Satyug Darshan Institute of Engineering & Technology, Faridabad

Department of Computer Science and Engineering

Academic year 2025-26

Programme: B.Tech	**Year & Semester**: 2025-26-sem 4
Course Name: EVS	**Course Code:** ESU-203-V
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Unit I

Short answer questions

Q.N.	Question	KL
1	What is meant by the term man-environment interaction?	KL1
2	How did the mastery of fire influence early human life and the environment?	KL2
3	Mention any two environmental impacts of the origin of agriculture.	KL2
4	What role did natural resources play in the development of great ancient civilizations?	KL2
5	State one major environmental consequence of the Industrial Revolution.	KL2
6	How does population growth lead to natural resource exploitation?	KL2
7	Differentiate between anthropocentric and ecocentric worldviews.	KL2
8	What was the main focus of The Club of Rome's report Limits to Growth (1972)?	KL2
9	Write a short note on the significance of the UN Conference on the Human Environment (1972).	KL2
10	What is the main objective of the World Commission on Environment and Development (WCED)?	KL2

Long answer questions

Q.N.	Question	KL
1	Discuss the evolution of man-environment interaction from the hunter-gatherer stage to the Industrial Revolution.	KL3
2	Explain the environmental impacts of population growth and resource exploitation in the modern era.	KL3
3	Evaluate the shift from anthropocentric to ecocentric perspectives in the development of environmental thought.	KL4
4	Describe the major global environmental conferences and reports — The Club of Rome, Stockholm Conference (1972), WCED (1987), and Rio Summit (1992) — and their contributions to global environmental awareness.	KL3
5	Analyze the role of the Industrial Revolution in transforming human society and its long-term effects on the environment and natural resources.	KL4

Unit II

Short answer questions

Q.N.	Question	KL
1	Define natural resources and explain their importance to human life.	KL1
2	Differentiate between biotic and abiotic resources with one example each.	KL2
3	What is the difference between renewable and non-renewable resources?	KL2
4	List any two major types of biotic resources and mention their significance.	KL1
5	What are microbes as a resource? Give one useful example.	KL2
6	Distinguish between freshwater and marine water resources.	KL2
7	Mention any two environmental impacts of over-exploitation of water resources.	KL2
8	Name two important minerals found in India and their uses.	KL1

9	What are non-conventional sources of energy? Give two examples.	KL1
10	What are Sustainable Development Goals (SDGs) and when were they adopted?	KL1

Long answer questions

Q.N.	Question	KL
1	Explain the classification of natural resources and discuss the major types of biotic and abiotic resources with examples.	KL3
2	Describe the types, availability, and uses of water resources. Discuss the issues and challenges related to water scarcity and conflicts over water.	KL3
3	Discuss the environmental problems associated with mineral extraction and soil degradation. Suggest sustainable management practices.	KL4
4	Compare and contrast conventional and non-conventional energy sources. Explain their environmental implications.	KL3
5	Define sustainable development and explain the objectives and importance of the Sustainable Development Goals (SDGs) in promoting environmental conservation and equitable growth.	KL3

Unit-III

Short answer questions

Q.N.	Question	KL
1	Differentiate between local, regional, and global environmental phenomena with one example each.	KL2
2	Define pollution and list any two of its major types.	KL1
3	What is transboundary air pollution? Give one example.	KL2
4	Explain the term acid rain and mention one of its environmental impacts.	KL2
5	What is smog and how is it formed?	KL2
6	Define land degradation and state one of its causes.	KL1
7	What is deforestation? Mention two of its consequences.	KL2
8	Define urbanization and explain its effect on land use.	KL2
9	What is ozone layer depletion and name one chemical responsible for it.	KL1
10	Differentiate between greenhouse effect and global warming.	KL2

Long answer questions

Q.N.	Question	KL
1	Explain the temporal and spatial scales of environmental phenomena and give examples of how local, regional, and global issues differ in impact and management.	KL3
2	Describe the major types of pollution — air, water, soil, noise, municipal solid waste, and hazardous waste — and discuss their environmental and health impacts.	KL3
3	Discuss land use and land cover changes such as deforestation, desertification, and urbanization, and analyze their consequences on ecosystems and biodiversity.	KL4
4	Explain the causes, effects, and control measures of major global environmental issues — ozone layer depletion, greenhouse effect, global warming, and climate change.	KL4
5	Evaluate the interrelationship between pollution, land use change, and global environmental change, highlighting the need for integrated environmental management.	KL4

Unit-IV

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Short answer questions

Q.N.	Question	KL
1	Define ecosystem and mention its two main components.	KL1
2	What are the structural and functional aspects of an ecosystem?	KL2
3	List any two examples of ecosystem types and mention one key characteristic of each.	KL2
4	What are ecosystem services? Give one example each of provisioning and regulating services.	KL2
5	Define biodiversity and explain its importance as a natural resource.	KL2
6	What are the three levels of biodiversity?	KL1
7	Name any two biodiversity hotspots in India.	KL1
8	Mention any two major threats to biodiversity.	KL2
9	Differentiate between in-situ and ex-situ conservation approaches.	KL2
10	What is the role of traditional knowledge in biodiversity conservation?	KL2

Long answer questions

Q.N.	Question	KL
1	Explain the concept, structure, and functions of ecosystems. Discuss with examples of different ecosystem types such as forests, wetlands, and coastal ecosystems.	KL3
2	Describe the various types of ecosystem services and analyze their importance for human well-being and sustainable development.	KL3
3	Explain the levels and types of biodiversity and discuss the global and Indian patterns of biodiversity distribution.	KL3
4	Discuss the major threats to biodiversity and explain the significance of in-situ and ex-situ conservation measures in preserving biodiversity.	KL4
5	Evaluate the role of traditional knowledge and community-based conservation approaches in maintaining biodiversity and ecosystem health.	KL4

