



INDIAN SCHOOL AL WADI AL KABIR

IED

7- ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

I. Multiple Choice Questions:

1. _____ is not the strategy for Sustainable Development. (Choose the correct alternative)
 - a. Use of biogas
 - b. Use of solar power
 - c. Use of thermal power
 - d. Use of hydel power
 2. Global environmental issues contribute to increased financial commitments to the Government. This indicates
 - a. The opportunity costs of negative environmental impacts are high.
 - b. The social costs of negative environmental cost is high
 - c. The opportunity costs of positive environmental cost is high
 - d. The social costs of positive environmental cost is high
 3. Resources are becoming extinct as degradation surpasses the _____ capacity of the environment. (Choose the correct alternative)
 - a. carrying
 - b. absorptive
 - c. assimilation
 - d. regeneration
 4. _____ is not a cause for environmental degradation.
 - a. Waste management
 - b. Deforestation
 - c. Global warming
 - d. Guarding green cover
 5. The threat to India's environment is due to
 - a. Affluence
 - b. Poverty
 - c. Growth of industries
 - d. All of the above
 6. The pollution which has the maximum impact on the general population in India is
 - a. Industrial effluence
 - b. Land contamination
 - c. Vehicular emissions
 - d. Sound pollution
 7. Due to increasing expenses related to energy and ecological considerations, a country chose to make significant investments in domestic renewable energy technologies instead of bringing in traditional energy sources from abroad.
What favorable outcomes can be anticipated from this strategy of substituting imports?
 1. lower energy costs for consumers due to subsidized imports
 2. promotion of the domestic green energy sector through targeted investments
 3. enhanced self-sufficiency in energy production and greater sustainability
 4. increased dependence on foreign technology for renewable energy implementation
- Alternatives:
- a. 1 and 2
 - b. 2 and 3
 - c. 3 and 4
 - d. 4 and 1

8. With regard to ensuring sustainable economic development, which one of the following strategies is wrong?
- Technological progress must be input efficient and not input consuming
 - Limiting human population within the carrying capacity
 - Rate of extraction of non-renewable resources should not exceed the rate of creation
 - None of the above
9. Select the option that presents a common challenge associated with sustainable aquaculture practices:
- guaranteed financial gains
 - neutral impact on ecosystems
 - struggle to maintain ecological equilibrium
 - independent of technological advancements
10. The environment can perform all its functions without any interruption as long as the demand on these functions is within its
- Assimilating capacity
 - Carrying capacity
 - Absorptive capacity
 - Plimsoll line

II. Answer the following questions:

- What is meant by environment?
- What happens when the rate of resource extraction exceeds that of their regeneration?
- How do the following factors contribute to the environmental crisis in India? What problem do they pose for the government?
 - Rising population
 - Air pollution
 - Water contamination
 - Affluent consumption standards.
 - Illiteracy
 - Industrialisation
 - Urbanisation
 - Reduction of forest coverage
 - Poaching
 - Global warming
- Explain the functions of the environment.
- Outline the steps involved in attaining sustainable development in India.
- Describe any six strategies of sustainable development.
- Explain how the opportunity costs of negative environmental impact are high.
- India has abundant natural resources —substantiate the statement.
- Forest cover: India has lush green forests, which provide green cover for its population and natural cover for its wildlife.
- Mineral deposits: India has large deposits of iron ore, coal, and natural gas, as well as other minerals such as bauxite, copper, chromite, diamonds, gold, lead, lignite, manganese, and zinc.

11. Give two instances of
(a) Overuse of environmental resources
(b) Misuse of environmental resources.
12. Interpret the given picture on account of current environmental challenges.



CASE BASED QUESTIONS:

I. Read the following text carefully:

Sustainable development is the development that meets the needs of the present, without compromising the ability of future generations to meet their own needs. India is critical in determining the success in a pursuit to achieve sustainable development.

The Union Budget 2023 presented by Finance Minister Nirmala Sitharaman builds on India's commitment to lead the global action against climate change, preserve biodiversity and support sustainable development.

The government has accelerated the pace of Green Growth as India is facing the grave reality of depleting natural resources, limited supply of water, minerals, and fossil fuels. In a bid to counter the climate threat, India has committed to achieving net zero by 2070; released a low-carbon development strategy; and introduced the concept of 'LiFE' (Lifestyle for Environment) to promote responsible consumption.

The Green Growth actions include several pointed measures that would facilitate the muchneeded steady decarbonization of Indian industries, reduce dependency on fossil fuel imports and establish technology and market leadership in this sunrise sector. For instance: The allocation of Rs 35,000 crore of priority capital investment towards achieving net zero by 2070 and clean energy transition ensures the country's energy security.

The outlay of Rs 19,700 crore for the Green Hydrogen Mission will mobilise a green hydrogen production capacity of 5 metric million tonnes by 2030. Moreover, to encourage the optimal use of wetlands, enhance biodiversity, carbon stock, eco-tourism opportunities and income generation for local communities, the Amrit Dharohar scheme will be implemented over three years.

Source: <https://economictimes.indiatimes.com/industry/renewables/view-budget-2023-ensured-india-is-primed-for-green-growth>

On the basis of the given text and common understanding, answer the following questions:

- (i) Define sustainable development.
(ii) Briefly elaborate, any two reasons behind the objective of Green Growth being set up by the Indian Government.

II. Read the following passage on the causes of the environmental crisis and answer the questions that follow:

The world is facing an unprecedented environmental crisis characterized by various interconnected challenges. Several factors have contributed to this alarming situation, threatening the delicate balance of ecosystems and the well-being of both humans and wildlife. One of the primary causes of the environmental crisis is the rapid growth of the human population. The increasing demand for resources, food, and energy has led to extensive deforestation, habitat destruction, and overconsumption of natural resources.

Industrialization and modernization have played a significant role in exacerbating the environmental crisis. The reliance on fossil fuels and the emission of greenhouse gases has resulted in global warming and climate change, leading to extreme weather events, rising sea levels, and disruptions in natural cycles. The unchecked discharge of pollutants and waste from industries has further contaminated air, water, and soil, endangering human health and biodiversity.

Another critical factor contributing to the environmental crisis is the expansion of agriculture and urbanization. The conversion of forests and natural habitats into agricultural lands and urban areas has led to the loss of biodiversity and fragmentation of ecosystems. This has disrupted the natural habitats of numerous species, leading to the extinction of many plants and animal species.

Moreover, human activities such as irresponsible waste management and improper disposal of plastics have resulted in the accumulation of plastic waste in oceans and landfills, causing harm to marine life and contaminating the environment. The excessive use of chemical fertilizers and pesticides in agriculture has also led to soil degradation, water pollution, and loss of biodiversity.

The environmental crisis is a complex issue with various interconnected causes. The rapid growth of the human population, industrialization, urbanization, and irresponsible waste management practices are some of the major contributors to this crisis. Addressing these causes requires a collective effort from governments, industries, and individuals to adopt sustainable practices and promote environmental conservation.

Source from: National Institutes of Health, Mongabay, UNFCCC, Intergovernmental Panel on Climate Change

On the basis of the given text and common understanding, answer the following question:

- i. Elucidate the primary causes of the environmental crisis described in the passage.
- ii. Discuss the connection between industrialization and the ongoing environmental crisis.
- iii. Explain the impact of agriculture and urbanization on the environment.
