EVS

Module 1

1. What is the scope of environmental studies?
a) Study of atmosphere and hydrosphere
b) Study of lithosphere and biosphere
c) Study of all living organisms on Earth
d) Study of sustainable development

2. What is the concept of sustainability?
a) The study of every aspect of living organisms
b) The study of science, physics, chemistry, etc.
c) The study of preserving the environment for future generations
d) The study of all resources and their utilization

3. Which component makes up the thin layer above Earth's surface where all living beings exist?
a) Hydrosphere
b) Atmosphere
c) Lithosphere
d) Biosphere

4. What is an ecological niche?
a) The temperature required for living beings to survive
b) The role that an animal or plant species plays in its environment
c) The type of food a species consumes
d) The geographical location where a species resides

5. What is a biome?
a) A community that has developed to climax
b) A region with similar climatic conditions and distinctive species
c) A large body of water such as a lake or ocean
d) An area with diverse ecosystems

6. Which term refers to the part of Earth's surface and atmosphere that contains the entire terrestrial ecosystem?
a) Hydrosphere
b) Lithosphere
c) Troposphere
d) Biosphere

7. What percentage of elements does Earth's mantle contain?

a) 93%
b) 47%
c)28%
d) 8%

8. Which layer of the atmosphere contains Earth's ozone layer?
a) Troposphere
b) Stratosphere
c) Mesosphere
d) Thermosphere

9. Where does the International Space Station orbit in the atmosphere?
a) Troposphere
b) Stratosphere
c) Mesosphere
d) Thermosphere

10. Which layer of the atmosphere merges with the solar wind?
a) Thermosphere
b) Exosphere
c)Mesosphere
d) Stratosphere

11. What does the term "sustainable development" stand for?
a) Development focused on poverty and equality
b) Development concerned with environment protection
c) Development focused on democracy and peace
d) Development concerned with science and technology

12. Who coined the term "sustainable development"?
a) Emad Salami
b) Barbara Ward
c) World Commission on Environment and Development
d) International Institute for Environment and Development

13. When was the concept of sustainable development popularized?
a) 1987
b) 1999
c) 2005
d) 2014

14. How many Sustainable Development Goals were published by UNESCO to be achieved by 2030?
a) 17
b) 10
c) 20
d) 15

15. What is the link between development and environment protection according to Barbara Ward?
a) They should be separate entities.
b) They should be prioritized based on economic factors.
c) They should be closely linked.
d) They should focus on different aspects of society.

Answer Key:

1. c)
2. c)
3. b)
4. b)
5. b)
6. d)
7. 93%
8. b)
9. d)
10. b)
11. b)
12. b)
13. a)
14. 17
15. c)

Module 2

1. What is an ecosystem?
a) A geographic area where animals and plants work together to form a bubble of life
b) A linear series of transfers of matter and energy in the form of food from organism to organism
c) An interconnected set of food chains in an ecosystem
d) A series of connected ecosystems organized based on the types of plants and animals that live in them

2. Which of the following is an abiotic factor in an ecosystem?
a) Plants
b) Animals
c) Rocks
d) Seaweed

3. How do animals that depend on plants for food and shelter adapt to changes in an ecosystem?
a) They move to another ecosystem
b) They perish
c) They must be able to survive in sand dunes for long periods of time.
d) They create a dense canopy that blocks sunlight.

4. What are tide pools?
a) Dense canopies formed by plants in forests
b) Open areas dominated by grasses or grass-like plants
c) Geographic areas where plants, animals, and other organisms work together to form a bubble of life
d) Ponds left by the ocean as the tide goes out

5. How do tide pools depend on abiotic factors?
a) They contain seaweed, which uses photosynthesis to create food
b) Some organisms thrive in an aquatic environment when the tide is in and the pool is full.
c) They connect different ecosystems within a larger biome.
d) They contain rocks, temperature, and humidity.

6. What are biomes?
a) Ponds, reefs, and tundra are all types of biomes.
b) Large sections of land, sea, or atmosphere.
c) Geographic areas where animals and plants work together to form a bubble of life.
d) Organisms that obtain energy and nutrients from remains of dead producers and consumers.

7. What types of ecosystems can be found within the Sahara Desert?
a) Oasis ecosystems with date palm trees, freshwater, and animals such as crocodiles.
b) Dune ecosystems with a changing landscape determined by the wind.
c) Marine environments where the Atlantic Ocean creates cool fogs on the Northwest African coast.
d) All of the above.

8. What do secondary and tertiary consumers eat in terrestrial ecosystems?
a) Plants
b) Other consumers
c) Producers
d) Decomposers

9. What is a food chain?
a) The sequence of transfers of matter and energy in the form of food from organism to organism.
b) The interconnected set of food chains in an ecosystem.
c) The primary food source in an ecosystem.
d) Microorganisms that live on dead organic matter.

10. What is a food web?
a) A linear series of organisms dependent on one another resulting in the transfer of energy.
b) All the food chains in an ecosystem.
c) Organisms that obtain energy and nutrients from remains of dead producers and consumers.
d) The structure of every ecosystem consisting of air, water, salts, light, temperature, and nutrients.

