

**Parvatibai Chowgule College of Arts and Science
(Autonomous)**

FOUNDATION COURSE OFFERED FOR B.A./B.Sc. STUDENTS

Course Title: Environmental Studies

Course Code: EVS-1A

Marks: 100

Credits: 4

Duration : 60 Hours

Course Objectives:

- 1) To provide students with basic knowledge of environment and its aspects.
- 2) To sensitize students about environmental issues.

Learning Outcomes: At the end of this course students will be able to

- 1) Understand the complex linkages of environment with different disciplines.
- 2) Apply the knowledge acquired in this course for environmental management

Unit-I: Environment and Natural Resources (15 hours)

Environment : Significance, natural resources and alternatives. Exploitation and conservation strategies. Current environmental issues: Global, national, local Sustainable development: meaning and significance; sustainable development goals and Swachh Bharat Abhiyaan.

Unit-II: Ecosystems and Biodiversity (15 hours)

Ecosystem: Structure, Functions, Energy flow. Ecological succession; Ecological niche
Biodiversity : introduction , hotspots of biodiversity in India, threats to biodiversity; bio geographical classification of India Conservation; Ecosystems and bio diversity services.
Bio safety protocol-2000 Biodiversity rule 2004 Genetically modified foods.

Unit-III: Environmental Pollution and climate change (15 hours)

Significance, application, amendments and enforcement issues: Wildlife protection Act 1972, Water pollution Act-1974, soil pollution act-1980, forest Conservation Act 1980, Air pollution Act-1981, Environmental protection Act 1986. Portals of public sensitization Climate change and global warming; ecological and carbon footprints Climate protection protocol(Kyoto and Doha) Human and climate change

Unit-IV: Environment and Economic development (15 hours)

Significance, linkages, Environmental Kuznet's Curve; environmental accounting. Economic activity and problem of residuals. Environmental pollution: Ambient, damage, abatement and enforcement cost. Environmental resources, externality and market failure. Environmental management: concept and significance. Disaster management and mitigation

REFERENCE BOOKS:

- 1) Asthana, D. K., Asthana M. (2009): A Text book of Environmental Studies. S Chand and Company Limited, New Delhi.
- 2) Bharucha E. (2013): Text Book of Environmental Studies. University Press(India)Private Limited, Hyderabad(A.P.) India.
- 3) Field, Berry and Field, Martha(2001), Environmental Economics. MacGraw Hill/ Irwin
- 4) Mishra,D.D.(2009): Fundamental Concepts in Environmental Studies. S.Chand and Company Limited,New Delhi.
- 5) Rana, S.V.S. (2003): Essentials of Ecology and Environmental Science, Prentice Hall of India Private Limited New Delhi.
- 6) Sharma, P.D. (2011): Environmental Biology and Toxicology, Rastogi Publications, Meerut, India.
- 7) Shinde,P.G. , Pendse S., Dongre P. (2007): Environmental Education. Sheth Publishers Pvt. Ltd, Mumbai, India.
- 8) Titenberg Tom and Lynne , Lewis(2012), Environmental and Natural resources economics, 9th edition , Pearson Publishing House,

Course Execution: This is a multidisciplinary course to be executed preferably by the Departments of Botany, Economics, Geography and Geology.

Course Evaluation: This course will be assessed using continuous assessment after the completion each module.