

UPSC 2022 Preparation

Year-Wise Environment and Ecology Questions in IAS Prelims (2013-2021)

The IAS Prelims Environment and Ecology Questions from 2013 to 2021 for <u>UPSC 2022</u> are given below:

Previous Year Environment and Ecology Questions 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 (CCAFS), 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



Previous Year Environment and Ecology Questions 2021

Q 1. In the context of recent advances in human reproductive technology, "Pronuclear

Transfer" is used for

- (a) fertilization of egg in vitro by the donor sperm
- (b) genetic modification of sperm-producing cells
- (c) development of stem cells into functional embryos
- (d) prevention of mitochondrial diseases in offspring
- **Q 2.** With reference to carbon nanotubes, consider the following statements:
 - 1. They can be used as carriers of drugs and antigens in the human body.
 - 2. They can be made into artificial blood capillaries for an injured part of human body.
 - 3. They can be used in biochemical sensors.
 - 4. Carbon nanotubes are biodegradable.

Which of the statements given above are correct?

- (a) 1 and 2 only
- (b) 2, 3 and 4 only
- (c) 1, 3 and 4 only
- (d) 1, 2, 3 and 4
- Q 3. Consider the following activities:
 - 1. Spraying pesticides on a crop field
 - 2. Inspecting the craters of active volcanoes
 - 3. Collecting breath samples from spouting whales for DNA analysis

At the present level of technology, which of the above activities can be successfully

carried out by using drones?

(a) 1 and 2 only

(b) 2 and 3 only



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

Q 4. Consider the following statements:

- 1. Genetic changes can be introduced in the cells that produce eggs or sperms of a prospective parent.
- 2. A person's genome can be edited before birth at the early embryonic stage.
- 3. Human-induced pluripotent stem cells can be injected into the embryo of a pig.

Which of the statements given above is/are correct?

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

Q 5. Which of the following statements are correct regarding the general difference between

plant and animal cells?

- 1. Plant cells have cellulose cell walls whilst animal cells do not
- 2. Plant cells do not have plasma membrane unlike animal cells which do
- 3. Mature plant cell has one large vacuole vacuoles

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

Q 6. Which of the following are the reasons/factors for exposure to benzene pollution?

- 1. Automobile exhaust
- 2. Tobacco smoke
- 3. Wood burning
- 4. Using varnished wooden furniture
- 5. Using products made of polyurethane



Select the correct answer using the code given below:

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

Q 7. With reference to Indian elephants, consider the following statements:

- 1. The leader of an elephant group is a female
- 2. The maximum gestation period can be 22 months
- 3. An elephant can normally go on calving till the age of 40 years only
- 4. Among the States in India, the highest elephant population is in Kerala

Which of the statements given above is/are correct?

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

Q 8. Which of the following Protected Areas are located in Cauvery basin?

- 1. Nagarhole National Park
- 2. Papikonda National Park
- 3. Sathyamangalam Tiger Reserve
- 4. Wayanad Wildlife Sanctuary

Select the correct answer using the code given below:

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

Q 9. With reference to India's biodiversity, Ceylon Frogmouth, Coppersmith Barbet, Gray Chinned Minivet and White-throated Redstart are



- (a) Birds
- (b) Primates
- (c) Reptiles
- (d) Amphibians

Q 10. Which one of the following protected areas is well-known for the conservation of a sub-species of the Indian swamp deer (Barasingha) that thrives well on hard ground and is exclusively graminivorous?

- (a) Kanha National Park
- (b) Manas National Park
- (c) Mudumalai Wildlife Sanctuary
- (d) Tal Chhapar Wildlife Sanctuary

Q 11. Which of the following are the most likely places to find the musk deer in its natural habitat?

- 1. Askot Wildlife Sanctuary
- 2. Gangotri National Park
- 3. Kishanpur Wildlife Sanctuary
- 4. Manas National Park

Select the correct answer using the code given below:

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

Q 12. In rural road construction, the use of which of the following is preferred for ensuring environmental sustainability or to reduce carbon footprint?

- 1. Copper slag
- 2. Cold mix asphalt technology
- 3. Geotextiles
- 4. Hot mix asphalt technology
- 5. Portland cement

Select the correct answer using the code given below:



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

Q 13. Steel slag can be the material for which of the following?

- 1. Construction of base road
- 2. Improvement of agricultural soil
- 3. Production of cement

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
- Q 14. Consider the following statements:
 - 1. Coal ash contains arsenic, lead and mercury.
 - 2. Coal-fired power plants release sulphur dioxide and oxides of nitrogen into the environment.
 - 3. High ash content is observed in Indian coal.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3
- Q 15. What is the use of biochar in farming?
 - 1. 'Biochar can be used as a part of the growing medium in vertical farming.
 - 2. When biochar is a part of the growing medium, it promotes the growth of nitrogen fixing microorganisms.
 - 3. When biochar is a part of the growing- medium, it enables the growing medium to retain water for longer time.



Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- Q 16. If a particular plant species is placed under Schedule VI of The Wildlife Protection Act,
- 1972, what is the implication?
- (a) A licence is required to cultivate that plant
- (b) Such a plant cannot be cultivated under any circumstances
- (c) It is a Genetically Modified crop plant
- (d) Such a plant is invasive and harmful to the ecosystem
- Q 17. What is/are the advantage/advantages of zero tillage in agriculture?
 - 1. Sowing of wheat is possible without burning the residue of the previous crop
 - 2. Without the need for the nursery of rice saplings, direct planting of paddy seeds in the wet soil is possible.
 - 3. Carbon sequestration in the soil is possible.

Select the correct answer using the code given below:

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

Q 18. According to India's National Policy on Biofuels, which of the following can be used as

raw materials for the production of biofuels?

