



ACADEMY OF CIVIL SERVICES

ECOLOGY AND ENVIRONMENT CHAPTER WISE

2011-2022

ECOSYSTEM

- 1. Which one of the following is the best description of the term ‘ecosystem’? (2015)**
 - (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. Which one of the following is the correct sequence of a food chain? (2014)**
 - (a) Diatoms-Crustaceans-Herrings
 - (b) Crustaceans-Diatoms-Herrings
 - (c) Diatoms –Herrings-Crustaceans
 - (d) Crustaceans-Herrings-Diatoms
- 3. Lichens, which are capable of initiating ecological succession even on a bare rock, are actually a symbiotic association of (2014)**
 - (a) algae and bacteria (b) algae and fungi
 - (c) bacteria and fungi (d) fungi and mosses
- 4. Which one of the following is the process involved in photosynthesis? (2014)**
 - (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
- 5. In the grasslands, trees do not replace the grasses as a part of an ecological succession because of (2013)**
 - (a) Insects and fungi

- (b) Limited sunlight and paucity of nutrients
- (c) Water limits and fire
- (d) None of the above

6. Which one of the following is the correct sequence of ecosystems in the order of decreasing productivity? (2013)

- (a) Oceans, lakes, grasslands, mangroves
- (b) Mangroves, oceans, grasslands, lakes
- (c) Mangroves, grasslands, lakes, oceans
- (d) Oceans, mangroves, lakes, grasslands

7. With reference to food chains in ecosystems, consider the following statements: (2013)

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

8. 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? (2013)

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

9. With reference to the food chains in ecosystems, which of the following kinds of organism is/are known as decomposer organism/organisms? (2013)

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

10. What would happen if phytoplankton of an ocean is completely destroyed for some reason? (2012)

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

12. In the context of ecosystem productivity, marine upwelling zones are important as they increase the marine productivity by bringing the (2011)

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

13. 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 (2011)

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

14. Consider the following kinds of organisms: (2021)

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

15. Which of the following are detritivores? (2021)

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

16. In nature, which of the following is/are most likely to be found surviving on a surface without soil? (2021)

- 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

17. Which of the following have species that can establish a symbiotic relationship with other organisms? (2021)

- 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

18) Consider the following pairs: (2022)

Wetland / Lake Location

Hokera Wetland – Punjab

Renuka Wetland – Himachal Pradesh

Rudrasagar Lake — Tripura

Sasthamkotta Lake – Tamil Nadu

How many pairs given above are correctly matched?

(a) Only one pair

(b) Only two pairs

(c) Only three pairs

(d) All four pairs

(Explanation - Hokera wetland - J& K; Renuka Wetland - Himachal Pradesh; Rudrasagar Lake - Tripura; Sasthamkotta lake - Kerala)

19) "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 statements? (2022)

(a). The water cycle in wetlands involves surface runoff, subsoil percolation and evaporation.

(b). Algae from the nutrient base upon which fish, crustaceans, molluscs, birds, reptiles and mammals thrive.

(c). Wetlands play a vital role in maintaining sedimentation balance and soil stabilization.

(d). Aquatic plants absorb heavy metals and excess nutrients.

20) Which of the following are nitrogen-fixing plants? (2022)

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

BIODIVERSITY

- 1. The term “sixth mass extinction/sixth extinction” is often mentioned in the news in the context of the discussion of (2018)**
 - (a) Widespread monoculture practices in agriculture and large-scale commercial farming with indiscriminate use of chemicals in many parts of the world that may result in the loss of good native ecosystems.
 - (b) Fears of a possible collision of a meteorite with the Earth in the near future in the manner it happened 65 million years ago that caused the mass extinction of many species including those of dinosaurs.
 - (c) Large scale cultivation of genetically modified crops in many parts of the world and promoting their cultivation in other parts of the world which may cause the disappearance of good native crop plants and the loss of food biodiversity.
 - (d) Mankind’s over-exploitation/misuse of natural resources, fragmentation/loss of natural habitats, destruction of ecosystems, pollution, and global climate change.
- 2. The most important strategy for the conservation of biodiversity together with traditional human life is the establishment of (2014)**
 - (a) Biosphere Reserves
 - (b) Botanical Gardens
 - (c) National Parks
 - (d) Wildlife Sanctuaries
- 3. With reference to ‘Eco- Sensitive Zones’, which of the following statements is /are correct? (2014)**
 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

4. In which one among the following categories of protected areas in India are local people *NOT* allowed to collect and use the biomass? (2012)

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

5. Which of the following can be threats to the biodiversity of a geographical area? (2012)

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

6. Consider the following statements:(2011)

1. Biodiversity is normally greater in the lower latitudes as compared to the higher latitudes
2. Along the mountain gradients, biodiversity is normally greater in the lower altitudes as compared to the higher altitudes.