Unit V

Short answer questions

Q.N.	Question	KL
1	Define pollution and explain the difference between point and non-point sources of pollution.	KL1
2	What are primary and secondary air pollutants? Give one example of each.	KL1
3	List any four criteria air pollutants and mention one adverse effect of each.	KL1
4	Define indoor air pollution and mention two common indoor air pollutants.	KL2
5	Name any three water quality parameters used to assess water pollution.	KL1
6	Name any three water quality parameters used to assess water pollution.	KL1
7	What are the main sources of soil pollution?	KL1
8	Define noise pollution and state its unit of measurement.	KL1
9	What are Volatile Organic Compounds (VOCs) and how do they affect air quality?	KL2
10	Mention two sources and impacts of thermal pollution.	KL2

Long answer questions

Q.N.	Question	KL
1.	Discuss the sources, types, and health impacts of air pollution in detail.	KL3

2.	Explain the sources, types, and control measures of water pollution. Include major water quality standards.	KL3
3.	Describe the composition, classification, and health hazards of solid and hazardous wastes.	KL3
4.	Explain the causes, measurement, and effects of noise pollution on human health.	KL3
5.	Discuss the sources and environmental effects of radioactive pollution and thermal pollution.	KL4

Unit VI

Short answer questions

Q.N.	Question	KL
1	What are the main layers of the atmosphere, and which layer plays the most important role in regulating climate?	KL1
2	Define greenhouse gases (GHGs) and name any four major GHGs.	KL1
3	Explain the difference between natural and anthropogenic climate change.	KL2
4	What is the significance of the 1.5°C and 2.0°C global warming limits?	KL2
5	Mention two major observed impacts of climate change on marine and coastal ecosystems.	KL2
6	Define the concept of vulnerability in the context of climate change.	KL1
7	What is the difference between adaptation and resilience?	KL2
8	Define carbon neutrality and carbon intensity.	KL1
9	List any three renewable energy sources that help mitigate climate change.	KL1
10	What is climate justice, and why is it important in international climate policy?	KL2

Long answer questions

Q.N.	Question	KL
1	Describe the structure of the atmosphere and explain how greenhouse gases influence global temperature.	KL3
2	Discuss the projected impacts of global climate change on temperature, rainfall, and extreme weather events, with special reference to India.	KL4
3	Explain the impacts of climate change on agriculture, human health, and natural ecosystems, highlighting key vulnerability factors.	KL4
4	Differentiate between adaptation and mitigation strategies. Explain how they can work synergistically for climate-resilient development.	KL4
5	Write a detailed note on climate change mitigation measures, including renewable energy, energy efficiency, carbon capture and storage, and India's National Action Plan on Climate Change (NAPCC) and INDCs.	KL4

Unit-VII

Short answer questions

Q.N.	Question	KL
1.	What does Article 48A of the Indian Constitution state about environmental protection?	KL1

2.	Explain the significance of Article 51A (g) in relation to environmental duties of citizens.	KL2
3.	Mention the main objectives of the Forest (Conservation) Act, 1980.	KL1
4.	Define Environmental Impact Assessment (EIA) and explain its importance.	KL2
5.	What do the 3Rs (Reduce, Reuse, Recycle) stand for in waste management?	KL1

Long answer questions

Q.N.	Question	KL
1	Discuss the constitutional and legislative framework for environmental protection in India, referring to key articles and major environmental acts.	KL3
2	Explain the objectives, structure, and benefits of ISO 14001 as part of the Environmental Management System (EMS).	KL3
3	Describe the process and importance of Environmental Audit and Environmental Impact Assessment (EIA) in promoting sustainable development.	KL3
4	Elaborate on pollution control and waste management measures in India, highlighting the role of pollution control boards.	KL4
5	Discuss the concept of the 3Rs and Ecolabeling/Eco Mark schemes, explaining how they contribute to sustainability and responsible consumption.	KL4
6	Discuss circular economy by taking an example.	KL2

Unit-VIII

Short answer questions

Q.N.	Question	KL
1.	What is the main objective of the Vienna Convention for the Protection of the Ozone Layer?	K1
2.	Name any two substances controlled under the Montreal Protocol.	K1
3.	What is the primary focus of the Basel Convention?	K1
4.	Which greenhouse gases are targeted under the Kyoto Protocol?	K2
5.	What commitment does the Paris Agreement require from all participating countries?	K2
6.	What are VOC and Persistent Organic Pollutants (POPs) as addressed by the Stockholm Convention?	K2
7.	Which gases are targeted under the Kigali Amendment to the Montreal Protocol?	K1
8.	What commitment does the Paris Agreement require from all participating countries?	K2

Long answer questions

Q.N.	Question	KL
1	Explain the role of the Montreal Protocol and the significance of the Kigali Amendment in addressing climate change.	K2
2	Discuss the objectives and importance of the Stockholm Convention on Persistent Organic Pollutants (POPs).	K2
3	Analyze how the Minamata Convention addresses environmental and human health risks associated with mercury.	K3
4	Compare the Kyoto Protocol and the Paris Agreement with respect to their approach to emission reduction commitments.	K4

5	Evaluate India's role and responsibilities as a party to major international environmental conventions such as UNFCCC, Basel, and Stockholm Conventions.	K4