- 1. Cassava
- 2. Damaged wheat grains
- 3. Groundnut seeds
- 4. Horse gram
- 5. Rotten potatoes



6. Sugar beet

Select the correct answer using the code given below:

(a) 1, 2, 5 and 6 only

- (b) 1, 3, 4 and 6 only
- (c) 2, 3, 4 and 5 only
- (d) 1, 2, 3, 4, 5 and 6

Q 19. Which one of the following statements best describes the term 'Social Cost of Carbon'? It is a measure, in monetary value, of the

(a) long-term damage done by a tonne of CO2, emissions in a given year

(b) requirement of fossil fuels for a country to provide goods and services to its citizens, based on the burning of those fuels

- (c) efforts put in by a climate refugee to adapt to live in a new place
- (d) contribution of an individual person to the carbon footprint on the planet Earth

Q 20. In the context of India, which of the following is/are considered to be of practice(s) of eco-friendly agriculture?

- 1. Crop diversification
- 2. Legume intensification
- 3. Tensiometer use
- 4. Vertical farming

Select the correct answer using the code given below:

- (a) 1, 2 and 3 only
- (b) 3 only
- (c) 4 only
- (d) 1, 2, 3 and 4
- **Q 21.** Consider the following minerals:
 - 1. Bentonite
 - 2. Chromite
 - 3. Kyanite



4. Sillimanite

In India, which of the above is/are officially designated as major minerals?

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

Q 22. With reference to Ocean Mean Temperature (OMT), which of the following statements is/are correct?

- 1. OMT is measured up to a depth of 26°C isotherm which is 129 meters in the southwestern Indian Ocean during January March.
- 2. OMT collected during January March can be used in assessing whether the amount of rainfall in monsoon will be less or more than a certain long-term mean.

Select the correct answer using the code given below:

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

Q 23. With reference to India's Desert National Park, which of the following statements are

correct?

- 1. It is spread over two districts.
- 2. There is no human habitation inside the Park.
- 3. It is one of the natural habitats of the Great Indian Bustard.

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



Q 24. Consider the following statements :

- 1. 36% of India's districts are classified as "overexploited" or "critical" by the Central Ground Water Authority (CGWA).
- 2. CGWA was formed under the Environment (Protection) Act.
- 3. India has the largest area under groundwater irrigation in the world.

Which of the statements given above is/are correct?

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

Q 25. Among the following Tiger Reserves, which one has the largest area under "Critical Tiger Habitat"?

- (a) Corbett
- (b) Ranthambore
- (c) Nagarjunsagar-Srisailam
- (d) Sunderbans

UPSC 2019 Environment and Ecology Prelims Questions

Q 1. Which one of the following groups of plants were domesticated in the 'New World' and introduced into the 'Old World'?

- (a) Tobacco, cocoa and rubber
- (b) Tobacco, cotton and rubber
- (c) Cotton, coffee and sugarcane
- (d) Rubber, coffee and wheat
- Q 2. Which one of the following National Parks lies completely in the temperate alpine zone?
- (a) Manas National Park
- (b) Namdapha National Park



- (c) Neora Valley National Park
- (d) Valley of Flowers National Park
- **Q 3.** Consider the following statements:
 - 1. Asiatic lion is naturally found in India only
 - 2. Double-humped camel is naturally found in India only
 - 3. One-horned rhinoceros is naturally found in India only

Which of the statements given above is/are correct?

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

Q 4. In the context of which of the following do some scientists suggest the use of cirrus cloud thinning technique and the injection of sulphate aerosol into the stratosphere?

- (a) Creating artificial rains in some regions
- (b) Reducing the frequency and intensity of tropical cyclones
- (c) Reducing the adverse effects of solar wind on the Earth
- (d) Reducing the global warming
- Q 5. Which of the following are in Agasthyamala Biosphere Reserve?
- (a) Neyyar, Peppara and Shendurney Wildlife sanctuaries; and Kalakad Mundanthurai Tiger Reserve
- (b) Mudumalai, Sathyamangalam and Wayanad Wildlife Sanctuaries; and Silent Valley National Park

(c) Kaundinya, Gundla Brahmeswaram and Papikonda Wildlife Sanctuaries; and Mukurthi National Park

(d) Kawal and Sri Venkateswara Wildlife Sanctuaries; and NagarjunasagarSrisailam Tiger Reserve

Q 6. Consider the following statements:

- 1. Some species of turtles are herbivores
- 2. Some species of fish are herbivores.
- 3. Some species of marine mammals are herbivores



4. Some species of snakes are viviparous

Which of the statements given above are correct?

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

Q 7. Why is there a great concern about the 'microbeads' that are released into the environment?

- (a) They are considered harmful to marine ecosystems
- (b) They are considered to cause skin cancer in children.
- (c) They are small enough to be absorbed by crop plants in irrigated fields.
- (d) They are often found to be used as food adulterants.

Q 8. For the measurement/estimation of which of the following are satellite images/remote sensing data used?

- 1. Chlorophyll content in the vegetation of a specific location
- 2. Greenhouse gas emissions from rice paddies of a specific location
- 3. Land surface temperatures of a specific location

Select the correct answer using the code given below.

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

Q 9. Which of the following statements are correct about the deposits of 'methane hydrate'?

- 1. Global warming might trigger the release of methane gas from these deposits
- 2. Large deposits of 'methane hydrate' are found in Arctic Tundra and under the seafloor
- 3. Methane in the atmosphere oxidizes to carbon dioxide after a decade or two

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

Q 10. Consider the following:

- 1. Carbon monoxide
- 2. Methane
- 3. Ozone
- 4. Sulphur dioxide

Which of the above are released into the atmosphere due to the burning of crop/biomass residue?