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. Biodiversity forms the basis for human existence in the following ways: (2011)

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

Select the correct answer using the codes given below

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

8. Which one of the following is *NOT* a site for in-situ method of conservation of flora? (2011)

- (a) Biosphere Reserve (b) Botanical Garden

- (c) National Park (d) Wildlife Sanctuary

9. “Red Data Books” published by the International Union for Conservation of Nature and Natural Resources (IUCN) contain lists of (2011)

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

BIOGEOCHEMICAL CYCLES

1. Which of the following statements best describes “carbon fertilization”? (2018)

- (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

2. Which of the following adds / add carbon dioxide to the carbon cycle on the planet Earth? (2014)

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

3. Which of the following adds/add Nitrogen to the soil? (2013)

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

4. What would happen if phytoplankton of an ocean is completely destroyed for some reasons? (2012)

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

5. Consider the following: (2011)

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

6. 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 (2011)

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 only (b) 2 only (c) 2 and 3 only (d) 3 only

7. Which one of the following is *NOT* an essential micronutrient for plants? (1996)

- (a) Boron (b) Zinc (c) Sodium (d) Copper

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

BIOMES

1. Which of the following leaf modifications occur(s) in the desert areas to inhibit water loss? (2018)

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

2. With reference to 'Red Sanders', sometimes seen in the news, consider the following statements: (2016)

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 rain forest 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

3. Which one of the following regions of India has a combination of mangrove forest, evergreen forest, and deciduous forest? (2015)

- (a) North Coastal Andhra Pradesh
- (b) South-West Bengal
- (c) Southern Saurashtra
- (d) Andaman and Nicobar Islands

4. Consider the following States: (2015)

1. Arunachal Pradesh
2. Himachal Pradesh
3. Mizoram

In which of the above States do 'Tropical Wet Evergreen Forests' occur?

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

5. In India, in which one of the following types of forests is teak a dominant tree species? (2015)

- (a) Tropical moist deciduous forest
- (b) Tropical rain forest
- (c) Tropical thorn scrub forest
- (d) Temperate forest with grasslands

6. Which of the following have coral reefs? (2014)

1. Andaman and Nicobar Islands 2. Gulf of Kachchh
3. Gulf of Mannar 4. Sunderbans

Select the correct answer using the code given below.

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

7. If you travel through the Himalayas, you are likely to see which of the following plants naturally growing there? (2014)

1. Oak
2. Rhododendron
3. Sandalwood

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

8. Which of the following is/are unique characteristic/characteristics of equatorial forests? (2013)

1. Presence of tall, closely set trees with crowns forming a continuous canopy
2. Coexistence of a large number of species
3. Presence of numerous varieties of epiphytes

Select the correct answer using the codes given below.

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

9. Which one of the following is the correct sequence of ecosystems in the order of decreasing productivity? (2013)

- (a) Oceans, lakes, grasslands, mangroves
- (b) Mangroves, oceans, grasslands, lakes
- (c) Mangroves, grasslands, lakes, oceans
- (d) Oceans, mangroves, lakes, grasslands

10. With reference to the wetlands of India, consider the following statements (2012)

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

11. The 2004 Tsunami made people realize that mangroves can serve as a reliable safety hedge against coastal calamities. How do mangroves function as a safety hedge? (2011)

- (a) The mangrove swamps separate the human settlements from the sea by a wide zone in which people neither live nor venture out
- (b) The mangrove provides both food and medicines which people are in need of after any natural disaster
- (c) The mangrove trees are tall with dense canopies and serve as an excellent shelter during a cyclone or tsunami
- (d) The mangrove trees do not get uprooted by storms and tides because of their extensive roots.