11. Which organisms make up the bottom of the trophic pyramid?
a) Producers
b) Primary consumers
c) Secondary consumers
d) Tertiary consumers

12. What is an energy pyramid?
a) A graphical representation of the energy found within the trophic levels of an ecosystem.
b) An interconnected set of food chains in an ecosystem.
c) A linear series of transfers of matter and energy in the form of food from organism to organism.
d) Organisms that obtain energy and nutrients from remains of dead producers and consumers.

13. How much energy is passed from one trophic level to the next in an energy pyramid?
a）100%
b）90%
c）50%
d）10%

14. What is the dominant vegetation in grasslands?
a) Trees
b) Shrubs
c) Grasses
d) Seaweed

15. What types of forests are found in temperate areas?
a) Tropical rainforests
b) Tropical deciduous forests
c) Temperate rainforests
d) Evergreen coniferous forests

Answers:
1. a) A geographic area where animals and plants work together to form a bubble of life.
2. c) Rocks.
3. a) They move to another ecosystem.
4. d) Ponds left by the ocean as the tide goes out.
5. b) Some organisms thrive in an aquatic environment when the tide is in and the pool is full.
6. b) Large sections of land, sea, or atmosphere.
7. d) All of the above.
8. b) Other consumers.
9. a) The sequence of transfers of matter and energy in the form of food from organism to organism.
10. b) All the food chains in an ecosystem.
11. a） Producers

Module 3

1. What is the primary source of energy in our lives?
   a) Natural energy
   b) Chemical energy
   c) Solar energy
   d) Nuclear energy

   2. Which type of energy release carbon dioxide and contribute to global warming?
   a) Natural energy
   b) Chemical energy
   c) Solar energy
   d) Nuclear energy

   3. Which of the following is a renewable energy resource?
   a) Coal
   b) Oil
   c) Hydro energy
   d) Gas

   4. What is one of the negative impacts of burning coal?
   a) Acid rain formation
   b) Decreased atmospheric temperature
   c) Increased biodiversity
   d) Improved air quality

   5. What is the largest contributor of greenhouse gases and one of the causes of global warming?
   a) Coal
   b) Oil
   c) Gas
   d) Nuclear energy

   6. Which type of mining has been less hazardous than coal mining?
   a) Metal mining
   b) Uranium mining
   c) Coal mining
   d) None of the above

   7. What is the primary cause of desertification worldwide?
   a). Overgrazing
   b). Destruction of vegetation
   c). Mining operations
   d). Climate change

8. Which type of soil erosion is caused by stormy wind carrying fine particles in suspension?
a). Sheet erosion
b). Rill erosion
c). Saltation erosion
d). Slip erosion

9. How can Kaziranga National Park be protected from threats?
a). By using searchlights and nightly patrols
b). By unplanned tourism infrastructure
c). By allowing invasive species to thrive
d). None of the above

10. What are some challenges faced by hydroelectric projects?
a). Submerging agricultural lands and displacement of people
b). Silting of reservoirs and conflicts over water use
c). Difficulties in navigation and fisheries
d). All of the above

11. What is the main cause of global climate change?
a). Trapping of greenhouse gases
b). Deforestation
c). Overfishing
d). None of the above

12. What can individuals do to conserve water?
a). Check and fix water leaks
b). Install water-saving devices
c). Wash dishes with running water
d). All of the above

13. How can food production be made sustainable?
a). Use organic fertilizers
b). Implement integrated crop management systems
c). Avoid use of pesticides
d). All of the above

14. What is one way to save electricity at home?
a) Use energy-efficient bulbs and turn off lights when not needed
b) Keep bulbs and tubes clean
c) Switch off unused electric gadgets
d) All of the above

15. What is one thing individuals can do to conserve the environment?
a) Avoid polluting soil, water, and air
b) Plant tree saplings
c) Advise family members and friends to conserve resources
d) All of the above

Answers:
1. c) Solar energy
2. d) Nuclear energy
3. c) Hydro energy
4. a) Acid rain formation
5. a) Coal
6. a) Metal mining
7. a) Overgrazing
8. c) Saltation erosion
9. a) By using searchlights and nightly patrols
10. d) All of the above
11. a) Trapping of greenhouse gases
12. d) All of the above (Check and fix water leaks, install water-saving devices, wash dishes with running water)
13. d) All of the above (Use organic fertilizers, implement integrated crop management systems, avoid use of pesticides)
14. d) All of the above (Use energy-efficient bulbs and turn off lights when not needed, keep bulbs and tubes clean, switch off unused electric gadgets)
15. d) All of the above (Avoid polluting soil, water, and air, plant tree saplings, advise family members and friends to conserve resources)

Module 4

1. Which of the following is NOT a level of biological diversity?
   a) Genetic diversity
   b) Ecosystem diversity
   c) Species diversity
   d) Biodiversity patterns

2. India can be divided into how many biogeographic zones?
   a) 5
   b) 7
   c) 10
   d) 12

3. Which region in India is known for its cold mountainous snow covered Trans Himalayan region?
   a) Trans Himalayas
   b) Himalaya
   c) Desert
   d) Semi-arid

