

Environment | 15 Jun 2022

2022

1. With reference to Indian laws about wildlife protection, consider the following statements:

1. Wild animals are the sole property of the government.
2. When a wild animal is declared protected, such animal is entitled for equal protection whether it is found in protected areas or outside.
3. Apprehension of a protected wild animal becoming a danger to human life is sufficient ground for its capture or killing.

Which of the statements given above is/are correct?

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

2. Certain species of which one of the following organisms are well known as cultivators of fungi?

- (a) Ant
- (b) Cockroach
- (c) Crab
- (d) Spider

3. Which one of the following has been constituted under the Environment (Protection) Act, 1986?

- (a) Central Water Commission
- (b) Central Ground Water Board
- (c) Central Ground Water Authority
- (d) National Water Development Agency

4. Which one of the following best describes the term "greenwashing"?

- (a) Conveying a false impression that a company's products are eco-friendly and environmentally sound.

- (b) Non-inclusion of ecological/ environmental costs in the Annual Financial Statements of a country.
- (c) Ignoring the disastrous ecological consequences while undertaking infrastructure development.
- (d) Making mandatory provisions for environmental costs in a government project/programme.

5. "Climate Action Tracker" which monitors the emission reduction pledges of different countries is a :

- (a) Database created by coalition of research organisations**
- (b) Wing of "International Panel of Climate Change"
- (c) Committee under "United Nations Framework Convention on Climate Change"
- (d) Agency promoted and financed by United Nations Environment Programme and World Bank

6. "If rainforests and tropical forests are the lungs of the Earth, then surely wetlands function as its kidneys." Which one of the following functions of wetlands best reflects the above statement?

- (a) The water cycle in wetlands involves surface runoff subsoil percolation and evaporation.
- (b) Algae form the nutrient base upon which fish, crustaceans, molluscs, birds, reptiles and mammals thrive.
- (c) Wetlands play vital role in maintaining sedimentation balance and soil stabilization.**
- (d) Aquatic plants absorb heavy metals and excess nutrients.

7. In the context of WHO Air Quality Guidelines, consider the following statements:

1. The 24-hour mean of $PM_{2.5}$ should not exceed $15 \mu g/m^3$ and annual mean of $PM_{2.5}$ should not exceed $5 \mu g/m^3$.
2. In a year, the highest levels of ozone pollution occur during the periods of inclement weather.
3. PM_{10} can penetrate the lung barrier and enter the bloodstream.
4. Excessive ozone in the air can trigger asthma.

Which of the statements given above are correct?

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

8. With reference to "Gucchi" sometimes mentioned in the news, consider the following statements:

1. It is a fungus.
2. It grows in some Himalayan forest areas.
3. It is commercially cultivated in the Himalayan foothills of north-eastern India.

Which of the statements given above is/are correct?

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

9. Which of the following is *not* a bird?

- (a) Golden Mahseer**
- (b) Indian Nightjar
- (c) Spoonbill
- (d) White Ibis

10. Which of the following are nitrogen-fixing plants?

1. Alfalfa
2. Amaranth
3. Chickpea
4. Clover
5. Purslane (Kulfa)
6. Spinach

Select the correct answer using the code given below:

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

11. "Biorock technology" is talked about in which one of the following situations?

(a) Restoration of damaged coral reefs

(b) Development of building materials using plant residue

(c) Identification of areas for exploration/extraction of shale gas

(d) Providing salt licks for wild animals in forests/protected areas

12. The "Miyawaki method" is well known for the:

(a) Promotion of commercial farming in arid and semi-arid areas

(b) Development of gardens using genetically modified flora

(c) Creation of mini forests in urban areas

(d) Harvesting wind energy on coastal areas and on sea surfaces

2021

1. Consider the following statements:

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 the 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 the 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 centres.

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

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

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

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 line

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 case of which one of the following biogeochemical cycles, the weathering of rocks is the main source of release of nutrient 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. Millipedes
4. Seahorses
5. Woodlice

Select the correct answer using the code given below.

(a) 1, 2 and 4 only

(b) 2, 3, 4 and 5 only

(c) 1, 3 and 5 only

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

10. The 'Common Carbon Metric', supported by UNEP, had 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 footprint caused by the use of fossil fuels by the world in a unit time

11. Which of the following have species that can establish 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' constitutes a tool available for promoting the adoption of

- (a) **Environmentally responsible practices in 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 environment.
2. The copper slag can cause the leaching of some heavy metals into 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 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 atmosphere.

