

DISCIPLINE SPECIFIC ELECTIVE COURSE – NATURAL RESOURCE MANAGEMENT (DSE 5)

Course title & Code	Credits	Duration (Hrs per week)			Eligibility Criteria	Prerequisite
		Lecture	Tutorial	Practical/Practice		
NATURAL RESOURCE MANAGEMENT	4	3	1	0	Class 12th	NIL

Learning Objectives:

The learning objectives of this course are as follows:

- To understand the basic concepts of natural resources, resource appraisal and resource management
- To explain the issues and challenges of management of different natural resources
- To discuss sustainable development of natural resources
- To analyse the resource management policies

Learning Outcomes:

The Learning Outcomes of this course are as follows:

- The students would be able to comprehend the concepts related to the field of natural resource management.
- The students would be able to assess the issues and challenges of management land, soil, water, forest and energy resources.
- The students would elaborate sustainable resource development, natural resource governance and policies.

Course Outline

Unit 1: Introduction: (9 hrs)

- Meaning and concepts of Natural Resources; Classification of natural resources, Approaches to Natural Resource Management, Resource Appraisal

Unit 2: Land and Soil Resources: (9 hrs)

- Utilization, Issues and challenges; Management and conservation

Unit 3: Water and Forest Resources: (9 hrs)

- Utilization, Issues and challenges; Management and conservation

Unit 4: Energy Resources: (9 hrs)

- Growing global energy needs; Use of alternate energy resources; Management and conservation

Unit 5: Contemporary Strategies for Natural Resource Management: (9 hrs)

- Sustainable Resource Development; Natural Resources Governance Framework; Resource Management Policies.

Readings

- Gautam, A. (2018) Natural Resource: Exploitation, Conservation and Management, Sharda Pustak Bhawan, Allhabad.
- Potter, K. (2022) Natural Resources: Exploitation, Depletion and Conservation, Callisto Reference, New York
- Singh, J. and G. Pandey (2015) Natural Resource Management and Conservation, New Delhi: Kalyani Publishers.
- Cooper, P. (2018) Ecology and Natural Resource Management, Syrawood Publishing House, New York
- Cole, R.A. (1999) Natural Resources: Ecology, Economics and Policy, Prentice Hall College Division
- Thakur, B. (2009) Perspectives in Resource Management in Developing Countries, Vol 1: Resource Management-Theory and Practices, Concept Publishing House, New Delhi.
- Thakur, B. (2009) Perspectives in Resource Management in Developing Countries, Vol 4: Land Appraisal and Development, Concept Publishing House, New Delhi.
- Zilberman, D., J.M. Perloff and C.S. Berck (2023) Sustainable Resource Development in the 21st Century, Natural Resource Management Policy: Vol. 57, Springer
- Pereira L.S. et al (2013) Coping With Water Scarcity: Addressing the Challenges, Springer
- Misra, H. N. (2014) Managing Natural Resources: Focus on Land and Water, PHI Learning Pvt. Ltd., New Delhi.
- Pathak, P. and R.R. Srivastav (2021) Alternate Energy Resources: The way to Sustainable Modern Society, Springer.
- Grebner, D.L. et el (2021) Introduction to Forestry and natural Resources, Academic Press, U.K.
- Saxena, H. M. (2013) Economic Geography, Rawat Publication, New Delhi.