

UNIVERSITY OF JAMMU
DEPARTMENT OF GEOGRAPHY
Syllabus for Pre-Ph.D. Course Work
Specialization Paper

Title: Environmental Planning and Management

Credit: 6

Duration of Examination: 3 hrs

Max. Marks: 150

Note: Detailed syllabus for examination to be held in 2026 & 2027 & 2028

Objectives:

The course highlights the environmental problems with which the present modern world is facing and how to mitigate with these problems are being emphasized. Analyze the human-environmental interaction and major ecological constraints with special reference to mountain environment. Specific Planning and management of the environmental issues are focused in this course.

Unit-I

- 1.1 Concept and components of environment
- 1.2 Environment: Life support system
- 1.3 Resource field and pollution sink
- 1.4 Ecosystem: Concept, nature, components, functions and types

Unit-II

- 2.1 Human Environment interaction: Environment and technology
- 2.2 Local, regional and global environmental problems; interconnections of these Environmental problems
- 2.3 Environmental degradation and pollution
- 2.4 Resource evaluation and degradation

Unit-III

- 3.1. Mountain topography and geomorphological processes
- 3.2. Soil erosion and land degradation
- 3.3. Landslides and slope instability
- 3.4. Emerging ecological stresses due to climate change

Unit-IV

- 4.1 Approaches to Environmental planning and management

ORC:

Amr *2-7* *Amr* *Amr* *Amr* *Amr*

- 4.2 Risk restoration and holistic: scales of planning and management
- 4.3 Small community, urban, watershed and eco-region
- 4.4 Techniques, EIA, GIS, Remote Sensing

Unit-V

- 5.1 Concepts and types of resources and their sustainable development
- 5.2 Management strategies of natural resources
- 5.3 Geo-Informatics for natural resources (Wetlands, Glaciers, Watersheds) management strategies
- 5.4. Environmental issues of mountain and fragile ecosystem

Unit VI

- 6.1 Causes, effects and control measures of Water, Air and land pollution
- 6.2 SDG and regional environmental planning
- 6.3 Natural and anthropogenic hazards and vulnerability mapping
- 6.4 Application of geospatial technology in climate, water, glaciers, wetlands, biodiversity and disaster studies.

Note For Paper Setter:

The question paper shall contain two questions from each unit. Candidates shall be required to attempt six questions in all selecting one question from each unit. Each question carries 25 marks.

Suggested Readings:

1. Barrow, C.J. (1999). Environmental Management: Principles and Practice. Routledge, New York.
2. DuPont, R.R., T.E. Baxter and L. Theodore, (1998). Environmental Management: Problems and Solutions, Lewis Publishers, Missouri.
3. Hanaki, K. (Ed.), (2008). Urban Environmental Management and Technology, Shinano inc. Springer.
4. Jeroen C.J.M. Vunder Bagh, K.J. Button and P.Nijkanp (2007). Environmental Planning. Edward Elgar. London.
5. Krishnamurthy, B.(2008). Environmental Management: Text and Cases, Prentice Hall of India Pvt. Ltd., New Delhi.
6. Madu, Christian N. (2007). Environmental Planning and Management, Imperial College Press, London.
7. Selma, P. (2008). Environmental Planning, Sage Publication India Ltd. New Delhi.

ORC: 

  