12. If a tropical rain forest is removed, it does not regenerate quickly as compared to a tropical deciduous forest. This is because (2011)

- (a) The soil of rain forest is deficient in nutrients
- (b) Propagules of the trees in a rain forest have poor viability
- (c) The rain forest species are slow growing
- (d) Exotic species invade the fertile soil of rain forest

13. The Himalayan Range is very rich in species diversity. Which one among the following is the most appropriate reason for this phenomenon? (2011)

- (a) It has a high rainfall that supports luxuriant vegetative growth
- (b) It is a confluence of different biogeographical zones
- (c) Exotic and invasive species have not been introduced in this region
- (d) It has less human interference

14. In India, which type of forest among the following occupies the largest area? (2010)

- (a) Montane Wet Temperate Forest
- (b) Sub-tropical Dry Evergreen Forest
- (c) Tropical Moist Deciduous Forest
- (d) Tropical Wet Evergreen Forest

15. Which one of the following is not essentially a species of the Himalayan vegetation? (2008)

- (a) Juniper (b) Mahogany (c) Silver fir (d) Spruce

16. Consider the following statements: (2003)

1. Unlike temperate forests, the tropical rain forests, if cleared can yield productive farmland that can support intensive agriculture for several years even without chemical fertilizers.
2. The primary productivity of the tropical rain forest is very high when compared to that of temperate forests.

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. Which one among the following covers the highest percentage of forest area in the world? (2003)

- (a) Temperate Coniferous forests
(b) Temperate Deciduous forests
(c) Tropical Monsoon forests
(d) Tropical Rain forest

18. Open stunted forests with bushes and small trees having long roots and sharp thorns or spines are commonly found in (2002)

- (a) Eastern Orissa (b) North-Eastern Tamil Nadu
(c) Siwaliks and Terai region (d) Western Andhra Pradesh

19. Extensive mangrove vegetation in India is found in (1998)

- (a) The Mahanadi Delta (b) The Rann of Kutch
(c) The Sunderbans (d) The Godavari delta

20. The alpine vegetation in the western Himalayas is found only up to a height of 3000 metres while in the eastern Himalayas it is found up to a height of 4000 metres. The reason for this variation in the same mountain range is that (1995)

- (a) eastern Himalayas are higher than western Himalayas
(b) eastern Himalayas are nearer to the equator and seacoast than western Himalayas
(c) eastern Himalayas get more monsoon rainfall than the western Himalayas
(d) eastern Himalayas rocks are more fertile than the western Himalayas rocks

FAUNA

1. Consider the following statement: (2019)

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

2. Consider the following statements:(2019)

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

3. Consider the following pairs:(2019)

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

Which of the pairs given above are correctly matched?

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

4. 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? (2017)

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

5. Due to some reasons, if there is a huge fall in the population of species of butterflies, what could be its likely consequence/consequences? (2017)

1. Pollination of some plants could be adversely affected.
2. There could be 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

6. If you want to see gharials in their natural habitat, which one of the following is the best place to visit? (2017)

- (a) Bhitarkanika Mangroves

- (b) Chambal River
- (c) Pulicat Lake
- (d) Deepor Beel

7. In India, if a species of tortoise is declared protected under Schedule 1 of the Wildlife (Protection), Act, 1972, what does it imply? (2017)

- (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.

8. In which of the following regions of India are you most likely to come across the 'Great Indian Hornbill' in its natural habitat? (2016)

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

9. What is/are unique about 'Kharai camel', a breed found in India? (2016)

- 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

10. Recently, for the first time in our country, which of the following states has declared a particular butterfly as 'State Butterfly'? (2016)

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

11. With reference to 'dugong', a mammal found in India, which of the following statements is/are correct? (2015)

- 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

12. Which one of the following is the national aquatic animal of India? (2015)

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

13. Other than poaching, what are the possible reasons for the decline in the population of Ganges River Dolphins? (2014)

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

14. Consider the following: (2014)

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

15. 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? (2014)

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

16. Among the following organisms, which one does not belong to the class of other three? (2014)

- (a) Crab (b) Mite (c) Scorpion (d) Spider

17. In which of the following States is lion-tailed macaque found in its natural habitat? (2013)

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

18. Consider the following: (2013)

- | | |
|------------------|-------------------|
| 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

19. Consider the following animals: (2013)

- | | | |
|------------|--------------|-------------|
| 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

20. Consider the following fauna of India: (2013)

- | | | |
|------------|-----------------------|---------------|
| 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