4. What are the threats to biodiversity?
   a) Habitat loss and poaching of wildlife only
   b) Habitat loss and man-wildlife conflicts only
   c) Habitat loss, poaching of wildlife, and biological invasions only
   d) Habitat loss, poaching of wildlife, man-wildlife conflicts, and biological invasions

5. What are the ecosystem services provided by biodiversity?
   a) Ecological and economic value only
   b) Ecological, economic, and social value only
   c) Ecological, economic, social, and ethical value only
   d) Ecological, economic, social, ethical, aesthetic, and informational value

6. In which type of conservation does conservation take place onsite?
   a) Ex-situ conservation
   b) In-situ conservation
   c) Protected area conservation
   d) Home garden conservation

7. Which method of ex situ conservation involves sampling, shifting, storage and preservation of organisms outside their natural habitat?
   a) Tissue culture storage and propagation
   b) Field gene banking
   c) Cultivation collections
   d) DNA storage

8. Which value is related to the importance of protecting all forms of life based on ethical values?
a) Consumptive use value
b) Productive use value
c)Social values
d)Ethical and moral values

9. Which method of conservation helps to recover populations in their natural habitat?
a) In-situ conservation
b) Ex-situ conservation
c) Protected area conservation
d) Home garden conservation

10. How many species of vascular plants must a region have as endemics to qualify as a biodiversity hotspot?
a) 500
b) 1,500
c) 2,000
d) 3,000

11. What percentage of the land surface do the remaining natural habitats in biodiversity hotspots cover?
a) 0.5%
b) 1.4%
c) 10%
d)15.7%

12. Which region in India is known for its Cape Floristic Region?
a) Eastern Himalaya
b) Indo-Burma
c)Western Ghats and Sri Lanka
d)Cape Floristic Region

13. Which project aims to save tigers from extinction worldwide?
a) Gir Lion Project
b)Crocodile Breeding Project
c)Project Elephant
d)Global Tiger Recovery Programme

14. What percentage of the world's terrestrial life lives on just 2.4% of the land surface area?
a) 40%
b)50%
c)60%
d)70%

Answers:

1. d) Biodiversity patterns
2. c) 10
3. a) Trans Himalayas
4. d) Habitat loss, poaching of wildlife, man-wildlife conflicts, and biological invasions
5. d) Ecological, economic, social, ethical, aesthetic, and informational value
6. b) In-situ conservation
7. d) DNA storage
8. d)Ethical and moral values
9. a) In-situ conservation
10. b) 1,500
11. b) 1.4%

12 c)Western Ghats and Sri Lanka

13. d)Global Tiger Recovery Programme
14. c)60%

Module 5

1. What is pollution?
a) The effect of desirable changes in our surroundings
b) The cause of beneficial changes in our surroundings
c) The effect of undesirable changes in our surroundings
d) The cause of harmful changes in our surroundings

Answer: c) The effect of undesirable changes in our surroundings

2. Which of the following is NOT a type of pollutant?
a) Solid substances
b) Liquid substances
c) Gaseous substances
d) Natural substances

Answer: d) Natural substances

3. Which type of pollutant takes decades or longer to degrade?
a) Degradable pollutants
b) Slowly degradable pollutants
c) Non-degradable pollutants
d) Persistent pollutants

Answer: b) Slowly degradable pollutants

4. Air pollution is:
a) The presence of harmful substances in water bodies
b) The presence of harmful substances in the atmosphere
c) The presence of harmful substances in soil
d) The presence of harmful substances in food crops

Answer: b) The presence of harmful substances in the atmosphere

5. What are some causes of air pollution?
a) Burning fossil fuels and industrial emissions
b) Indoor air pollution and microbial decaying process
c) Transportation and open burning of garbage waste
d) All of the above

Answer: d) All of the above.

6. How can we control the damage caused by air pollution?
a) Conserving energy and using public transport
b) Understanding the concept of reducing, reusing, and recycling
c) Proper disposal of waste and using chemical-free products
d) All of the above

Answer: d) All of the above

7. What are some effects of air pollution on human health?
a) Increased risk of heart attack and breathing problems
b) Worsening of existing heart problems and asthma
c) Irritation of eyes, nose, and throat
d) All of the above

Answer: d) All of the above

8. How does water pollution affect aquatic life?
a) It causes birth defects in aquatic animals
b) It disrupts the entire food chain
c) It leads to reproductive failure in aquatic animals
d) All of the above

Answer: d) All of the above

9. What is a major consequence of water pollution?
a) Death of aquatic creatures
b) Increased availability of clean drinking water
c) Improved water quality in urbanized areas
d) Preservation of ecosystems and habitats

Answer: a) Death of aquatic creatures

10. How does noise pollution affect individuals?
a) It can cause stress and anxiety
b) It can lead to hearing loss
c) It can result in decreased productivity
d) All of the above

Answer: d) All of the above

11. What is the role of an individual in preventing pollution?
a) Developing environmentally ethical lifestyles
b) Planting trees to reduce air pollution
c) Using pesticides only when necessary and in small amounts
d) All of the above

Answer: d) All of the above