



INSIGHTSIAS

SIMPLIFYING IAS EXAM PREPARATION

INSTA 75 DAYS REVISION PLAN FOR UPSC CSE PRELIMS 2024

INSTA TEST: DAY - 78

SUBJECT : ENVIRONMENT



1. Which of the following factors directly affect the length and complexity of food chains in an ecosystem?

1. Energy availability
2. Primary productivity
3. Presence of decomposers
4. Nutrient cycling

Options:

- a) 1 and 2 only
- b) 1, 2, and 3 only
- c) 1, 2, and 4 only
- d) 1, 2, 3, and 4

2. Which of the following statements about the trophic levels in an ecosystem are correct?

1. Each trophic level contains organisms with similar feeding behavior.
2. Energy transfer between trophic levels is highly efficient.
3. Primary consumers occupy the second trophic level.
4. Tertiary consumers are typically at the top of the food chain.

Select the correct answer using the code given below:

- a) 1, 2, and 3 only
- b) 1 and 3 only
- c) 1, 3, and 4 only
- d) 2, 3, and 4 only

3. Consider the following statements regarding artificial ecosystems:

1. They require human intervention for maintenance.
2. They can be completely self-sustaining without external inputs.
3. They replicate the complexity and dynamics of energy flow and nutrient cycles of natural ecosystems.

How many of the above statements are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

4. With reference to the 'Global Stocktake', recently seen in news, consider the following statements:

1. The Global Stocktake is a periodic review mechanism established under the Paris Agreement.
2. The stock take will analyze contributions and achievements of each individual country towards meeting targets set by the Paris Climate summit.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

5. Which of the following best describes 'Ecophene'?

- a) A gradation from one ecosystem to another when there is no sharp boundary between the two.
- b) Population which is characterized by the same genotype but different phenotype in a particular habitat.
- c) An area of uniform environmental conditions providing a living place for a specific assemblage of plants and animals.
- d) A zone of junction between two or more diverse ecosystems.

6. Which of the following statements about pollution sources are correct?

1. Point source pollution can be readily identified and is typically localized.
2. Diffuse pollution is easier to control and mitigate than point source pollution.
3. Urban storm water discharges are considered point source pollution.
4. Mining activities can result in both point and diffuse sources of pollution.

Choose the correct answer from the options given below:

- a) 1 and 2 only
- b) 1 and 3 only

- c) 1 and 4 only
- d) 2, 3, and 4 only

7. Consider the following statements with regard to e-waste:

1. E-waste can be a source of polybrominated biphenyls and polybrominated diphenyl ethers, which are hazardous to human health.
2. E-waste contains valuable materials such as gold, silver, and platinum.
3. The first e-waste clinic for segregating, processing, and disposal of e-waste in India was established in Bhopal, Madhya Pradesh.

How many of the above statements is/are correct?

- a) Only one
- b) Only two
- c) All three
- d) None

8. Consider the following:

1. Carbon dioxide (CO₂)
2. Methane (CH₄)
3. Nitrous oxide (N₂O)
4. Sulfur hexafluoride (SF₆)

Arrange the above given greenhouse gases in an ascending order with reference to their atmospheric lifetime?

- a) 1-2-3-4
- b) 2-3-1-4
- c) 4-1-3-2
- d) 3-2-1-4

9. With reference to Wildlife Protection (Amendment) Act, 2022, consider the following statements:

1. It seeks to increase the species protected under the law, and implement the provisions of Washington Convention.
2. The new act has removed Schedule V that dealt with vermin or animals that destroy food crops.
3. It provides for mandatory surrender of

any captive animals or animal products to the Chief Wild Life Warden.

4. Compensation will be paid to the person for surrendering such items.

How many of the above are correct?

- a) Only one
- b) Only two
- c) Only three
- d) All four

10. Bioprospecting is the systematic search for biochemical and genetic information in nature in order to develop commercially-valuable products for pharmaceutical, agricultural, cosmetic and other applications from:

1. Bacteria
2. Fungi
3. Plants

Select the correct answer using the code given below:

- a) 1 only
- b) 2 only
- c) 1 and 2 only
- d) 1,2 and 3

11. Consider the following statements about India's National Adaptation Fund for Climate Change (NAFCC):

1. NAFCC supports projects aimed at climate adaptation in sectors such as agriculture, water resources, and forestry.
2. The fund exclusively finances renewable energy projects.

Which of the above given statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

12. Consider the following statements about the implementation and applicability of the Forest Rights Act (FRA), 2006:

1. The Ministry of Tribal Affairs is the nodal

agency for its implementation.

2. The Act applies to both tribal and other traditional forest dwelling communities.
3. Rights are recognized for individuals who have resided in forests for at least two generations prior to 2005.
4. A generation is defined as a period of 25 years.

Which of the above given statements are correct?

