list-style-type: none">• Definition and Structure of Ecosystem• Abiotic and Biotic Components<ul style="list-style-type: none">○ Producers○ Consumers○ Decomposers	35% 11 Hr.

	<ul style="list-style-type: none"> • Functions of Ecosystem: <ul style="list-style-type: none"> ○ Energy Flow in an Ecosystem ○ Food Chains and Food Webs (with examples) • Classification of Natural Resources: <ul style="list-style-type: none"> ○ Renewable Resources ○ Non-renewable Resources ○ Types and Examples 	
3.	<p>Unit 3: Biotic Interactions</p> <ul style="list-style-type: none"> • Positive Interactions (with suitable examples): <ul style="list-style-type: none"> ○ Mutualism ○ Commensalism ○ Proto-cooperation • Negative Interactions (with suitable examples): <ul style="list-style-type: none"> ○ Exploitation ○ Competition ○ Antibiosis 	<p>30% 08 Hr.</p>

Teaching- Learning Methodology	Blended Learning Approach Incorporating Both Traditional Classroom Teaching as Well as Usage of ICT Tools.
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Course Outcomes: Having completed this course, the learner will be able to	
CO1	Understand The Basics, Scope, And Components of Environmental Studies.
CO2	Learn Ecosystem Structure, Functions, And Types of Natural Resources.
CO3	Explore Positive and Negative Biotic Interactions Among Organisms.

Suggested References	
Sr.No.	References
1.	Ecology and Environment by P.D. Sharma.
2.	Fundamentals of Ecology by E.P.Odum.
3..	Ecology by Mohan P. Arora.
4.	Environmental Science by S.C.Santra.
5.	Ecology and Sustainable development by P.S. Ramkrishana.
Digital resources to be used if available as reference material	
Digital Resources	
NPTEL: Environmental Studies – Free Online Course (IIT Madras)	
Khan Academy – Ecology & Environment	
National Geographic Education – Environment & Ecosystems	


Chairman
BOS of Economics
Anand Commerce College


Academic Coordinator
Anand Commerce College


Principal
Anand Commerce College