21. Which one of the following groups of animals belongs to the category of endangered species? (2012)

- (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

22. What is the difference between the antelopes Oryx and Chiru? (2012)

- (a) Oryx is adapted to live in hot and arid areas whereas Chiru is adapted to live in steppes and semi-desert areas of cold high mountains
(b) Oryx is poached for its antlers whereas Chiru is poached for its musk
(c) Oryx exists in western India only whereas Chiru exists in north-east India only.
(d) None of the statements (a), (b) and (c) given above is correct

23. Consider the following: (2012)

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

24. Vultures which used to be very common in Indian countryside some years ago are rarely seen nowadays. This is attributed to (2012)

- (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

25. 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? (2011)

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

26. Consider the following pairs: (2010)

Protected Area	Well-known for
1. Bhitarkanika, Orissa	Saltwater Crocodile
2. Desert National Park, Rajasthan	Great Indian Bustard
3. Eravikulam, Kerala	Hoolak Gibbon

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

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

27. Consider the following animals of India:(2003)

- 1. Crocodile
- 2. Elephant

Which of these is/are endangered species?

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

28. The sea coast of which one of the following states has become a nesting place for the giant Olive Ridley turtles from South America. (2002)

- (a) Goa (b) Gujarat (c) Orissa (d) Tamil Nadu

PROTECTED AREAS – BIOSPHERE RESERVES

1. Which of the following are in Agasthyamala Biosphere Reserve? (2019)

- (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 Paikonda Wildlife Sanctuaries; and Mukurthi National Park

(d) Kawal and Sri Venkateshwara Wildlife Sanctuaries; and Nagarjunsagar-Srisailem Tiger Reserve

2. 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? (2014)

- (a) Sathyamangalam Tiger Reserve
- (b) Nallamala Forest
- (c) Nagarhole National park
- (d) Seshachalan Biosphere Reserve

3. The most important strategy for the conservation of biodiversity together with traditional human life is the establishment of (2014)

- (a) Biosphere reserves
- (b) Botanical gardens
- (c) National parks
- (d) Wildlife sanctuaries

4. Which of the following pairs is/are correct? (2012)

Biosphere Reserve	State
1. Nilgiri	: Tamil Nadu
2. Manas	: Madhya Pradesh
3. Panchmarhi	: Assam
4. Simlipal	: Odisha

Select the correct answer using the code given below:

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

5. Out of all the Biosphere Reserves in India, four have recognized on the World Network by UNESCO. Which one of the following is *NOT* one of them? (2008)

- (a) Gulf of Mannar (b) Kanchenjunga (c) Nanda Devi (d) Sunderbans

6. Which one of the following is *NOT* a Biosphere Reserve? (2005)

- (a) Agasthyamalai
- (b) Nallamalai
- (c) Nilgiri
- (d) Panchmarhi

7. Match List-I (Biosphere Reserve) with List-II (States) and select the correct answer using the codes given below the lists:(2004)

List-I

List-II

- A. Simlipal
- B. Dihang Dibang
- C. Nokrek
- D. Kanchenjunga

- 1. Sikkim
- 2. Uttaranchal
- 3. Arunachal Pradesh
- 4. Orissa
- 5. Meghalaya

	A	B	C	D
(a)	1	3	5	4
(c)	1	5	2	4

	A	B	C	D
(b)	4	5	2	1
(d)	4	3	5	1

- 8. Which one among the following is the first biosphere reserve of India? (1995)**
- (a) Sunderbans
 - (b) Simlipal
 - (c) Manas
 - (d) Nilgiri

NATIONAL PARKS IN INDIA

- 1. If you want to see gharials in their natural habitat, which one of the following is the best place to visit? (2017)**
- (a) Bhitarkanika Mangroves
 - (b) Chambal River
 - (c) Pulicat Lake
 - (d) Deepor Beel
- 2. Which of the following National Parks has a climate that varies from tropical to subtropical, temperate, and arctic? (2015)**
- (a) Khangchendzonga National Park
 - (b) Nanadadevi National Park
 - (c) Neora Valley National Park
 - (d) Namdapha National Park
- 3. Consider the following pairs:(2013)**

<i>National Park</i>	<i>River flowing through the Park</i>
1. Corbett National Park	: Ganga
2. Kaziranga National Park	: Manas
3. Silent Valley National Park	: Kaveri

Which of the above pairs is/are correctly matched?

