

Maulana Abul Kalam Azad University of Technology, WB
(Formerly known as West Bengal University of Technology)

Course: Environmental Studies		
Course Code: VAC281D		Semester: II
Maximum Marks: 100		
Teaching Scheme		Examination Scheme
Lecture: 0		End semester Exam: 0
Tutorial: 0		Attendance: 0
Practical: 2		Continuous Assessment: 0
Credit: 2		Practical/Seasonal internal continuous evaluation: 0
		Practical/Seasonal external examination: 100
Sl. No.	Course Objective	
1	The course is designed to provide a working knowledge of environment, ecology and physical sciences for problem solving.	
2	The learner will be able to remember, understand and apply the taught concepts and methods involving social and environmental processes for betterment of environmental health and safety.	
	Course Outcomes	Mapped module/Unit
CO 1	Be able to remember the basic concepts related to environment & ecology	U1, U2
CO 2	Be able to remember & understand the scientific problem related to air, water, noise & land pollution	U3
CO 3	Be able to understand environmental Protection, different renewable energy sources and environmental movements.	U4

Learning Outcome/Skills:

The candidate will be able to acquire a comprehensive knowledge on the fundamental domains of environment, ecosystem, pollution and the ways and means developed to protect the environment for our future generation. This would also create a sense of responsibility and sharp awareness on the role and importance of environment in our life.

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Unit	Total Hours	Bloom's Taxonomy	Remarks, if any
U1	4	1	NA
U2	8	1, 2	NA
U3	10	1, 2, 3	NA
U4	8	1, 2, 3	NA
	30		

Formative Assessment	
Assessment Occasion/ type	Weightage in Marks
Field Survey/Project	25 Marks
Assignments	25 Marks
Theory Exam	25 Marks
PowerPoint Presentation	25 Marks

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Course Code:	VAC281D	
Course:	Environmental Studies	Credits:2.0
Contents		
Chapter	Name of the topic	Hours
Unit-I	Fundamentals of Environment: Introduction, Multidisciplinary nature, Scope and importance; the need for environmental education. Concept of sustainability and sustainable development	4
Unit-II	Ecosystems Ecosystems: Definition, Structure: food chains, food webs and function of ecosystem: Energy flow, nutrient cycle and ecological succession. Ecological Interactions, Biodiversity and Conservation – Levels, India as a mega-biodiversity nation, Threats to biodiversity, Ecosystem and biodiversity services.	8
Unit-III	Environmental Pollution Environmental Pollution - Types: - Air pollution, Water pollution, Land pollution, Noise pollution; pollutants, Effects of pollution, Control and Remedial measures.	10
Unit-IV	Environmental Protection Environmental Protection- Report of the Club of Rome: Sustainable Development, Different Renewable Energy Sources- Wind Power, Water Power, Bio Fuel/Solid Bio Mass, Geothermal Energy, Nuclear Power, Environmental Movements- Chipko movement; Narmada Bachao movement; Tehri Dam conflict.	8
	Total	30

List of Books

Name of Author	Title of the Book	Name of the Publisher
G.N. Pandey	Environmental Management	Vikas Publishing House Pvt. Ltd.
Cunningham	Environmental Science	TMH.
R. Rajagopalan	Environmental Studies	Oxford
R. Joshi & MunishKapila	Environment Management	Kalyani Publishers.
C.S. Rao	Environmental Pollution Control Engineering	New Age International Publication.