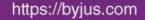
- (a) 1 and 2 only
- (b) 2, 3 and 4 only
- (c) 1 and 4 only
- (d) 1, 2, 3 and 4

Q 11. In India, the use of carbofuran, methyl parathion, phorate and triazophos is viewed with apprehension. These chemicals are used as

- (a) pesticides in agriculture
- (b) preservatives in processed foods
- (c) fruit-ripening agents
- (d) moisturising agents in cosmetics
- Q 12. Consider the following statements:
 - 1. Under Ramsar Convention, it is mandatory on the part of the Government of India to protect and conserve all the wetlands in the territory of India
 - 2. The Wetlands (Conservation and Management) Rules, 2010 were framed by the Government of India based on the recommendations of Ramsar Convention
 - 3. The Wetlands (Conservation and Management) Rules, 2010 also encompass the drainage area or catchment regions of the wetlands as determined by the authority

Which of the statements given above is/are correct?

(a) 1 and 2 only





- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3
- Q 13. Consider the following statements:
 - 1. Agricultural soils release nitrogen oxides into the environment
 - 2. Cattle release ammonia into the environment
 - 3. The poultry industry releases reactive nitrogen compounds into the environment

Which of the statements given above is/ are correct?

- (a) 1 and 3 only
- (b) 2 and 3 only
- (c) 2 only
- (d) 1, 2 and 3
- Q 14. Why are dewdrops not formed on a cloudy night?
- (a) Clouds absorb the radiation released from the Earth's surface.
- (b) Clouds reflect back the Earth's radiation
- (c) The Earth's surface would have a low temperature on cloudy nights
- (d) Clouds deflect the blowing wind to ground level
- Q 15. Consider the following statements:
 - 1. According to the Indian Patents Act, a biological process to create a seed can be patented in India
 - 2. In India, there is no Intellectual Property Appellate Board
 - 3. Plant varieties are not eligible to be patented in India

Which of the statements given above is/are correct?

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



Q 16. The word 'Denisovan' is sometimes mentioned in media in reference to

- (a) fossils of a kind of dinosaurs
- (b) an early human species
- (c) a cave system found in North-East India
- (d) a geological period in the history of the Indian subcontinent
- **Q 17.** Consider the following statements:

The Environment Protection Act, 1986 empowers the Government of India to

- 1. state the requirement of public participation in the process of environmental protection, and the procedure and manner in which it is sought
- 2. lay down the standards for emission or discharge of environmental pollutants from various sources

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
- Q 18. Consider the following statements:
 - 1. As per the recent amendment to the Indian Forest Act, 1927, forest dwellers have the right to fell the bamboos grown on forest areas
 - 2. As per the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, bamboo is a minor forest produce
 - 3. The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition Forest Rights) Act, 2006 allows ownership of minor forest produce to forest dwellers

Which of the statements given above is/are correct?

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



Q 19. Recently, there was a growing awareness in our country about the importance of Himalayan nettle (Girardinia diversifolia) because it is found to be a sustainable source of [Based on Current Affairs 2018-19]

- (a) anti-malarial drug
- (b) biodiesel
- (c) pulp for the paper industry
- (d) textile fibre

Q 20. In the context of proposals to the use of hydrogen-enriched CNG (H-CNG) as fuel [Based on Current Affairs 2018-19]

buses in public transport, consider the following statements:

- 1. The main advantage of the use of HCNG is the elimination of carbon monoxide emissions
- 2. H-CNG as fuel reduces carbon dioxide and hydrocarbon emissions
- 3. Hydrogen up to one-fifth by volume can be blended with CNG as fuel for buses
- 4. H-CNG makes the fuel less expensive than CNG

Which of the statements given above is/are correct?

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

UPSC Prelims Environment and Ecology Questions 2018

- Q 1. Which one of the following is an artificial lake?
- (a) Kodaikanal (Tamil Nadu)
- (b) Kolleru (Andhra Pradesh)
- (c) Nainital (Uttarakhand)
- (d) Renuka (Himachal Pradesh)

Q 2. Which of the following is/are the possible consequences of heavy and mining in riverbeds?

- 1. Decreased salinity in the river
- 2. Pollution of groundwater



3. Lowering of the water table

Select the correct answer using the code given below:

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

Q 3. The Partnership for Action on Green Economy (PAGE) a UN mechanism to assist countries transition towards greener and more inclusive economies, emerged at

- (a) The Earth Summit on Sustainable Development 2002, Johannesburg
- (b) The United Nations Conference on Sustainable Development 2012, Rio de Janeiro
- (c) The United Nations Framework Convention on Climate Change 2015, Paris
- (d) The World Sustainable Development Summit 2016, New Delhi
- Q 4. Why is a plant called Prosopis Juliflora often mentioned in the news?
- (a) Its extract is widely used in cosmetics
- (b) It tends to reduce the biodiversity in the area in which it grow
- (c) Its extract is used in the synthesis of pesticides
- (d) None of the above
- **Q 5**. Consider the following statements:
 - 1. The Earth's magnetic field has reversed every few hundred thousand years
 - 2. When the Earth was created more than 4000 million years ago, there was 54% oxygen and no carbon dioxide
 - 3. When living organisms originated, they modified the early atmosphere of the Earth

Which of the statements given above is/are correct?

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



- (d) 1, 2 and 3
- Q 6. In which one of the following states is Pakhui wildlife sanctuary located?
- (a) Arunachal Pradesh
- (b) Manipur
- (c) Meghalaya
- (d) Nagaland
- Q 7. Consider the following statements?
 - 1. The definition of "Critical Wildlife Habitat" is incorporated in the forest rights act 2006
 - 2. For the first time in India, Baigas have been given habitat rights
 - 3. Union Ministry of Environment Forest and Climate Change officially decides and declares Habitat Rights for Primitive and Vulnerable Tribal Groups in any part of India

Which of the statements given above is/are correct?