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

4. Consider the following pairs: (2013)

1. Nokrek Biosphere Reserve : Garo Hills
2. Loktak (Loktak) Lake : Barail Range
3. Namdapha National Park : Dafla Hills

Which of the above pairs is/are correctly matched?

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

5. In which one among the following categories of protected areas in India are local people *NOT* allowed to collect and use the biomass? (2012)

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

6. Two important rivers- one with its source in Jharkhand (and known by a different name in Odisha), and another, with its source in Odisha – merge at a place only a short distance from the coast of Bay of Bengal before flowing into the sea. This is an important site of wildlife and biodiversity and a protected area. Which one of the following could be this? (2011)

- (a) Bhitarkanika (b) Chandipur on sea
(c) Gopalpur on sea (d) Simlipal

7. Consider the following statements: (2010)

1. The boundaries of a National Park are defined by legislation.
2. A biosphere Reserve is declared to conserve a few species of flora and fauna.
3. In a Wildlife Sanctuary, limited **biotic interference** is permitted.

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

8. Consider the following pairs: (2010)

Protected Area	Well-known for
1. Bhitarkanika, Orissa	Saltwater Crocodile
2. Desert National Park, Rajasthan	Great Indian Bustard
3. Eravikulam, Kerala	Hoolak Gibbon

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

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

9. Which one among the following has the maximum number of National Parks? (2008)

- (a) Andaman and Nicobar Islands (b) Arunachal Pradesh
(c) Assam (d) Meghalaya

10. Which one of the following is located in the Bastar region? (2007)

- (a) Bandhavgarh National Park (b) Dundeli Sanctuary
(c) Rajaji National Park (d) Indravati National Park

11. Match List-I with List-II and select the correct answer using the code given below the lists: (2005)

List-I (National Park/ Wildlife Sanctuary)

List-II (state)

A. Bondla Wildlife Sanctuary

1. Orissa

B. Kangerghat National Park

2. Assam

C. Orang Sanctuary

3. Chhattisgarh

D. Ushakothi Wildlife Sanctuary

4. Goa

5. Tripura

	A	B	C	D		A	B	C	D
(a)	2	1	5	3	(b)	4	3	2	1
(c)	2	3	5	1	(d)	4	1	2	3

12. Consider the following statements: (2005)

- Silent Valley National Park is in the Nallamalai range
- Pathrakkadavu Hydroelectric Project is proposed to be built near the Silent Valley National Park.
- The Kunthi river originates in Silent Valley's rainforests.

Which of the statements given above is/are correct?

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

13. Match List-I (National Park/Sanctuary) with List-II (State) and select the correct answer using the codes given below the lists: (2004)

List-I

List-II

A. Kanger Ghati National Park

1. Chhattisgarh

B. Nagarhole National Park

2. Haryana

C. Kugti Wildlife Sanctuary

3. Himachal Pradesh

D. Sultanpur Bird Sanctuary

4. Karnataka

	A	B	C	D
(a)	3	2	1	4
(c)	3	4	1	2

	A	B	C	D
(b)	1	4	3	2
(d)	1	2	3	4

14. Which one of the following is the first National Park established in India? (2004)

- (a) Bandipur (b) Corbett (c) Velavadar (d) Periyar

15. Which of the following pairs is/are correct? (2002)

National Park/Sanctuary		Important Protected Species
1. Kaziranga National Park	:	One horned rhinoceros
2. Dachigam Wildlife Sanctuary	:	Hangul
3. Jim Corbett National Park	:	Tiger
4. Mudumalai Wildlife Sanctuary	:	Elephant

Select the correct answer using the code given below:

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

OTHER PROTECTED AREAS

1. In which one of the following States is Pakhui Wildlife Sanctuary located? (2018)

- (a) Arunachal Pradesh
(b) Manipur
(c) Meghalaya
(d) Nagaland

2. The term 'M-STrIPES' is sometime seen in the news in the context of (2017)

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

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. (2017)

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

4. Consider the following pairs: (2014)

- | | | |
|-----------------------------|---|----------|
| 1. Dampa Tiger Reserve | : | Mizoram |
| 2. Gumti Wildlife Sanctuary | : | Sikkim |
| 3. Saramati Peak | : | Nagaland |

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

5. Consider the following protected areas:(2012)

- | | |
|-------------|-----------------|
| 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

6. Three of the following criteria have contributed to the recognition of Western Ghats-Sri Lanka and Indo-Burma regions as hotspots of biodiversity: (2011)

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

Which three of the above 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

7. Consider the following statements: (2010)

1. Biodiversity hotspots are located only in tropical regions.
2. Indian has four **biodiversity hotspots** i.e., **Eastern Himalayas**, Western Himalayas, **Western Ghats** and Andaman and Nicobar Islands.

