

PAPER – III
ENVIRONMENTAL LAW
(Paper Code : K-403)

The course shall comprise of the following :

- (1) General Background
 - (a) Problems of Environmental Pollution and Protection
 - (b) History of Indian Environmental Laws
 - (c) Importance and Scope of Environmental Laws
- (2) Constitutional Aspects : (a) Distribution of Legislative Power, (b) Directive Principles of State Policy (c) Fundamental Duties, (d) Fundamental Rights.
- (3) Select Legal Controls - The Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981. (a) Salient Features of the Acts, (b) Definitions (c) Authorities - Composition, Power and Function, (d) Mechanism to Control the Pollution,(e) Sanctions
- (4) Environment (Protection) Act, 1986 : Definition of 'Environment', Salient Features of the Act, Authorities - Composition, Powers, Functions, Mechanism to Control Environmental Pollution, Sanctions.
- (5) Control of Noise Pollution : Legal Control, Judicial Control.
- (6) Emerging Principles : Historical Background and Judicial Approach in India (1) Polluter Pays Principle, (2) Precautionary Principle, (3) Public Trust Doctrine, (4) Sustainable Development
- (7) Environmental Dispute and Grievance Settlement Mechanism :National Environment Tribunal Act, 1995-Powers, Functions and Jurisdiction of the National Environment Tribunal; National Environment Appellate Authority Act, 1997- Powers, Functions and Jurisdiction of the National Environment Appellate Authority.

BOOKS RECOMMENDED

Diwan Paras, *Environment Administration, Law and Judicial Attitude.*
 Jaswal P.S., *Environmental Law.*
 Kumar Naresh : *Air Pollution and Environment Protection.*
 Pal Chandra, *Environmental Pollution & Development.*
 Singh Gurdip, *Environmentl Law.*

Central Legislations :

The AIR (Prevention and Control of Pollution) Act, 1981.
The Environment (Protection) Act, 1986
The National Environment Tribunals Act, 1995.
The Public Liability Insurance Act, 1991
The Water (Prevention and control of Pollution) Act, 1974

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Course Contents

Unit I: Basic Concept and Nature of Environment

- Meaning, scope and nature of environment. Natural and Man-made Environment.
- Ecosystem-Structure, function and its components.
- Energy flow in Ecosystem-Food chains, Food webs and Ecological pyramids.

Unit II: Natural Resources and Associated Problems

- Forest Resources – use and overexploitation. Deforestation-cause, effects and remedy
- Water Resources- use and overexploitation of surface and ground water. Rain water Harvesting and watershed management.
- Mineral Resources- use, exploitation and conservation, effect of mining on man & environment.
- Food Resources- world food problems-changes caused by agriculture and overgrazing, effect of modern agriculture, fertilizers, pesticides, water logging and Salinity.
- Energy Resources- growing energy need renewable and non-renewable energy sources, Conservation and alternate energy sources.

Unit III: Biodiversity and its conservation

- Meaning and values of Biodiversity, India as a Mega diversity Nation.
- Threats to Biodiversity-habitat loss, poaching of wild life, man-wildlife conflicts.
- Conservation of genetic diversity, an important environment priority: learning to live in harmony with nature.

Unit IV: Environment Issues and Its Preventive Measures

- Causes and effects of environmental hazard, global and local Environmental pollution and its remedies. Air, Water, Soil, Marine, Noise, Thermal and Nuclear Pollution.
- Climate Change- Global Warming, Acid Rain, Ozone layer depletion, Piller Melting.
- Natural Disasters-Flood, Earthquake, Cyclone and Land slides.

Unit V: Environment Management

- Programmes of Environmental Education for attitude changes among the children.
- Environmental Ethics and Values.
- Environmental Acts, Rule and Regulations.
- Role of school in environmental conservation and sustainable development.

Task and Assignments (any one) :

CCS University, Meerut/B.Ed.(Two Year) Syllabus/Session 2019-21 Onwards

- To submit a report after surveying a typically degraded area and to suggest necessary remedial measures with latest statistical data. The area of this task is to include any one of the following topics :
 - Noise Pollution
 - Water Pollution
 - Air Pollution
 - Deforestation
 - Role of the Pollution control boards
 - .Role of Voluntary Organizations.
- Critical analysis of any theme of the course content in about eight to ten pages

Course Structure

1.	Course Status	PEDAGOGY COURSE : PC-4 (OPTIONAL COURSE-ANY ONE)
2.	Course Number	XIV
3.	Course Title	ENVIRONMENT EDUCATION
4.	Course Code	E-503
5.	Period per week	03
6.	Weightage	50 marks
7.	Course Objectives	<p>To enable student-teachers to-</p> <ul style="list-style-type: none"> • Enable the student teacher understand about the concept of environmental education. • Develop in the student teacher a sense of awareness about the environmental pollution, and possible hazards and its causes and remedies. • Develop a sense of responsibility towards conservation of environment, bio-diversity and sustainable development. • Develop reasonable understanding about the role of school and education in fostering the idea and learning to live in harmony with nature. • Enable the students to understand about the various measures available to conserve the environment for sustaining the

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PAPER 15

ENVIRONMENTAL ECONOMICS

PREAMBLE-The objective of the Environmental Economics is to provide students with the necessary training for the application of economic theory and analysis to natural resource and environmental management issues. The subject will impart understanding on the environmental regulatory approaches for correcting market failures, and making use of economic evaluation techniques to assess environmental issues and policies.