16. In the 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 only**
- (d) 1, 3 and 4 only

2020

1. 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**

2. What are the advantages of fertigation in agriculture?

1. Controlling the alkalinity of irrigation water is possible.
2. Efficient application of Rock Phosphate and all other phosphatic fertilizers is possible.
3. Increased availability of nutrients to plants is possible.
4. Reduction in the leaching of chemical nutrients is possible.

Select the correct answer using the code given below:

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

3. 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

4. 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

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

- (a) Corbett
- (b) Ranthambore
- (c) Nagarjunasagar-Srisailem**
- (d) Sundarbans

6. 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.

7. Which 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.

8. 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

9. 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

10. With reference to India's biodiversity, Ceylon frogmouth, Coppersmith barbet, Gray-chinned miniyet and White-throated redstart are

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

11. 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

12. 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

13. 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

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**

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**

2019

1. 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**

2. Which one of the following groups of plants was 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

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

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 stratosphere?

- (a) Creating the 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

5. In the context of which one of the following are the terms 'pyrolysis and plasma gasification' mentioned?

- (a) Extraction of rare earth elements
- (b) Natural gas extraction technologies
- (c) Hydrogen fuel-based automobiles
- (d) Waste-to-energy technologies**

6. Which of the following are in Agasthyamala Biosphere Reserve?

- (a) Neyyar, Idl 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 Nagarjunasagar-Srisaïlam Tiger Reserve

7. 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 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**

8. Consider the following pairs

	Wildlife	Naturally found in
1.	Blue-finned Mahseer	Cauvery River
2.	Irrawaddy Dolphin	Chambal River
3.	Rusty-spotted Cat	Eastern Ghats

Which of the pairs given correctly matched?

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

9. Why is there a great concern about the 'microbeads' that are released into 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.

10. 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

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

11. 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 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**

12. Consider the following:

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

Which of the above are released into 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**

13. 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

14. 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

15. Consider the following statements:

1. Agricultural soils release nitrogen oxides into environment.
2. Cattle release ammonia into environment.
3. Poultry industry releases reactive nitrogen compounds 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**

16. In the context of proposals to the use of hydrogen-enriched CNG (H-CNG) as fuel for buses in public transport, consider the following statements:

1. The main advantage of the use of H-CNG 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

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

18. As per the Solid Waste Management Rules, 2016 in India, which one of the following statements is correct?

- (a) Waste generator has to segregate waste into five categories.

(b) The Rules are applicable to notified urban local bodies, notified towns and all industrial townships only.

(c) The Rules provide for exact and elaborate criteria for the identification of sites for landfills and waste processing facilities.

19. 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 Indian subcontinent

2018

1. In which one of the following States is Pakhui Wildlife Sanctuary located?

(a) Arunachal Pradesh

(b) Manipur

(c) Meghalaya

(d) Nagaland

2. 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

3. Which of the following is/are the possible consequence/s of heavy sand 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

4. Consider the following statements:

1. Most of the world's coral reefs are in tropical waters.
2. More than one-third of the world's coral reefs are located in the territories of Australia, Indonesia and Philippines.
3. Coral reefs host far more number of animal phyla than those hosted by tropical rainforests.

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**

5. "Momentum for Change: Climate Neutral Now" is an initiative launched by

- (a) The Intergovernmental Panel on Climate Change
- (b) The UNEP Secretariat
- (c) The UNFCCC Secretariat**
- (d) The World Meteorological Organisation

6. Which of the following statements best describes "carbon fertilization"?

- (a) Increased plant growth due to increased concentration of carbon dioxide in the atmosphere.**
- (b) Increased temperature of Earth due to increased concentration of carbon dioxide in the atmosphere.
- (c) Increased acidity of oceans as a result of increased concentration of carbon dioxide in the atmosphere.
- (d) Adaptation of all living beings on Earth to the climate change brought about by the increased concentration of carbon dioxide in the atmosphere.

7. With reference to the circumstances in Indian agriculture, the concept of “Conservation Agriculture” assume significance. Which of the following fall under the Conservation Agriculture?