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

8. Consider the following regions: (2009)

1. Eastern Himalayas
2. Eastern Mediterranean region
3. North-Western Australia

Which of the above is/are Biodiversity Hotspot(s)?

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

9. Match List-I with List-II and select the correct answer using the code given below the lists: (2004)

List-I (National Park/ Wildlife Sanctuary)

- A. Kanger Ghati National Park
- B. Nagarhole National Park
- C. Kugti Wildlife Sanctuary
- D. Sultanpur Bird Sanctuary

List-II (state)

- 1. Chhattisgarh
- 2. Haryana
- 3. Himachal Pradesh
- 4. Karnataka

	A	B	C	D		A	B	C	D
(a)	3	2	1	4	(b)	1	4	3	2
(c)	3	4	1	2	(d)	1	2	3	4

INTERNATIONAL ENVIRONMENTAL ORGANIZATIONS

- 1. The Partnership for Action on Green Economy (PAGE), a UN mechanism to assist countries transition towards greener and more inclusive economies, emerged at (2018)**

- (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

- 2. Consider the following statements in respect of Trade Related Analysis of Fauna and Flora in Commerce (TRAFFIC): (2017)**

- 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

- 3. What is/are the importance/importance's of the 'United Nations Convention to Combat Desertification'? (2016)**

- 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

4. With reference to an initiative called “The Economics of Ecosystems and Biodiversity (TEEB)”, which of the following statements is/are correct? (2016)

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

5. With reference to ‘Agenda 21’, sometimes seen in the news, consider the following statements: (2016)

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

4. 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? (2015)

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

5. What is Rio+20 Conference, often mentioned in the news? (2015)

- (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

6. With reference to an organization known as 'Bird Life International', which of the following statements is/are correct? (2015)

- 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

7. With reference to a conservation organization called 'Wetlands international', which of the following statements is /are correct? (2014)

- 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

8. With reference to 'Global Environment Facility', which of the following statements is / are correct? (2014)

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

9. Consider the following international agreements:(2014)

- 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

10. Consider the following statements regarding 'Earth Hour': (2014)

- 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

11. The “Red Data Books” published by the International Union for Conservation of Nature and Natural Resources (IUCN) contain lists of (2011)

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

12. The United Nations Framework Convention on Climate Change (UNFCCC) is an international treaty drawn at

- (a) United Nations Conference on the Human Environment, Stockholm, 1972
- (b) UN Conference on Environment and Development, Rio de Janeiro, 1992
- (c) World Summit on Sustainable Development, Johannesburg, 2002
- (d) UN Climate Change Conference, Copenhagen, 2009

13. Which one of the following statements is correct? (2005)

- (a) The First Meeting of the Parties (MOP-1) to the Cartagena Protocol on Biosafety was held in Philippines in the year 2004
- (b) India is not a signatory to the Biosafety Protocol/Convention on Biological Diversity
- (c) The Biosafety Protocol deals with genetically modified organisms
- (d) The United States of America is member of the Biosafety Protocol/Convention on Biological Diversity

14. 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**

15. With reference to the ‘New York Declaration on Forests’, which of the following statements are correct? (2021)

- 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

16. The “Common Carbon Metric” supported by UNEP, has been developed for (2021)

- (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

ENVIRONMENTAL ORGANIZATIONS IN INDIA

1. How is the National Green Tribunal (NGT) different from the Central Pollution Control Board (CPCB)? (2018)

- 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

2. Which of the following are the key features of 'National Ganga River Basin Authority (NGRBA)? (2016)

1. River basin is the unit of planning and management.
2. It spearheads the river conservation efforts at the national level.
3. One of the Chief Ministers of the States through which the Ganga flows becomes the Chairman of NGBRA on rotation basis.