- a) 1, 2, and 4 only
- b) 1, 3, and 4 only
- c) 2, 3, and 4 only
- d) 1, 2, 3, and 4

13. Consider the following statements about the categories within the Coastal Regulation Zone (CRZ) 2011 notification:

1. CRZ-I includes ecologically sensitive areas like mangroves and coral reefs.
2. CRZ-II pertains to already developed areas close to the shoreline.
3. CRZ-III includes rural areas with a population density above 2161 per square kilometre.
4. CRZ-IV includes aquatic areas from the low tide line up to territorial limits.

Which of the above given statements are correct?

- a) 1 and 3 only
- b) 1, 2, and 4 only
- c) 2, 3, and 4 only
- d) 1, 2, 3, and 4

14. Consider the following statements related to Eco mark:

1. Eco mark is a certification mark issued by the Bureau of Indian Standards to products conforming to a set of standards aimed at the least impact on the ecosystem.
2. It is mandatory for companies to get Eco mark certification.

Which of the above statements is/are correct?

- a) 1 only

- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

15. BSE-GREENEX measures:

- a) Total market value of carbon-intensive products in the economy
- b) Performance of the companies in terms of Carbon Emissions
- c) International trade balance in green products
- d) Movement in sovereign debt of green economies

16. Consider the following statements regarding the Invasive Plant Species:

1. More than half of India's natural systems are threatened by these species which include Lantana camara and Prosopis juliflora.
2. One of the targets in the Kunming-Montreal Global Biodiversity Framework deals with the mitigation of these species.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

17. Consider the following statements regarding the Blue Holes:

1. They are underwater sinkholes similar to the sinkholes on land.
2. They vary in depth and shape but also act as ecological hot spots.
3. They do not include corals or sponges as they inhabit the shallow waters.
4. They provide the essential interaction of the groundwater and aquifer layers.

How many of the statements given above is/are correct?

- (a) Only one
- (b) Only two
- (c) Only three

(d) All four

18. Consider the following statements regarding the Amur Leopard:

1. It lives in areas with mixed Korean pine forests and open grasslands.
2. It lives in the savannah of Africa and in the Russian Far East.
3. It is also known as the Manchurian leopard.

How many of the statements given above is/are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

19. With reference to the Red Panda, consider the following statements:

1. This species is found only in Sikkim and the Kalimpong District of West Bengal.
2. It is the state animal of Sikkim and is listed as Endangered in the IUCN Red List.
3. It thrives best in mixed deciduous forests with dense understories of bamboo.

How many of the statements given above is/are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

20. Which one of the following Organizations recently launched the Climate Promise Initiative?

- (a) The United Nations Environment Programme
- (b) The Climate Action Tracker Group
- (c) The Environmental Defense Fund
- (d) The United Nations Development Programme

21. Consider the following statements regarding the Carbon Footprint:

1. Carbon footprints are usually reported in tonnes of emissions (CO₂-equivalent) per

unit of comparison.

2. A product's carbon footprint includes the emissions for the given year.
3. An organization's carbon footprint includes the direct emissions that it causes and not the indirect emissions.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

22. Consider the followings:

1. Kappad Beach
2. Pati Sonepur Beach
3. Padubidri Beach
4. Radhanagar beach
5. Ghoghla beach

How many of the above blue flag beaches are situated at the eastern coast of India?

- (a) Only two
- (b) Only three
- (c) Only four
- (d) All five

23. Consider the following statements :

1. To allow more feedstocks for production of biofuels.
2. To advance the ethanol blending target of 40% blending of ethanol in petrol to ESY 2025-26 from 2030,
3. To constitute National Biofuel Coordination Committee (NBCC).

How many of the above are the objectives of National Policy on Biofuels-2022?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

24. Consider the following statements regarding Bioremediation technologies:

1. Windrow systems are similar to compost techniques where soil is periodically

turned in order to enhance aeration.

2. Bioventing is the process of groundwater remediation as oxygen, and possible nutrients, is injected.
3. Biosparging is a process that increases the oxygen or air flow into the unsaturated zone of the soil.

How many of the above statements are **incorrect**?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

25. Consider the following statements regarding the Critical wildlife habitats (CWHs):

1. CWHs are areas inside wildlife sanctuaries, national parks and tiger reserves where people's activities like cattle grazing or collecting leaves compete with the needs of wildlife.
2. CWHs are not covered under any law of India.
3. As of December 2020, more than 100 Critical Wildlife Habitats (CWHs) have been declared in India's more than 500 protected areas.

How many of the above statements are correct?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

26. With reference to the Methane hydrate, consider the following statements:

1. Methane hydrate is a liquid clathrate compound that traps large amounts of methane within a water crystal structure.
2. Methane hydrates are formed when methane and water combine at very high temperatures and high pressures.
3. Methane hydrates are one of the largest caches of carbon in the world.