1. Avoiding monoculture practices
2. Adopting minimum tillage
3. Avoiding the cultivation of plantation crops
4. Using crop residues to cover soil surface
5. Adopting spatial and temporal crop sequencing/crop rotations

Select the correct answer using the code given below:

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

8. Which of the following leaf modifications occur (s) in the desert areas to inhibit water loss?

1. Hard and waxy leaves
2. Tiny leaves
3. Thorns instead of leaves

Select the correct answer using the code given below:

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

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

10. Which of the following has/have shrunk immensely/dried up in the recent past due to human activities?

- 1. Aral Sea
- 2. Black Sea
- 3. Lake Baikal

Select the correct answer using the code given below:

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

2017

1. The term 'M-STRIPES' is sometimes seen in the news in the context of

- (a) Captive breeding of Wild Fauna
- (b) Maintenance of Tiger Reserves**
- (c) Indigenous Satellite Navigation System
- (d) Security of National Highways

2. 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 the 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.

3. Recently there was a proposal to translocate some of the lions from their natural habitat in Gujarat

to which one of the following sites?

(a) Corbett National Park

(b) Kuno Palpur Wildlife Sanctuary

(c) Mudumalai Wildlife Sanctuary

(d) Sariska National Park

4. 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 policies and 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

5. Biological Oxygen Demand (BOD) is a standard criterion for

(a) Measuring oxygen levels in blood

(b) Computing- oxygen levels in forest ecosystems

(c) Pollution assay in aquatic ecosystems

(d) Assessing oxygen levels in high altitude regions

6. 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 focuses on methane, black carbon and hydrofluorocarbons.

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

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

- (a) Bhitarkanika Mangroves
- (b) Chambal River**
- (c) Pulicat Lake
- (d) Deepor Bed

8. From the ecological point of view, which one of the following assumes importance in being a good link between the Eastern Ghats and the Western Ghats?

- (a) Sathyamangalam Tiger Reserve**
- (b) Nallamala Forest
- (c) Nagarhole National Park
- (d) Seshachalam Biosphere Reserve

9. 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 plants and animals is not a threat to the conservation of nature.

Which of the above statements is/are correct?

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

10. In the context of solving pollution problems, what is/are the advantage/advantages of bioremediation technique?

1. It is a technique for 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 code given below:

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

11. It is 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 large scale facilities which may raise ecological and social concerns.

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

12. Due to some reasons, if there is a huge fall in the population of 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 infections 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

13. 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 formations

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**

14. 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**

2016

1. The term 'Intended Nationally Determined Contributions' is sometimes seen in the news in the context of

- (a) pledges made by the European countries to rehabilitate refugees from the war-affected Middle East
- (b) plan of action outlined by the countries of the world to combat climate change**
- (c) capital contributed by the member countries in the establishment of Asian Infrastructure Investment Bank
- (d) plan of action outlined by the countries of the world regarding Sustainable Development Goals

2. What is/are the importance/importances of the 'United Nations Convention to Combat

Desertification’?

1. It aims to promote effective action through innovative national programmes and supportive international partnerships.
2. It has a special/particular focus on South Asia and North Africa regions, and its Secretariat facilitates the allocation of major portion of financial resources to these regions.
3. It is committed to bottom-up approach, encouraging the participation of local people in combating the desertification.

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

3. Consider the following pairs

*Terms sometimes
seen in the news*

Their origin

1. Annex-I Countries : Cartagena Protocol
2. Certified Emissions Reductions : Nagoya Protocol
3. Clean Development Mechanism : Kyoto Protocol

Which of the pairs given above is / are correctly matched?

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

4. 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**

5. Which of the following best describes/describe the aim of ‘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

6. 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.
3. 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

7. 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) Maikala Hills
- (d) Tropical rain forests of northeast

8. 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

9. 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**

10. What is Greenhouse Gas Protocol?

(a) It is an international accounting tool for government and business leaders to understand, quantify and manage greenhouse gas emissions

(b) It is an initiative of the United Nations to offer financial incentives to developing countries to reduce greenhouse gas emissions and to adopt eco-friendly technologies

(c) It is an inter-governmental agreement ratified by all the member countries of the United Nations to reduce greenhouse gas emissions to specified levels by the year 2022

(d) It is one of the multilateral REDD+ initiatives hosted by the World Bank

11. 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

12. 'Gadgil Committee Report' and 'Kasturirangam Committee Report', sometimes seen in the news, are related to

- (a) constitutional reforms
- (b) Ganga Action Plan
- (c) linking of rivers
- (d) protection of Western Ghats**

13. On which of the following can you find the Bureau of Energy Efficiency Star Label?

1. Ceiling fans
2. Electric geysers
3. Tubular fluorescent lamps

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**

14. Consider the following statements:

1. The International Solar Alliance was launched at the United Nations Climate Change Conference in 2015.
2. The Alliance includes all the member countries of the United Nations.