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

3. 'Gadgil Committee Report' and 'Kasturirangan Committee Report', sometimes seen in the news, are related to (2016)

- (a) Constitutional reforms
- (b) Ganga Action Plan
- (c) Linking of rivers
- (d) Protection of Western Ghats

4. The Genetic Engineering Appraisal Committee is constituted under the (2015)

- (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

5. Consider the following statement: (2014)

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

6. With reference to Bombay Natural History Society (BNHS), consider the following statements: (2014)

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

7. How does National Biodiversity Authority (NBA) help in protecting the Indian agriculture? (2018)

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

8) Consider the following statements :

1. "The Climate Group" is an international non-profit organization that drives climate action by building large networks and runs them.
2. The International Energy Agency in partnership with the Climate Group launched a global initiative "EP100".
3. EP100 brings together leading companies committed to driving innovation in energy efficiency and increasing competitiveness while delivering on emission reduction goals.
4. Some Indian companies are members of EP100.
5. The International Energy Agency is the Secretariat to the "Under2 Coalition".

Which of the statements given above are correct?

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

(Explanation - Climate group is an international non-profit founded in 2003, created to drive climate action. No such partnership exists. EP100 brings together over 120 energy smart businesses committed to measuring and reporting on energy efficiency improvements. Mahindra group became the first Indian Company to join EP100. Climate Group is the Secretariat to the Under2 Coalition and works with governments to accelerate climate action)

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- (c) 2, 3 and 5 only
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ENVIRONMENTAL LAWS IN INDIA

1. Consider the following statements: (2019)

1. As per 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 Right) Act, 2006, bamboo is a minor forest produce.

3. The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Right) 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

2. In India, 'extended producer responsibility' was introduced as an important feature in which of the following? (2019)

- (a) The Bio-medical Waste (Management and Handling) Rules 1998
(b) The Recycled Plastic (Manufacturing and Usage) Rules, 1999
(c) The e-Waste (Management and Handling Rules, 2011
(d) The Food Safety and Standard Regulations, 2011

3. Consider the following statements:(2019)

1. As per law, the Compensatory Afforestation Fund Management and Planning Authority exists at both National and State Levels.
2. People's participation is mandatory in the compensatory afforestation programme carried out under the Compensatory Afforestation Fund Act, 2016.

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

4. Consider the following statements:(2019)

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

5. Consider the following statements:(2018)

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 statement given above is/are correct?

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

6. 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? (2017)

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

7. In India, if a species of tortoise is declared protected under Schedule 1 of the Wildlife (Protection), Act, 1972, what does it imply? (2017)

- (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.

8. The Genetic Engineering Appraisal Committee is constituted under the (2015)

- (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

9. With reference to India, consider the following Central Acts: (2011)

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 Act

10. Which one of the following legislations does not deal with the protection of environment? (1999)

- (a) The Water (Cess) Act, 1977
(b) The Forest (Conservation) Act, 1980

(c) The Public Liability Insurance Act, 1991

(d) The Port Laws Amendment Act, 1997

11) Which one of the following has been constituted under the Environment (Protection) Act, 1986? (2022)

(a) Central Water Commission

(b) Central Ground Water Board

(c) Central Ground Water Authority

(d) National Water Development Agency

12) With reference to Indian laws about wildlife protection, consider the following statements: (2022)

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

POLLUTION

1. Consider the following: (2019)

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

2. Why is there a great concern about the ‘microbeads’ that are released into environment? (2019)

- (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.

3. Biological Oxygen Demand (BOD) is a standard criterion for (2017)

- (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

4. In the context of solving pollution problems, what is/are the advantage/ advantages of bioremediation technique? (2017)

- 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

5. In the cities of our country, which among the following atmospheric gases are normally considered in calculating the value of Air Quality Index? (2016)

- Carbon dioxide
- Carbon monoxide
- Nitrogen dioxide
- Sulfur dioxide
- 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

6) “R2 Code of Practices” constitute a tool available for promoting the adoption of (2021)

(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

7) Why is there a concern about copper smelting plants? (2021)

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

8) With reference to furnace oil, consider the following statements:(2021)

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

9) Magnetite particles, suspected to cause neurodegenerative problems are generated as environmental pollutants from which of the following? (2021)

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

10) Consider the following: (2022)

1. Carbon monoxide
2. Nitrogen oxide
3. Ozone
4. Sulphur dioxide

Excess of which of the above in the environment is/are cause(s) of acid rain?