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

Q 8. Consider the following

- 1. Birds
- 2. Dust blowing
- 3. Rain
- 4. Wind blowing

Which of the above spread plant diseases?

- (a) 1 and 3 only
- (b) 3 and 4 only
- (c) 1, 2 and 4 only
- (d) 1, 2, 3 and 4
- Q 9. How is the National Green Tribunal (NGT) different from the Central Pollution Control Board



(CPCB)?

- 1. The NGT has been established by an Act whereas the CPCB has been created by an executive order of the government
- 2. The NGT provides environmental justice and helps reduce the burden of litigation in the higher courts whereas the CPCB promotes cleanliness of streams and wells, and aims to improve the quality of air in the country

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

Q 10. With reference to the 'Global Alliance for Climate-Smart Agriculture' (GACSA) which of the following statements is/are correct?

- 1. GACSA is an outcome of the climate summit held in Paris in 2015
- 2. Membership of GACSA does not create any binding obligations
- 3. India was instrumental in the creation of GACSA

Select the correct answer using the code given below

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

Q 11. "Momentum for Change: Climate Neutral Now" is an initiative launched by [Based on Current Affairs 2017-18]

(a) The Intergovernmental Panel on climate change

- (b) The UNEP Secretariat
- (c) The UNFCCC Secretariat
- (d) The World Meteorological Organization

UPSC Prelims Environment and Ecology Questions 2017



Q 1. Consider the following statements in respect of Trade Related Analysis of Fauna and Flora in Commerce (TRAFFIC):

- 1. TRAFFIC is a bureau under United Nations Environment Programme (UNEP)
- 2. The mission of TRAFFIC is to ensure that trade in wild animals is not a threat to the conservation of nature

Which of the given statements is/are correct?

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

Q 2. In the context of solving pollution problems, which is/are the advantage/advantages of bioremediation techniques?

- 1. It is a technique of cleaning up pollution by enhancing the same biodegradation process that occurs in nature
- 2. Any contaminant with heavy metals such as cadmium and lead can be readily and completely treated by bioremediation using microorganisms
- 3. Genetic engineering can be used to create microorganisms specifically designed for bioremediation

Select the correct answer using the codes given below:

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

Q 3. Due to some reasons if there is a huge fall in the population of a species of butterflies, what could be its likely consequence/consequences?

- 1. Pollination of some plants could be adversely affected
- 2. There could be a drastic increase in the fungal infection of some cultivated plants
- 3. It could lead to a fall in the population of some species of wasps, spiders and birds

Select the correct answer using the code given below:

(a) 1 only



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

(d) 1, 2 and 3

Q 4. Is it possible to produce algae based biofuels, but what is/are the likely limitation(s) of developing countries in promoting this industry?

- 1. Production of algae based biofuels is possible in seas only and not on continents
- 2. Setting up and engineering the algae based biofuel production requires high level of expertise/ technology until the construction is completed
- 3. Economically viable production necessitates the setting up of a large scale facilities which may raise ecological and social concerns

Select the correct answer using the codes given below:

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

Q 5. In the context of mitigating the impending global warming due to anthropogenic emissions of carbon dioxide, which of the following can be the potential sites for carbon sequestration?

- 1. Abandoned and uneconomic coal seams
- 2. Depleted oil and gas reservoirs
- 3. Subterranean deep saline formalities

Select the correct answer using the codes given below:

- (a) 1 and 2 only
- (b) 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- **Q 6.** Consider the following statements:
 - 1. In tropical regions, Zika virus disease is transmitted by the same mosquito that transmits dengue
 - 2. Sexual transmission of Zika virus disease is possible



Which of the given statements is/are correct?

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

Q 7. According to the Wildlife (Protection) Act, 1972, which of the following animals cannot be hunted by any person except under some provisions provided by law?

- 1. Gharial
- 2. Indian wild ass
- 3. Wild Buffalo

Select the correct answer using the code given below:

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

Q 8. With reference to 'Global Climate Change Alliance', which of the following statements is/are correct?

- 1. It is an initiative of the European Union
- 2. It provides technical and financial support to targeted developing countries to integrate climate change into their development budgets
- 3. It is coordinated by World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD)

Select the correct answer using the code given below:

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

Q 9. With reference to the role of UN-Habitat in the United Nations programme working towards a



better urban future, which of the following statements is/are correct?

- 1. UN-Habitat has been mandated by the United Nations General Assembly to promote socially and environmentally sustainable towns and cities to provide adequate shelter for all
- 2. Its partners are either governments or local urban authorities only
- 3. UN-Habitat contributes to the overall objective of the United Nations system to reduce poverty and to promote access to safe drinking water and basic sanitation

Select the correct answer from the code given below:

- (a) 1, 2 and 3
- (b) 1 and 3 only
- (c) 2 and 3 only
- (d) 1 only
- Q 10. Biological Oxygen Demand (BOD) is a standard criteria for
- (a) Measuring oxygen level in blood
- (b) Computing oxygen levels in forest ecosystems
- (c) Pollution assay in aquatic ecosystem
- (d) Assessing oxygen levels in high altitude regions
- Q 11. Consider the following statements:
 - 1. Climate and Clean Air Coalition (CCAC) to reduce Short Lived Climate Pollutants is a unique initiative of G20 group of countries
 - 2. The CCAC focusses on methane, black carbon and hydrochlorofluorocarbons

Which of the given statements given above is/are correct?

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

Q 12. If you want to see gharials in their natural best habitat, which one of the following is the best place to visit?