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

15. With reference to the Agreement at the UNFCCC Meeting in Paris in 2015, which of the following statements is/are correct?

1. The Agreement was signed by all the member countries of the UN and it will go into effect in 2017.
2. The Agreement aims to limit the greenhouse gas emissions so that the rise in average global temperature by the end of this century does not exceed 2°C or even 1.5°C above pre-industrial levels.
3. Developed countries acknowledged their historical responsibility in global warming and committed to donate \$1000 billion a year from 2020 to help developing countries to cope with climate change.

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

16. 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

17. 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

2015

1. 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

2. 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'.

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

3. With reference to the Indian Renewable Energy Development Agency Limited (IREDA), which of the following statements is/are correct?

1. It is a Public Limited Government Company.

2. It is a Non-Banking Financial Company.

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

4. 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

5. 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

6. 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 I 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

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

- (a) Saltwater crocodile
- (b) Olive ridley turtle
- (c) Gangetic dolphin
- (d) Gharial

8. Which one of the following is associated with the issue of control and phasing out of the use of ozone-depleting substances?

- (a) Bretton Woods Conference
- (b) Montreal Protocol**
- (c) Kyoto Protocol
- (d) Nagoya Protocol

9. 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

10. '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**

11. The Genetic Engineering Appraisal Committee is constituted under the

- (a) Food Safety and Standards Act, 2006
- (b) Geographical Indications of Goods (Registration and Protection) Act, 1999
- (c) Environment (Protection) Act, 1986**
- (d) Wildlife (Protection) Act, 1972

12. In a particular region in India, the local people train the roots of living trees into robust bridges across the streams. As the time passes, these bridges become stronger. These unique 'living root bridges' are found in

- (a) Meghalaya
- (b) Himachal Pradesh
- (c) Jharkhand
- (d) Tamil Nadu

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

1. It is a global partnership of governments, businesses, civil society and indigenous peoples.
2. 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 Emissions 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

2014

1. 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 the biodiversity?

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

2. 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 the awareness about the 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

3. If a wetland of international importance is brought under the ‘Montreux Record’, what does it imply?

- (a) Changes in ecological character have occurred, are occurring or are likely to occur in the wetland as a result of human interference
- (b) The country in which the wetland is located should enact a law to prohibit any human activity within five kilometres from the edge of the wetland
- (c) The survival of the wetland depends on the cultural practices and traditions of certain communities living in its vicinity and therefore the cultural diversity therein should not be destroyed
- (d) It is given the status of ‘World Heritage Site’

4. With reference to Bombay Natural History Society (BNHS), consider the following statements:

1. It is an autonomous organization under the Ministry of Environment and Forests.
2. It strives to conserve nature through action-based research, education and public awareness.
3. It organizes and conducts nature trails and camps for the general public.

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

5. 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)

6. With reference to a conservation organization called ‘Wetlands International’, which of the following statements is/are correct?

1. It is an intergovernmental organization formed by the countries which are signatories to Ramsar Convention.
2. It works at the field level to develop and mobilize knowledge, and use the practical experience to advocate for better policies.

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

7. 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

8. 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

9. If you walk through 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

10. 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

11. Consider the following statements:

1. Animal Welfare Board of India is established under the Environment (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

12. Consider the following pairs

<i>Wetlands</i>	:	<i>Confluence of rivers</i>
1. Harike Wetlands	:	Confluence of Beas and Satluj/Sutlej
2. Keoladeo Ghana National Park	:	Confluence of Banas and Chambal
3. Kolleru Lake	:	Confluence of Musi and Krishna

Which of the above pairs is/are correctly matched?

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

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

14. 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

15. 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

2013

1. Under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, who shall be the authority to initiate the process for determining the nature and extent of individual or community forest rights or both?