UNIT I

Environmental Economics: Meaning, Nature, Scope and Significance; Economy – ecology and environment inter – linkages; Environmental Costs of Economic Growth, Limits to Growth; Environmental Kuznets Curve; Natural Resources: Renewable and non-renewable resources, Theories of Optimal Use of Exhaustible and Renewable Resources; Resource Taxonomy, Equitable use of resources for sustainable lifestyles

UNIT II

Welfare Economics and Environment Valuation: Pareto optimality and competitive equilibrium; Market failures; Theories of Externality and Public Goods, Solutions to Externality, Coase's Theorem, Property Rights and Transaction Costs; Free Rider's Problem, Optimal Provision of Public Goods — Lindahl's Equilibrium; Common Property Resources – Tragedy of Commons.

Environment Valuation: Meaning and Types; Environmental Damages/Benefits, Social Cost Benefit Analysis; Valuation Techniques – Market and Non-Market: - Scientific, Behavioural and Technological - Production Based, Contingent Valuation, Hedonic-Pricing, Travel Cost Method, Risk Assessment,

UNIT III

Environment Management Techniques: Cost Benefit Analysis, Environmental Impact Assessment, Environmental Audit

Theory of Environmental Policy Environmental regulations- promoting Coasian markets; Pigouvian taxes; command and control verses market based instruments; Effluent and emission taxes verses tradable permits; The tools in practice; Micro planning for environment and eco-preservation—water sheds, joint forest management and self- help groups.

UNIT IV

Environmental Pollution: Definition, Cause, effects and control measures, Climate change, global warming, acid rain, ozone layer depletion, Green House Effect, nuclear accidents and holocaust; Consumerism and waste products, Role of an individual in prevention of pollution.

Sustainable Development: Concept, indicators, Measurement and Strategies for Sustainable development; current issues in Sustainable Development; Green Economy; Green Manufacturing, Green Finance and Green Tourism.

M. B. V. M. S. J.

UNIT V

Environmental policy in India: Mechanism for environment regulation in India; Environmental laws and their implementation; Global Environmental Governance; Ecological Footprint Analysis; Policy instruments for controlling water and air pollution and forestry policy; Environment and human health; Poverty and Environment Degradation; People's participation in the Protection of Environment; Role of environmental education.

Suggested Reading Lists[Please refer to the Latest Editions]

1. Baumol, William J. and Wallace E. Oates: The Theory of Environmental Policy, Cambridge University Press, 1988
2. Fisher, A.C.: Resource and Environmental Economics, Cambridge University Press, 1981
3. Jadhav, H & Bhosale, V.M. 1995. Environmental Protection and Laws. Himalaya Pub. House, Delhi 284 p.
4. Cunningham, W.P. Cooper, T.H. Gorham, E & Hepworth, M.T. 2001, Environmental Encyclopedia, Jalco Publ. House, Mumbai, 1196p
5. Mhaskar A.K., Matter Hazardous, Techno-Science Publication (TB)
6. Miller T.G. Jr. Environmental Science, Wadsworth Publishing Co. (TB)
7. Odum, E.P. 1971. Fundamentals of Ecology, W.B. Saunders Co. USA, 574p

M. A. Geography
Semester III
Course XIII
Ecology and Environment

Max. Marks: 100
Theory Exam: 50
Int. Assessment: 50

Course Contents:

- Unit-I : Ecology and Environment, Geography as Human Ecology Conceptual background. The Environment – meaning, structure and types, Man Environment Relationship, Perception of Environment.
- Unit-II : Ecology: meaning and its relation with Geography, Ecosystem: Kinds and functions, food chains, food structure webs, Structure and trophic levels, Energy flow and nutrient cycles, Major Biomes of the World.
- Unit-III : Geographical aspects of major environmental problems: Natural hazards- floods, drought, landslides, Earthquakes and Cyclones, Man-induced hazards – Rapid urbanization, transport development, Agricultural development, Big dams.
- Unit-IV : Environmental Pollution concept and types of pollution, Ecological impact of pollution, its environmental concerns, the green house effects, Global warming and ozone depletion, Environmental Policy and Legislation.
- Unit-V : Ecological basis of environmental Management – Concept, need and approaches, Indian and International efforts for environmental conservation and management: Environmental problems and programmes in India. Environmental Impact Assessment (ETA) of River Valley Projects like Tehri Hydro and Narmada Valley (Sardar Sarovar) Projects, National Parks.

Suggested Readings:

- > Anjunevulu, Y. (2004): Introduction to Environmental Science. B. S. Publications, Hyderabad.
- > Athavale, R. N. (2003): Water Harvesting and Sustainable Supply in India. Rawat Publications, Jaipur.
- > Blaikie, P., Cannon, T. and Davis, I. (eds.) (2004): At Risk: Natural Hazards, Peoples Vulnerability and Disasters. Routledge, London.
- > Bodkin, E. (1982): Environmental Studies, Charles E. Merrill Pub. Co., Columbus, Ohio.
- > Chandna, R.C. (1998): Environmental Awareness, Kalyani Publisher, New Delhi.
- > Eyre, S.R. and Jones, G.R.J. (eds.) (1966): Geography as Human Ecology, Edward Arnold, London.
- > Gautam, A. (2007): Environmental Geography, Sharda Pustak Bhawan, Allahabad.