- (a) Bhitarkanika Mangroves
- (b) Chambal River
- (c) Pulicat Lake
- (d) Deepor Beel
- Q 13. The term M-STrIPES' is sometimes seen in news in the context of
- (a) Captive breeding of Wild Fauna
- (b) Maintenance of Tiger Reservoirs
- (c) Indegenous Satellite Navigation System
- (d) Security of National Highways

Q 14. In India, if a species of tortoise is declared protected under Schedule I of the Wildlife (Protection) Act, 1972, what does it imply?

(a) It enjoys the same level of protection as tiger

(b) It no longer exists in the wild, a few individuals are under captive protection; and now it is impossible to prevent its extinction

- (c) It is endemic to a particular region of India
- (d) Both (b) and (c) stated above are correct in this context

Q 15. Recently, there was a proposal to translocate some of the lions from their natural habitat in Gujarat to which one of the following sites? [Based on Current Affairs 2016-2017]

- (a) Corbett National Park
- (b) Kuno Palpur Wildlife Sanctuary
- (c) Mudumalai Wildlife Sanctuary
- (d) Sariska National Park

UPSC Prelims Environment and Ecology Questions 2016

Q 1. Which of the following best describes/ describe the aim of the 'Green India Mission' of the Government of India?

1. Incorporating environmental benefits and costs into the Union and State Budgets thereby implementing the `green accounting'



- 2. Launching the second green revolution to enhance agricultural output so as to ensure food security to one and all in the future
- 3. Restoring and enhancing forest cover and responding to climate change by a combination of adaptation and mitigation measures

Select the correct answer using the code given below.

- (a) 1 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3
- earningApt **Q 2.** What is/are unique about 'Kharai Camel', a breed found in India?
 - 1. It is capable of swimming up to three kilometres in seawater
 - 2. It survives by grazing on mangroves
 - It lives in the wild and cannot be domesticated

Select the correct answer using the code given below.

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

Q 3. Recently, our scientists have discovered a new and distinct species of banana plant which attains a height of about 11 metres and has orange-coloured fruit pulp. In which part of India has it been discovered?

- (a) Andaman Islands
- (b) Anaimalai Forests
- (c) Maikal Hills
- (d) Tropical rain forests of northeast

Q 4. With reference to an initiative called 'The Economics of Ecosystems and Biodiversity (TEEB)', which of the following statements is/are correct?

- 1. It is an initiative hosted by UNEP, IMF and World Economic Forum
- 2. It is a global initiative that focuses on drawing attention to the economic benefits of biodiversity



3. It presents an approach that can help decision-makers recognize, demonstrate and capture the value of ecosystems and biodiversity

Select the correct answer using the code given below.

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

Q 5. With reference to 'Red Sanders', sometimes seen in the news, consider the following statements:

- 1. It is a tree species found in a part of South India
- 2. It is one of the most important trees in the tropical rainforest areas of South India

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
- Q 6. Which of the following statements is/are correct?

Proper design and effective implementation of UN-REDD+ Programme can significantly contribute to

- 1. protection of biodiversity
- 2. resilience of forest ecosystems
- 3. poverty reduction

Select the correct answer using the code given below.

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

Q 7. With reference to 'Agenda 21', sometimes seen in the news, consider the following statements :

1. It is a global action plan for sustainable development



2. It originated in the World Summit on Sustainable Development held in Johannesburg in 2002

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
- Q 8. Which of the following statements is/are correct?

Viruses can infect

- 1. bacteria
- 2. fungi
- 3. plants

Select the correct answer using the code given below.

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

Q 9. In the cities of our country, which among the following atmospheric gases are normally considered in calculating the value of Air Quality Index?

- 1. Carbon dioxide
- 2. Carbon monoxide
- 3. Nitrogen dioxide
- 4. Sulfur dioxide
- 5. Methane

Select the correct answer using the code given below.

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



(d) 1, 2, 3, 4 and 5

Q 10. Consider the following statements:

- 1. The Sustainable Development Goals were first proposed in 1972 by a global think tank called the 'Club of Rome'
- 2. The Sustainable Development Goals have to be achieved by 2030

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

Q 11. In which of the following regions of India are you most likely to come across the `Great Indian Hornbill' in its natural habitat?

- (a) Sand deserts of northwest India
- (b) Higher Himalayas of Jammu and Kashmir
- (c) Salt marshes of western Gujarat
- (d) Western Ghats

Q 12. Recently, for the first time in our country, which of the following States has declared a particular butterfly as 'State Butterfly'? [Based on Current Affairs 2015-16]

- (a) Arunachal Pradesh
- (b) Himachal Pradesh
- (c) Karnataka
- (d) Maharashtra

Previous Year Environment and Ecology Questions 2015

Q 1. Which one of the following National Parks has a climate that varies from tropical to subtropical, temperate and arctic?

(a) Khangchendzonga National park





- (b) Nandadevi National Park
- (c) Neora Valley National Park
- (d) Namdapha National park
- Q 2. 'BioCarbon Fund Initiative for Sustainable Forest Landscapes' is managed by the
- (a) Asian Development Bank
- (b) International Monetary Fund
- (c) United Nations Environment Programme
- (d) World Bank
- Q 3. Consider the following statements
 - 1. The winds which blow between 30 degrees N and 60 degrees S latitudes throughout the year are known as westerlies
 - 2. The moist air masses that cause winter rams in North-Western region of India are part of westerlies

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

Q 4. With reference to 'Forest Carbon Partnership Facility', which of the following statements is/are correct?