- (a) State Forest Department
- (b) District Collector/Deputy Commissioner
- (c) Tahsildar/Block Development Officer/Mandal Revenue Officer

(d) Gram Sabha

2. 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

3. 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

4. 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

5. 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

6. Photochemical smog is a resultant of the reaction among

- (a) NO_2 , O_3 and peroxyacetyl nitrate in the presence of sunlight
- (b) CO , O_2 and peroxyacetyl nitrate in the presence of sunlight
- (c) CO , CO_2 and NO_2 at low temperature
- (d) High concentration of NO_2 , O_3 and CO in the evening

7. Consider the following:

1. Star tortoise
2. Monitor lizard
3. Pygmy hog
4. Spider monkey

Which of the above are naturally 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

8. 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

9. 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

2012

1. How does National Biodiversity Authority (NBA) help in protecting the Indian agriculture?

1. NBA checks the biopiracy and protects the indigenous and traditional genetic resources.
2. NBA directly monitors and supervises the scientific research on genetic modification of crop plants.
3. Application for intellectual Property Rights related to genetic/biological resources cannot be made without the approval of NBA.

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

2. If National Water Mission is properly and completely implemented, how will it impact the country?

1. Part of the water needs of urban areas will be met through recycling of waste-water.
2. The water requirements of coastal cities with inadequate alternative sources of water will be met by adopting appropriate technologies that allow for the use of ocean water.
3. All the rivers of Himalayan origin will be linked to the rivers of peninsular India.
4. The expenses incurred by farmers for digging bore-wells and for installing motors and pump-sets to draw ground-water will be completely reimbursed by the Government.

Select the correct answer using the codes given below:

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

3. Consider the following statements:

Chlorofluorocarbons, known as ozone-depleting substances, are used.

1. in the production of plastic foams
2. in the production of tubeless tyres
3. in cleaning certain electronic components
4. as pressurizing agents in aerosol cans

Which of the statements given above is/are correct?

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

4. Government of India encourages the cultivation of 'sea buckthorn'. What is the importance of this plant?

1. It helps in controlling soil erosion and in preventing desertification:
2. It is a rich source of bio-diesel.
3. It has nutritional value and is well-adapted to live in cold areas of high altitudes.
4. Its timber is of great commercial value.

Which of the statements given above is/are correct?

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

5. With reference to the wetlands of India, consider the following statements:

1. The country's total geographical area under the category of wetlands is recorded more in Gujarat as compared to other States.
2. In India, the total geographical area of coastal wetlands is larger than that of inland wetlands.

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

6. The increasing amount of carbon dioxide in the air is slowly raising the temperature of the atmosphere, because it absorbs

- (a) the water vapour of the air and retains its heat
- (b) the ultraviolet part of the solar radiation
- (c) all the solar radiations
- (d) the infrared part of the solar radiation

7. Other than resistance to pests, what are the prospects for which genetically engineered plants have been created?

1. To enable them to withstand drought
2. To increase the nutritive value of the produce
3. To enable them to grow and do photosynthesis in spaceships and space stations
4. To increase their shelf life

Select the correct answer using the codes given below:

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

8. Consider the following protected areas

1. Bandipur
2. Bhitarkanika
3. Manas
4. Sunderbans

Which of the above are declared Tiger Reserves?

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

9. In which one among the following categories of protected areas in India are local people not allowed

to collect and use the biomass?

- (a) Biosphere Reserves
- (b) National Parks
- (c) Wetlands declared under Ramsar Convention
- (d) Wildlife Sanctuaries

10. Which one of the following groups of animals belongs to the category of endangered species?

- (a) Great Indian Bustard, Musk Deer, Red Panda and Asiatic Wild Ass
- (b) Kashmir Stag, Cheetal, Blue Bull and Great Indian Bustard
- (c) Snow Leopard, Swamp Deer, Rhesus Monkey and Saras (Crane)
- (d) Lion-tailed Macaque, Blue Bull, Hanuman Langur and Cheetal

11. The Millennium Ecosystem Assessment describes the following major categories of ecosystem services-provisioning, supporting, regulating, preserving and cultural. Which one of the following is supporting service?

- (a) Production of food and water
- (b) Control of climate and disease
- (c) Nutrient cycling and crop pollination
- (d) Maintenance of diversity

12. Which of the following can be threats to the biodiversity of a geographical area?

1. Global warming
2. Fragmentation of habitat
3. Invasion of alien species
4. Promotion of vegetarianism

Select the correct answer using the codes given below:

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

13. Consider the following:

1. Black-necked crane
2. Cheetah
3. Flying squirrel
4. Snow leopard

Which of the above are naturally found in India?

