

Semester-I

(2025 - 2026)

Environment and Road Safety

Subject Code: BEVS101

(VAC)

Max. Marks: 50

Credits: 02

End-Semester Exam: 35 marks

Total load: 30 Hours

Internal Evaluation: 15 marks

Pass Marks: 35%

Instructions for Paper Setter:

The end-semester examination will be of 35 marks and of 1.5 hours duration. The question paper will consist of three sections, namely Section A, B and C. Section A and B will have four questions each from the respective sections of syllabus. Each question will carry 06 marks and may be segregated into sub-parts. Section C will be compulsory with 11 short- answer type questions of 1 mark each covering the entire syllabus.

Instructions for students:

Students have to attempt four questions in all from Section A and B by selecting 2 questions from each Section. Section C will be compulsory, Use of scientific calculator is allowed.

Section-A

Introduction to environmental studies: The multidisciplinary nature of environmental studies, definition, scope and importance, concept of Biosphere-Lithosphere, hydrosphere, atmosphere.

Ecosystem & biodiversity conservation: Ecosystem and its components, types of Ecosystems Biodiversity-definition and Value, Threats to biodiversity and its conservation Level of biological diversity, genetic, species and ecosystem diversity; bio-geographic zones of India; biodiversity patterns and global biodiversity hot spots, India as Mega-biodiversity nation; Endangered and endemic species of India. Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and informational value.

Natural resources-renewable and non-renewable resources: Land resources and land use change; land degradation soil erosion and desertification, Deforestation causes and impacts due to mining, dam building on environment, Forests, Biodiversity and tribal populations. Water: use and over-exploitation of surface and ground water floods droughts conflicts over water (international & inter-state) Energy resources: renewable and non-renewable energy sources. Use of alternate energy sources, growing energy need case studies.

Pragati

Riyathekar

Environmental Pollution Environmental Pollution: types, causes, effects and controls: Air, water, soil and noise pollution, Nuclear hazards and human health risks, Solid waste management, Source Segregations: Control measures of urban and Industrial waste, Pollution case studies.

Section-B

Environmental protection laws in India: Environmental protection act for: Air (Prevention and control of pollution), Water (Prevention and Control of pollution), Wild life Forest Conservation, Issues involved in the enforcement of environmental, legislation role of an individual in prevention of pollution, Environmental policies & Practices; Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture.

Human Communities and the Environment: Human population growth: Impacts on environment human health and welfare Sanitation & Hygiene, Resettlement and rehabilitation of project affected persons: case studies, Disaster management: floods, earthquake cyclones and landslides, Environment movements: Chipko. Silent valley, Bishops of Rajasthan Environmental ethics: Role of Indian and other religions and cultures in environmental conservation for a Clean green pollution free state, Environmental communication and public awareness case studies (e g CNG vehicles in Delhi)

Road safety awareness: Concept and significance of Road safety, Traffic signs, Traffic rules, Traffic Offences and penalties, How to obtain license, Role of first aid in Road Safety Stubble, Burning, Meaning of Stubble burning, Impact on health & environment, Management and alternative uses of crop stubble, Environmental Legislations and Policies for Restriction of Agriculture Residue Burning in Punjab.

Field Work

1. Visit to an area to document environmental assets: river Forest Flora Fauna etc.
2. Visit to Local polluted site urban/Rural Industrial Agricultural
3. Study of common Plants Insects, Birds and basic principles of identification
4. Study of simple ecosystems-pond river, Delhi Ridge etc.

Reference Books

1. Carson. R. 2002 Silent Spring Houghton Mifflin Harcourt.
2. Gadgil Miuha R 1993 Thislissured 1 and: An ecological History of India of California Press.
3. MCE ully, P. 1996. Rivers no more: the environmental effects of dams (pp.29 64). Zed Books
4. Raven. P.H., Hassenzahl. D.M & Berg R 2012. Environment 8Th edition John
5. Wiles & Sons 13. Rosencranz A Divan. S., & Nobie. ML. 2001. Environmental law and policy in India Tripathi 1992.
6. Singh. J.S., Singh, S.P. and Gupta, S.R. 2014. Ecology. Environmental Science and Conservation. S. Chand Publishing. New Delhi.

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