- 1. It is global partnership of governments, businesses, civil society and indigenous peoples
- It provides financial aid to universities, individual scientists and institutions involved in scientific forestry research to develop eco-friendly and climate adaptation technologies for sustainable forest management
- 3. It assists the countries in their 'REDD+ (Reducing Emission from Deforestation and Forest Degradation)' efforts by providing them with financial and technical assistance

Select the correct answer using the code given below

(a) 1 only



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

(d) 1, 2 and 3

Q 5. With reference to an organization known as 'Birdlife International' which of the following statements is/are correct?

- 1. It is a Global Partnership of Conservation Organizations
- 2. The concept of 'biodiversity hotspots' originated from this organization
- 3. It identifies the sites known/referred to as 'Important Bird and Biodiversity Areas'
- 4. Select the correct answer using the code given below
- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- Q 6. Which one of the following is the best description of the term "ecosystem"?
- (a) A community of organisms interacting with one another
- (b) That part of the Earth which is inhabited by living organisms
- (c) A community of organisms together with the environment in which they live
- (d) The flora and fauna of a geographical area

Q 7. Which of the following National Parks is unique in being a swamp with floating vegetation that supports a rich biodiversity?

- (a) Bhitarkanika National Park
- (b) Keibul Lamjao National Park
- (c) Keoladeo Ghana National park
- (d) Sultanpur National park

Q 8. With reference to the International Union for Conservation of Nature and Natural Resources (IUCN) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which of the following statements is/are correct?

1. IUCN is an organ of the United Nations and CITES is an international agreement between



governments

- 2. IUCN runs thousands of field projects around the world to better manage natural environments
- 3. CITES is legally binding on the States that have joined it, but this Convention does not take the place of national laws

Select the correct answer using the code given below.

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

Q 9. With reference to 'dugong', a mammal found in India, which of the following statements is/are correct?

- 1. It is a herbivorous marine animal
- 2. It is found along the entire coast of India
- 3. It is given legal protection under Schedule 1 of the Wildlife (Protection) Act, 1972

Select the correct answer using the code given below.

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

Q 10. Which one of the following is the national aquatic animal of India?

- (a)Saltwater crocodile
- (b) Olive ridley turtle
- (c) Gangetic dolphin
- (d) Gharial
- Q 11. What is Rio+20 Conference, often mentioned in the news?
- (a) It is the United nations Conference on Sustainable Development
- (b) It is a Ministerial Meeting of the World Trade Organization



- (c)It is a Conference of the Inter-governmental Panel on Climate Change
- (d) It is a Conference of the Member Countries of the Convention on Biological Diversity
- Q 12. The term 'Goldilocks Zone' is often seen in the news in the context of
- (a) the limits of habitable zone above the surface of the Earth
- (b) regions inside the Earth-like planets in outer space
- (c) search for the Earth-like planets in outer space
- (d) search for meteorites containing precious metals
- Q 13. Which of the following statements regarding 'Green Climate Fund' is/are correct?
 - 1. It is intended to assist the developing countries in adaptation and mitigation practices to counter climate change
 - 2. It is founded under the aegis of UNEP, OECD, Asian Development Bank and World Bank

Select the correct answer using the code given below.

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

UPSC Prelims Environment and Ecology Questions 2014

Q 1. With reference to 'Global Environment Facility', which of the following statements is/are correct?

(a) It serves as financial mechanism for 'Convention on Biological Diversity' and 'United Nations Framework Convention on Climate Change'

(b) It undertakes scientific research on environmental issues at global level

(c) It is an agency under OECD to facilitate the transfer of technology and funds to underdeveloped countries with specific aim to protect their environment

(d) Both (a) and (b)

- **Q 2.** Which of the following phenomena might have influenced the evolution of organisms?
 - 1. Continental drift



2. Glacial cycles

Select the correct answer using the code given below.

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

Q 3. Other than poaching, what are the possible reasons for the decline in the population of Ganges River Dolphins?

- 1. Construction of dams and barrages on rivers
- 2. Increase in the population of crocodiles in rivers
- 3. Getting trapped in fishing nets accidentally
- 4. Use of synthetic fertilizers and other agricultural chemicals in crop-fields in the vicinity of rivers

Select the correct answer using the code given below.

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

Q 4. Brominated flame retardants are used in many household products like mattresses and upholstery. Why is there some concern about their use?

- 1. They are highly resistant to degradation in the environment
- 2. They are able to accumulate in humans and animals

Select the correct answer using the code given below.

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2
- Q 5. Consider the following :



- 1. Bats
- 2. Bears
- 3. Rodents

The phenomenon of hibernation can be observed in which of the above kinds of animals?

- (a) 1 and 2 only
- (b) 2 only
- (c) 1, 2 and 3
- (d) Hibernation cannot be observed in any of the above

Q 6. Which of the following adds/add carbon dioxide to the carbon cycle on the planet Earth?

- 1. Volcanic action
- 2. Respiration
- 3. Photosynthesis
- 4. Decay of organic matter

Select the correct answer using the code given below.

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

Q 7. If you walk through the countryside, you are likely to see some birds stalking alongside the cattle to seize the insects disturbed by their movement through grasses. Which of the following is /are such bird/birds?

- 1. Painted Stork
- 2. Common Myna
- 3. Black-necked Crane

Select the correct answer using the code given below.

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



(d) 3 only

Q 8. Lichens, which are capable of initiating ecological succession even on a bare rock, are actually a symbiotic association of

- (a) algae and bacteria
- (b) algae and fungi
- (c) bacteria and fungi
- (d) fungi and mosses

Q 9. Which of the following are some important pollutants released by steel industry in India ?

- 1. Oxides of sulphur
- 2. Oxides of nitrogen
- 3. Carbon monoxide
- 4. Carbon dioxide

Select the correct answer using the code given below:

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

Q 10. Every year, a month long ecologically important campaign/festival is held during which certain communities/tribes plant saplings of fruit-bearing trees.