(a) 1, 2 and 3

(b) 2 and 4 only

(c) 4 only

(d) 1, 3 and 4

CLIMATE CHANGE – BASICS

1. 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? (2017)

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

2. Which one of the following is associated with the issue of control and phasing out of the use of ozone-depleting substances? (2015)

(a) Bretton Woods Conference

(b) Montreal Protocol

(c) Kyoto Protocol

(d) Nagoya Protocol

3. 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? (2014)

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

4. Consider the following statements:

Chlorofluorocarbons, known as ozone-depleting substances, are used (2012)

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

5. 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? (2011)

(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

6. What are the possible limitations of India in mitigating the global warming at present and in the immediate future? (2010)

1. Appropriate alternate technologies are not sufficiently available.
2. India cannot invest huge funds in research and development
3. Many developed countries have already set up their polluting industries in India.

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

7. Due to their extensive rice cultivation, some regions may be contributing to global warming. To what possible reason/reasons is this attributable? (2010)

1. The anaerobic conditions associated with rice cultivation cause the emission of methane.
2. When nitrogen-based fertilizers are used, nitrous oxide is emitted from the cultivated soil.

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

8. What is blue carbon? (2021)

- (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

9. Among the following crops, which one is the most important anthropogenic source of both methane and nitrous oxide? (2022)

- (a) Cotton
- (b) Rice
- (c) Sugarcane
- (d) Wheat

10. "Climate Action Tracker" which monitors the emission reduction pledges of different countries is a: (2022)

- (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

GLOSSARY

1) “Momentum for Change: Climate Neutral Now” is an initiative launched by (2018)

- a) The Intergovernmental Panel on Climate Change
- b) The UNEP Secretariat
- c) The UNFCCC Secretariat
- d) The World Metrological Organization

2) With reference to ‘Agenda 21’, sometimes seen in the news, consider the following statements: (2016)

- 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

3) Consider the following pairs: (2016)

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) Regarding ‘carbon credits’, which one of the following statements is *NOT* correct? (2011)

- (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.

5) The United Nations Framework Convention on Climate Change (UNFCCC) is an international treaty drawn at (2010)

- (a) United Nations Conference on the Human Environment, Stockholm, 1972
- (b) UN Conference on Environment and Development, Rio de Janeiro, 1992
- (c) World Summit on Sustainable Development, Johannesburg, 2002
- (d) UN Climate Change Conference, Copenhagen, 2009

6) In the context of CO₂ emission and Global Warming, what is the name of a market driven device under the UNFCCC that allows developing countries to get funds/incentives from the developed countries to adopt better technologies that reduce greenhouse gas emissions? (2009)

- (a) Carbon Footprint
- (b) Carbon Credit Rating
- (c) Clean Development Mechanism
- (d) Emission Reduction Norm

7) Consider the following statement: (2005)

1. Kyoto Protocol came into force in the year 2005.
2. Kyoto Protocol deals primarily with the depletion of the Ozone layer.
3. Methane as a greenhouse gas is more harmful than carbon dioxide

Which of the statements given above is/are correct?

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

IMPORTANT CLIMATE FUNDS

1. The term 'Intended Nationally Determined Contributions' is sometimes seen in the news in the context of (2016)

- (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. Consider the following statements: (2016)

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

3. With reference to the Agreement at the UNFCCC meeting in Paris in 2015, which of the following statements is/are correct? (2016)

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

4. Which of the following statements regarding 'Green Climate Fund' is/are correct? (2015)

1. It is intended to assist the developing countries in adaption 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

ENVIRONMENTAL PROBLEMS

1) In the context of In WHO Air Quality Guidelines, consider the following statements: (2022)

1. The 24-hour mean of PM_{2.5} should not exceed 15 ug/m³ and annual mean of PM_{2.5} should not exceed 5 µg/m³.
2. In a year, the highest levels of ozone pollution occur during the periods of inclement weather.
3. PM₁₀ 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

2) "Biorock technology" is talked about in which one of the following situations? (2022)

- (a) Restoration of damaged coral reefs**
- (b) Development of building materials using plant residues
- (c) Identification of areas for exploration/extraction of shale gas
- (d) Providing salt licks for wild animals in forests/protected areas.

MISCELLANEOUS

1) Which of the following is not a bird ? (2022)

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

2) The "Miyawaki method" is well known for the: (2022)

- (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

3) Which one of the following best describes the term “greenwashing”? (2022)

(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

4) Certain species of which one of the following organisms are well known as cultivators of fungi? (2022)

(a) **Ant**

(b) Cockroach

(c) Crab

(d) Spider