

Environment & Ecology

Questions in UPSC Prelims 2021

1. Statement 1:

The United Nations Capital Development Fund (UNCDF) and the Arbor Day Foundation have recently recognized Hyderabad as 2020 Tree City of the World

Statement 2:

Hyderabad was selected for recognition for a year following its commitment to grow and maintain the Urban forests.

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

- (a) Both Statement 1 and Statement 2 are correct and Statement 2 is the correct explanation for Statement 1
- (b) Both Statement 1 and Statement 2 are correct but Statement 2 is not the correct explanation for Statement 1.
- (c) Statement 1 is correct but Statement 2 is not correct.
- (d) Statement 1 is not correct but Statement 2 is correct.

2. In the context of India's preparation for Climate-smart Agriculture, consider the following statements:

- 1. The 'Climate-Smart village' approach in India is a part of a project led by climate change, Agriculture and food security (CAAFS), an international research programme.
- 2. The project of CCAFS is carried out under Consultative Group on International Agricultural Research (CGIAR) headquartered in France.
- 3. The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) in India is one of the CGIAR'S research centers.

Which of the statements given above are correct?

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

3. Consider the following kinds of organisms:

1. Copepods
2. Cyanobacteria
3. Diatoms
4. Foraminifera

Which of the above are primary producers in the food chains of oceans?

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

4. Consider the following animals

1. Hedgehog
2. Marmot
3. Pangolin

To reduce the chance of being captured by predators, which of the above organisms rolls up/roll up and protects/protect its/their vulnerable parts?

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

5. With reference to the “New York Declaration on Forests”, which of the following statements are

correct?

1. It was first endorsed at the United Nations Climate Summit in 2014
2. It endorses a global timeline to end the loss of forests
3. It is a legally binding international declaration
4. It is endorsed by governments, big companies and indigenous communities.
5. India was one of the signatories at its inception

Select the correct answer using the code given below

- (a) 1, 2 and 4
- (b) 1, 3 and 5
- (c) 3 and 4
- (d) 2 and 5

6. Magnetite particles, suspected to cause neurodegenerative problems are generated as environmental pollutants from which of the following?

1. Brakes of motor vehicles
2. Engines of motor vehicles
3. Microwave stoves within homes
4. Power plants
5. Telephone lines

Select the correct answer using the code given below

- (a) 1, 2, 3 and 5 only
- (b) 1, 2 and 4 only
- (c) 3, 4 and 5 only
- (d) 1, 2, 3, 4 and 5

7. Which one of the following is a filter feeder?

- (a) Catfish

- (b) Octopus
- (c) Oyster
- (d) Pelican

8. In the case of which of the following biogeochemical cycles, the weathering of rocks is the main source of release of nutrients to enter the cycle?

- (a) Carbon cycle
- (b) Nitrogen cycle
- (c) Phosphorus cycle
- (d) Sulphur cycle

9. Which of the following are detritivores?

- 1. Earthworms
- 2. Jellyfish
- 3. Seahorse
- 4. Woodlice

Select the correct answer using the code given below

- (a) 1, 2 and 4 only
- (b) 2, 3, 4 and 4 only
- (c) 1, 3 and 5 only
- (d) 1, 2, 3, 4 and 5

10. The "Common Carbon Metric" supported by UNEP, has been developed for

- (a) Assessing the carbon footprint of building operations around the world
- (b) Enabling commercial farming entities around the world to enter carbon emission trading
- (c) Enabling governments to assess the overall carbon footprint caused by their countries
- (d) Assessing the overall carbon foot-print caused by the use of fossil fuels by the world in a unit time

11. Which of the following have species that can establish a symbiotic relationship with other

organisms?

1. Cnidarians
2. Fungi
3. Protozoa

Select the correct answer using the code given below:

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

12. "R2 Code of Practices" constitute a tool available for promoting the adoption of

- (a) Environmentally responsible practices in the electronics recycling industry
- (b) Ecological management of "Wetlands of International Importance" under the Ramsar Convention
- (c) Sustainable practices in the cultivation of agricultural crops in degraded lands
- (d) "Environmental Impact Assessment" in the exploitation of natural resources

13. Why is there a concern about copper smelting plants?

1. They may release lethal quantities of carbon monoxide into the environment
2. The copper slag can cause the leaching of some heavy metals into the environment
3. They may release sulphur dioxide as a pollutant

Select the correct answer using the code given below

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

14. With reference to furnace oil, consider the following statements:

1. It is a product of oil refineries

2. Some industries use it to generate power
3. Its use causes sulphur emissions into the environment

Which of the statements given above are correct?

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

15. What is blue carbon?

- (a) Carbon captured by oceans and coastal ecosystems
- (b) Carbon sequestered in forest biomass and agricultural soils
- (c) Carbon contained in petroleum and natural gas
- (d) Carbon present in the atmosphere

16. In nature, which of the following is/are most likely to be found surviving on a surface without soil?

1. Fern
2. Lichen
3. Moss
4. Mushroom

Select the correct answer using the code given below

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