Which of the following are such communities/tribes?

- (a) Bhutia and Lepcha
- (b) Gond and Korku
- (c) Irula and Toda
- (d) Sahariya and Agariya

Q 11. With reference to two nonconventional energy sources called 'coalbed methane' and 'shale gas', consider the following statements:

1. Coalbed methane is the pure methane gas extracted from coal seams, while shale gas is a mixture of propane and butane only that can be extracted from fine-grained sedimentary rocks.



2. In India abundant coalbed methane sources exist, but so far no shale gas sources have been found.

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

Q 12. In India, the problem of soil erosion is associated with which of the following?

- 1. Terrace cultivation
- 2. Deforestation
- 3. Tropical climate

Select the correct answer using the code given below.

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

Q 13. The most important strategy for the conservation of biodiversity together with traditional human life is the establishment of

- (a) biosphere reserves
- (b) botanical gardens
- (c) national parks
- (d) wildlife sanctuaries
- Q 14. Consider the following statements :
 - 1. Animal Welfare Board of India is established under the Environments (Protection) Act, 1986
 - 2. National Tiger Conservation Authority is a statutory body
 - 3. National Ganga River Basin Authority is chaired by the Prime Minister

Which of the statements given above is/are correct?



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

Q 15. The scientific view is that the increase in global temperature should not exceed 2 C above pre-industrial level. If the global temperature increases beyond 3 C above the pre industrial level, what can be its possible impact/ impacts on the world?

- 1. Terrestrial biosphere tends toward a net carbon source
- 2. Widespread coral mortality will occur
- 3. All the global wetlands will permanently disappear
- 4. Cultivation of cereals will not be possible anywhere in the world

Select the correct answer using the code given below.

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

Q 16. With reference to Neem tree, consider the following statements:

- 1. Neem oil can be used as a pesticide to control the proliferation of some species of insects and mites
- 2. Neem seeds are used in the manufacture of biofuels and hospital detergents
- 3. Neem oil has applications in the pharmaceutical industry

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- Q 17. Which one of the following is the process involved in photosynthesis?
- (a) Potential energy is released to form free energy



- (b) Free energy is converted into potential energy and stored
- (c) Food is oxidized to release carbon dioxide and water.
- (d) Oxygen is taken, and carbon dioxide and water vapour are given out
- Q 18. Consider the following international agreements :
 - 1. The International Treaty on Plant Genetic Resources for Food and Agriculture
 - 2. The United Nations Convention to Combat Desertification
 - 3. The world Heritage Convention
- Which of the above has/have a bearing on biodiversity?
- (a) 1 and 2 only
- (b) 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3
- Q 19. Consider the following statements regarding 'Earth Hour'
 - 1. It is an initiative of UNEP and UNESCO
 - 2. It is a movement in which the participants switch off the lights for one hour on a certain day every year
 - 3. It is a movement to raise awareness about climate change and the need to save the planet

Which of the statements given above is/are correct?

- (a) 1 and 3 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3
- Q 20. With reference to 'Eco-Sensitive Zones', which of the following statements is/are correct?
 - 1. Eco-Sensitive Zones are the areas that are declared under the Wildlife (Protection) Act, 1972
 - 2. The purpose of the declaration of Eco-Sensitive Zones is to prohibit all kinds of human activities in those zones except agriculture

Select the correct answer using the code given below.



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

UPSC Prelims Environment and Ecology Questions 2013

- Q 1. Consider the following
 - 1. Star tortoise
 - 2. Monitor lizard
 - 3. Pygmy hog
 - 4. Spider monkey

Which of the above is found in India?

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

Q 2. Which of the following can be found as pollutants in the drinking water in some parts of India?

- 1. Arsenic
- 2. Sorbitol
- 3. Fluoride
- 4. Formaldehyde
- 5. Uranium

Select the correct answer using the codes given below.

- (a) 1 and 3 only
- (b) 2, 4 and 5 only
- (c) 1, 3 and 5 only
- (d) 1, 2, 3, 4 and 5
- Q 3. Consider the following animals:
 - 1. Sea cow



- 2. Sea horse
- 3. Sea lion

Which of the above is/are mammal/mammals?

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

Q 4. On the planet earth, most of the freshwater exists as ice caps and glaciers. Out of the remaining freshwater, the largest proportion

- (a) is found in atmosphere as moisture and clouds
- (b) is found in freshwater lakes and rivers
- (c) exists as groundwater
- (d) exists as soil moisture

Q 5. In the grasslands, trees do not replace the grasses as a part of an ecological succession because of

- (a) insects and fungi
- (b) limited sunlight and paucity of nutrients
- (c) water limits and fire
- (d) None of the above

Q 6. Which one of the following is the correct sequence of ecosystems in the order of decreasing productivity?

- (a) Oceans, lakes, grasslands, mangroves
- (b) Mangroves, oceans, grasslands, lakes
- (c) Mangroves, grasslands, lakes, oceans
- (d) Oceans, mangroves, lakes, grasslands
- **Q 7.** Acid rain is caused by the pollution of environment by



- (a) carbon dioxide and nitrogen
- (b) carbon monoxide and carbon dioxide
- (c) ozone and carbon dioxide
- (d) nitrous oxide and sulphur dioxide
- Q 8. With reference to food chains in ecosystems, consider the following statements :
 - 1. A food chain illustrates the order in which a chain of organisms feed upon each other
 - 2. Food chains are found within the populations of a species
 - 3. A food chain illustrates the numbers of each organism which are eaten by others

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 1 and 2 only
- (c) 1, 2 and 3
- (d) None
- Q 9. Consider the following organisms
 - 1. Agaricus
 - 2. Nostoc
 - 3. Spirogyra

Which of the above is/are used as biofertilizer/biofertilizers

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

Q 10. Which of the following adds/add nitrogen to the soil?