How many of the above statements are **incorrect**?

rect?

- (a) Only one
- (b) Only two
- (c) All three
- (d) None

27. Consider the following statements :

Statement-I :

Carbon fertilization decreases the rate of photosynthesis in plants

Statement-II :

Soils are a major carbon reservoir containing more carbon than the atmosphere and terrestrial vegetation.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- (b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- (c) Statement-I is correct but Statement-II is incorrect
- (d) Statement-I is incorrect but Statement-II is correct

28. consider the following statements regarding the Greenhouse Gas Protocol:

1. It is the most widely used international accounting tool for government and business leaders to understand, quantify, and manage greenhouse gas emissions.
2. The GHG Protocol offers an internationally accepted management tool to help businesses to compete in the global marketplace and governments to make informed decisions about climate change.
3. It provides the accounting framework for nearly every GHG standard and program in the world.

How many of the above statements are correct?

- (a) Only one
- (b) Only two

- (c) All three
- (d) None

29. Consider the following statements regarding the National Tiger Conservation Authority (NTCA):

1. It is a constitutional body set up under Article 48A, under the Ministry of Environment, Forests and Climate Change.
 2. It was established in 2005 following the recommendations of the Tiger Task Force.
- Which of the above statements is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

30. Consider the following statements :

Statement-I :

The New York Declaration on Forests (NYDF) is a voluntary, legally binding political declaration that calls for global action to restore and protect forests.

Statement-II :

The NYDF provides a framework for forest action that consolidates various objectives and initiatives that drive forest restoration, sustainable use, and protection.

Which one of the following is correct in respect of the above statements?

- (a) Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- (b) Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- (c) Statement-I is correct but Statement-II is incorrect
- (d) Statement-I is incorrect but Statement-II is correct

31. Consider the following about Concentrated Solar Thermal Energy Technologies (CST).

1. Under this technology, electricity is gener-

ated when concentrated sunlight, using mirrors or lenses, is converted to heat.

2. It is recorded to be more efficient in costs and useful in emissions cutting in the industrial heat process related applications, over conventional solar thermal energy generation processes.

Select the correct answer using the codes below.

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) None of the above

32. Consider the following about the Joint Polar Satellite System-I (JPSS-I).

1. It will improve recognition of climate patterns that influence weather.
2. It is designed for remote sensing operations and create a Geographical Informational System (GI) based ultraviolet map of the earth.

Select the correct answer using the codes below.

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

33. Under Joint Implementation, countries with commitments are eligible to transfer and/or acquire emission reduction units (ERUs) and use them to meet part of their emission reduction target. This has been provided for under the

- a) Convention on Long-Range Transboundary Air Pollution (LRTAP)
- b) Kyoto Protocol
- c) Montreal Protocol
- d) Paris Climate Accord

34. Coalbed Methane (CBM) can be used for

1. power generation
2. compressed natural gas (CNG) auto fuel
3. feedstock for fertilisers

Select the correct answer using the codes below.

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

35. High concentrations of fluoride in ground water are common in some of the semi-arid areas of

- 1. Gujarat
- 2. Southern Punjab
- 3. Rajasthan

Select the correct answer using the codes below.

- a) 1 and 2 only
- b) 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

Passage 1:

For some, money is the answer. India spends 2.7% of GDP on schools, less than other developing countries, such as Brazil. Two-fifths of schools lack even electricity. But much of the budget is not spent, or is spent badly. School funding increased by 80% from 2011 to 2015, according to analysis of eight states' budgets by Geeta Kingdon of University College London, yet test scores have fallen.

36. Based on your reading of the passage, what is/are the possible reason for falling test scores?

- 1. Most of the education budget is not spent or is spent badly
 - 2. Money might not be the answer to education woes
- A. 1 only
 - B. 2 only
 - C. Both 1 and 2
 - D. Neither 1 nor 2

Examine the following statements.

- I. All colours are pleasant.

II. Some colours are pleasant.

III. No colours are pleasant.

IV. Some colours are not pleasant.

Given that the Statement IV is true, what can be definitely concluded?

- (a) I and II are true.
- (b) I is false.
- (c) II is false.
- (d) II is true.

39. What is the length of train B ?

I. Length of train A is 180 m and it crosses a pole in 12 seconds.

II. The ratio of speed of train A and train B is 3 : 5. Train B crosses a 280 m long bridge in 20 seconds.

- a) Only I is sufficient.
- b) Either I or II is sufficient.
- c) Only II is sufficient.
- d) Both I and II are sufficient.

40. Find the rate of interest ?

I. The difference between CI and SI on an amount at rs.4000 for 2 years is rs.90.

II. The simple interest incurred on certain sum is rs.2400 in 4 years.

- a) Only I is sufficient.
- b) Only II is sufficient.
- c) Either I or II is sufficient.
- d) Neither I nor II is sufficient.