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

14. Consider the following agricultural practices:

1. Contour bunding
2. Relay cropping
3. Zero tillage

In the context of global climate change, which of the above helps/help in carbon sequestration/storage in the soil?

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

15. What would happen if phytoplankton of an ocean is completely destroyed for some reason?

1. The ocean as a carbon sink would be adversely affected.
2. The food chains in the ocean would be adversely affected.
3. The density of ocean water would drastically decrease.

Select the correct answer using the codes given below:

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

16. Vultures which used to be very common in Indian countryside some years ago are rarely seen nowadays. This is attributed to

- (a) the destruction of their nesting sites by new invasive species
- (b) a drug used by cattle owners for treating their diseased cattle
- (c) scarcity of food available to them
- (d) a widespread, persistent and fatal disease among them

2011

1. Biodiversity forms the basis for human existence in the following ways

1. Soil formation
2. Prevention of soil erosion
3. Recycling of waste
4. Pollination of crops

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

2. The formation of ozone hole in the Antarctic region has been a cause, of concern. What could be the reason for the formation of this hole?

- (a) Presence of prominent tropospheric turbulence; and inflow of chlorofluorocarbons
- (b) Presence of prominent polar front and stratospheric clouds; and inflow of chlorofluorocarbons
- (c) Absence of polar front and stratospheric clouds; and inflow of methane and chlorofluorocarbons.
- (d) Increased temperature at polar region due to global warming

3. Regarding "carbon credits", which one of the following statements is not correct?

- (a) The carbon credit system was ratified in conjunction with the Kyoto Protocol
- (b) Carbon credits are awarded to countries or groups that have reduced greenhouse gases below their emission quota
- (c) The goal of the carbon credit system is to limit the increase of carbon dioxide emission

(d) Carbon credits are traded at a price fixed from time to time by the United Nations Environment Programme

4. There is a concern over the increase in harmful algal blooms in the seawaters of India. What could be the causative factors for this phenomenon?

1. Discharge of nutrients from the estuaries.
2. Run-off from the land during the monsoon.
3. Upwelling in the seas.

Select the correct answer from the codes given below:

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

5. A sandy and saline area is the natural habitat of an Indian animal species. The animal has no predators in that area but its existence is threatened due to the destruction of its habitat. Which one of the following could be that animal?

- (a) Indian wild buffalo
- (b) Indian wild ass
- (c) Indian wild boar
- (d) Indian gazelle

6. The “Red Data Books” published by the International Union for Conservation of Nature and Natural Resources (IUCN) contain lists of

1. Endemic plant and animal species present in the biodiversity hotspots.
2. Threatened plant and animal species.
3. Protected sites for conservation of nature and natural resources in various countries.

Select the correct answer using the codes given below;

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

7. Three of the following criteria have contributed to the recognition of Western Ghats-Sri Lanka and Indo-Burma regions as hotspots of biodiversity:

1. Species richness
2. Vegetation density
3. Endemism
4. Ethno-botanical importance
5. Threat perception
6. Adaptation of flora and fauna to warm and humid conditions

Which three of the above are correct criteria in this context?

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

8. Human activities in the recent past have caused the increased concentration of carbon dioxide in the atmosphere, but a lot of it does not remain in the lower atmosphere because of

1. its escape into the outer stratosphere.
2. the photosynthesis by phytoplankton in the oceans
3. the trapping of air in the polar ice caps.

Which of the statements given above is/ are correct?

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

9. In the context of ecosystem productivity, marine upwelling zones are important as they increase the marine productivity by bringing the

1. decomposer microorganisms to the surface.
2. nutrients to the surface.
3. bottom-dwelling organisms to the surface.

Which of the statements given above is/are correct?

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

(d) 3 only

10. With reference to India, consider the following Central Acts:

1. Import and Export (Control) Act, 1947
2. Mining and Mineral Development (Regulation) Act, 1957
3. Customs Act, 1962
4. Indian Forest Act, 1927

Which of the above Acts have relevance to/bearing on the biodiversity conservation in the country?

- (a) 1 and 3 only
- (b) 2, 3 and 4 only
- (c) 1, 2, 3 and 4
- (d) None of the above Acts

11. Consider the following:

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

Which of the above add carbon dioxide to the carbon cycle on Earth?

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