- 1. Excretion of urea by animals
- 2. Burning of coal by man
- 3. Death of vegetation

Select the correct answer using the codes given below.



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

Q 11. In which of the following States is lion-tailed macaque found in its natural habitat?

- 1. Tamil Nadu
- 2. Kerala
- 3. Karnataka
- 4. Andhra Pradesh

Select the correct answer using the codes given below.

(a) 1, 2 and 3 only

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

Q 12. Which one of the following terms describes not only the physical space occupied by an organism but also its functional role in the community of organisms?

- (a) Ecotone
- (b) Ecological niche
- (c) Habitat
- (d) Home range

Q 13. With reference to the food chains in ecosystems, which of the following kinds of organisms is/are known as decomposer organism/organisms?

- 1. Virus
- 2. Fungi
- 3. Bacteria

Select the correct answer using the codes given below.

(a) 1 only



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

Q 14. During a thunderstorm, the thunder in the skies is produced by the

- 1. meeting of cumulonimbus clouds in the sky
- 2. lightning that separates the nimbus clouds
- 3. violent upward movement of air and water particles

Select the correct answer using the codes given below.

- (a) 1 only
- (b) 2 and 3
- (c) 1 and 3
- (d) None of the above produces the thunder
- Q 15. Fruits stored in a cold chamber exhibit longer storage life because
- (a) exposure to sunlight is prevented
- (b) concentration dioxide in the is increased of carbon environment
- (c) rate of respiration is decreased
- (d) there is an increase in humidity
- Q 16. Consider the following fauna of India:
 - 1. Gharial
 - 2. Leatherback turtle
 - 3. Swamp deer

Which of the above is/are endangered?

- (a) 1 and 2 only
- (b) 3 only
- (c) 1, 2 and 3
- (d) None



UPSC Prelims Environment Answers Key 2013-2021

UPSC Prelims Environment Questions 2021 – Answer Key		
1. D	9. C	
2. D	10. A	
3. B	11. D	
4. D	12. A	
5. D	13. D	
6. B	14. D	
7. C	15. A	
8. C	16. C	

UPSC Prelims Previous Year Environment and Ecology Solutions [2013-2020]

IAS Prelims Environment and Ecology Solutions 2020



Q 2. (d)	Q 3. (d)
Q 5. (c)	Q 6. (d)
Q 8. (c)	Q 9. (a)
Q 11. (a)	Q 12. (a)
Q 14. (d)	Q 15. (d)
Q 17. (d)	Q 18. (a)
Q 20. (d)	Q 21. (d)
Q 23. (c)	Q 24. (b)
	Q 8. (c) Q 11. (a) Q 14. (d) Q 17. (d) Q 20. (d)

IAS Prelims Environment and Ecology Solutions 2019		
Q 1. (a)	Q 2. (d)	Q 3. (a)
Q 4. (d)	Q 5. (a)	Q 6. (d)
Q 7. (a)	Q 8. (d)	Q 9. (d)



Q 10. (d)	Q 11. (a)	Q 12. (b)
Q 13. (d)	Q 14. (b)	Q 15. (c)
Q 16. (b)	Q 17. (c)	Q 18. (b)
Q 19. (d)	Q 20. (b)	C

IAS Prelims Environment and Ecology Solutions 2018		
Q 1. (a)	Q 2. (b)	Q 3. (b)
Q 4. (b)	Q 5. (c)	Q 6. (a)
Q 7. (a)	Q 8. (d)	Q 9. (b)
Q 10. (b)	Q 11. (c)	

IAS Prelims Environment and Ecology Solutions 2017		
Q 1. (b)	Q 2. (c)	Q 3. (c)
Q 4. (b)	Q 5. (d)	Q 6. (c)



Q 7. (d)	Q 8. (a)	Q 9. (b)
Q 10. (c)	Q 11. (b)	Q 12. (b)
Q 13. (b)	Q 14. (a)	Q 15. (b)

IAS Prelims Environment and Ecology Solutions 2016		
Q 1. (c)	Q 2. (a)	Q 3. (a)
Q 4. (c)	Q 5. (a)	Q 6. (d)
Q 7. (a)	Q 8. (d)	Q 9. (b)
Q 10. (b)	Q 11. (d)	Q 12. (d)

IAS Prelims Environment and Ecology Solutions 2015		
Q 1. (d)	Q 2. (d)	Q 3. (b)
Q 4. (c)	Q 5. (c)	Q 6. (c)
Q 7. (b)	Q 8. (b)	Q 9. (c)



Q 10. (c)	Q 11. (a)	Q 12. (c)
Q 13. (a)		

IAS Prelims Environment and Ecology Solutions 2014		
Q 1. (a)	Q 2. (c)	Q 3. (c)
Q 4. (c)	Q 5. (c)	Q 6. (c)
Q 7. (b)	Q 8. (b)	Q 9. (d)
Q 10. (b)	Q 11. (d)	Q 12. (b)
Q 13. (a)	Q 14. (b)	Q 15. (b)
Q 16. (c)	Q 17. (b)	Q 18. (d)
Q 19. (c)	Q 20. (d)	

IAS Prelims Environment and Ecology Solutions 2013		
Q 1. (a)	Q 2. (c)	Q 3. (b)



Q 4. (c)	Q 5. (c)	Q 6. (c)
Q 7. (d)	Q 8. (a)	Q 9. (b)
Q 10. (c)	Q 11. (a)	Q 12. (b)
Q 13. (b)	Q 14. (d)	Q 15. (c)
Q 16. (c)		
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