



PRATIBHA NIKETAN COLLEGE, NANDED.

Pratibha Learn Massive Open Online Course (MOOC)

VALUE EDUCATION COURSE (VEC):

Environmental Studies “पर्यावरण अभ्यास”



ABOUT THE COURSE:

Environmental Studies is a multidisciplinary course that helps students understand the relationship between humans and the environment. It focuses on natural resources, ecosystems, biodiversity, pollution, climate change, and sustainable development. The course creates awareness about environmental problems and encourages responsible behavior for protecting and conserving the environment.

In many universities (especially in India under UGC/AISHE guidelines), it's a compulsory Ability Enhancement Compulsory Course (AECC) for undergraduates across streams, focusing on awareness and basic concepts rather than deep specialization.

TARGET AUDIENCE:

- Under graduate students of all disciplines
- All students interested in Environment and related issues and remedies
- Students pursuing Ability Enhancement Compulsory Course mentioned in NEP
- Learners seeking awareness about the environment
- Teachers, educators, and lifelong learners interested in Environment related problems

COURSE DETAILS:

Course Instructor : *Dr. Shrimant Dashrath Raut*

Course Duration : 08 Weeks

Credit Awarded : 2 Credits

Medium of Instruction : Bilingual (English and Marathi)

Disciplinary Category : Interdisciplinary

Enrollment Starts : 19th January 2026

Enrollment Up to : 31st January 2026

Course Starts on : 26th January 2026

Course Conclusion : 23rd March 2026

Examination Date : 31st March 2026

COURSE MODULES:

Course Content (Unit-wise)

Unit-I: *Introduction & Natural Resources:*

- ♣ Environment: Definition, Scope, Importance, need for public awareness.
- ♣ Natural Resources: Renewable and Non-Renewable resources, Natural resources and associated problems.
- ♣ Forest Resources: Utility and natural renewal balance, Uses and over exploitation of forest resources, Deforestation case studies, Mining, Dams and their effects on forests.
- ♣ Water resources: Uses of water, over utilization of surface ground water, Floods, Draughts, Dams: Benefits and problems.
- ♣ Mineral Resources: Environmental effects of Extracting and using mineral resources.
- ♣ Land Resources: Land as a resource, effects on productivity, Man induced landslides, soil erosion, Desertification.
- ♣ Energy Resources: Needs, Types of energy and quantities available, growing energy needs, renewable and non-renewable resources, use of alternative energy sources.

Unit-II: *Pollution Introduction, Definition and Scope:*

Definition of Pollution; Causes, effects and control measures of

- ♣ Air pollution,
- ♣ Water pollution,
- ♣ Soil pollution,
- ♣ Noise pollution.

Unit III: *Ecosystems:*

- ♣ Concepts of an ecosystems, Structure and function of an ecosystem, Producers, Consumers, and Decomposers, Energy flow in an ecosystem
- ♣ Ecological succession, Food chain, Food webs, Ecological pyramids.

Unit IV: *Types of Ecosystems:*

- ♣ Introduction, Types, Characteristic features & Structure of following ecosystems
- ♣ Forest ecosystem,
- ♣ Grassland ecosystem,
- ♣ Desert ecosystem
- ♣ Aquatic ecosystem (Ponds, Streams, Lakes, Rivers, Oceans, Estuaries)



About the Instructor: Associate Professor and Head of the Botany Department at Pratibha Niketan Mahavidyalaya, Nanded. With **18** years of teaching experience, he holds M. Sc., B. Ed, and Ph.D. degrees. He has authored **19** research papers and **2** books, actively participated international seminars, and Renowned for his academic dedication and research contributions in plant Sciences.

ENVIRONMENTAL STUDIES – What you will get:

- ♣ Understand the multidisciplinary nature of environmental studies and appreciate how ecology, economy, society & human health are deeply interconnected.
- ♣ The structure & functions of different ecosystems (forest, grassland, desert, aquatic, etc.) and recognize how they provide essential services to humans (food, water, climate regulation, etc.).
- ♣ About various natural resources (renewable & non-renewable), their current status in India, causes of degradation (deforestation, soil erosion, over-exploitation, desertification, etc.) and sustainable management practices.
- ♣ Identify & analyze major types of environmental pollution (air, water, soil, noise, thermal, plastic, radioactive, e-waste) — their sources, effects on health & environment, and control measures.
- ♣ Understand the concepts of biodiversity, its levels values of biodiversity, hotspots in India, threats, and conservation methods.
- ♣ Recognize key contemporary issues and their Indian context:
- ♣ Develop a sense of personal & social responsibility towards environment

ENROLLMENT & CONTACT INFORMATION:

- **Course Starts** : 26th January, 2026
- **Mode** : 100% Online *Massive Open Online Course* (MOOC)
- **Certificate** : Awarded after successful completion
- **Offered by** : Pratibha Niketan College, Nanded
- **Email** : pnmmooc@gmail.com
- **Website** : www.pratibhalearn.online

- **Registration link:** <https://forms.gle/P4uBEwxCzwQfZsEr7>

- **"Nature itself is the best physician." – Hippocrates**

"A single plant can heal what a thousand words cannot."

"जगात कोणताही प्रयोगशाळेत बनवलेला औषध निसर्गाच्या वनस्पतीसारखा संपूर्णनसतो."

"झाडे केवळ प्राणवायू देत नाहीत, ती जीवनदायी औषधे देखील देतात."

LEARN, GROW & SUCCEED