

# Environment & Ecology

#### Q.1) Which of the following matter/s is/are comes under "ecology"?

- 1. Effects of environment on organisms
- 2. Energy flow in environment
- 3. Mineral cycling

#### How many of the statements given above are correct?

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

#### ANS: C

**Explanation: Ecology** is defined "as a scientific study of the relationship of the living organisms with each other and with their environment."

It deals with the ways in which organisms are molded by their environment, how they make use of environmental resources including energy flow and mineral cycling.

#### Source: Shankar IAS

#### Q.2) Which of the following has/had the reference of ecological principles?

- 1. Charaka-Samhita
- 2. Sushruta-Samhita
- 3. Aranyakas

#### How many of the statements given above are correct?

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

#### ANS: C

**Explanation:** Our ancient Indian texts have references to ecological principles.

- The classical texts of the Vedic period such as the Vedas, the Samhitas, the Brahmanas and the Aranyakas-Upanishads contain many references to ecological concepts.
- The Indian treatise on medicine, the Charaka-Samhita and the surgical text Sushruta-Samhita, show that people during this period had a good understanding of plant and animal ecology.

Source: Shankar IAS



#### Q.3) Which of the following is non - biotic component of environment?

- a) Green plants
- b) Decomposers
- c) Radiation
- d) Parasites

#### ANS: C

**Explanation:** The environment is not static. Both biotic and abiotic factors are in a flux and keep changing continuously.

<b>Components of Environment</b>	
Abiotic	Biotic
Energy	Green plants
Radiation	Non-green plants
Temperature & heat flow	Decomposers
Water	Parasites
Atmospheric gases and wind	Symbionts
Fire	Animals
Gravity	Man
Topography	
Soil	
Geologic substratum	

#### Source: Shankar IAS

#### Q.4) Which of the following is not an inorganic compound?

- a) Proteins
- b) Nitrate
- c) Sulfur
- d) Phosphates

#### ANS: A

**Explanation:** Inorganic compound such as carbon dioxide, water, sulphur, nitrates, phosphates, and ions of various metals are essential for organisms to survive. **Source: Shankar IAS** 

#### Q.5) Which of the following is/are primary producer/s?

- 1. Algae
- 2. Bacteria
- 3. Green plants

#### How many of the statements given above are correct?

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

#### ANS: C

**Explanation:** Primary producers are basically green plants (and certain bacteria and algae).



They synthesize carbohydrate from simple inorganic raw materials like carbon dioxide and water in the presence of sunlight by the process of photosynthesis for themselves, and supply indirectly to other nonproducers.

#### Source: Shankar IAS

#### Q.6) Consider the following statements regarding "consumers":

- 1. They are incapable of producing their own food.
- 2. They depend on organic food derived from plants, animals or both.

#### 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

#### ANS: C

Explanation: Consumers are incapable of producing their own food (photosynthesis).

- They depend on organic food derived from plants, animals or both.
- Consumers can be divided into two broad groups namely micro and macro consumers.

#### Source: Shankar IAS

#### Q.7) Consider the following statements:

- 1. Herbivores are primary consumers which feed mainly on plants.
- 2. Omnivores are organisms which consume both plants and animals.

#### 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

#### ANS: C

**Explanation:** Herbivores are primary consumers which feed mainly on plants e.g. cow, rabbit. Omnivores are organisms which consume both plants and animals e.g. man, monkey. **Source:** Shankar IAS

#### Q.8) The term "osmotrophs" related to which of the following?

- a) Primary producers
- b) Consumers
- c) Decomposers
- d) Omnivores

#### ANS: C

**Explanation:** Micro consumers - Saprotrophs (decomposers or osmotrophs): They are bacteria and fungi which obtain energy and nutrients by decomposing dead organic substances (detritus) of plant and animal origin.



The products of decomposition such as inorganic nutrients which are released in the ecosystem are reused by producers and thus recycled.

# Source: Shankar IAS

#### Q.9) Which of the following is/are example/s of ecotone?

- 1. Mangrove forest
- 2. Grassland
- 3. River bank

### How many of the statements given above are correct?

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

# ANS: C

**Explanation:** Ecotone is a zone of junction between two or more diverse ecosystems.

- For e.g. the mangrove forests represent an ecotone between marine and terrestrial ecosystem.
- Other examples are grassland, estuary and river bank.

#### Source: Shankar IAS

### Q.10) The "Agasthyamala Biosphere Reserve" is recently seen in news related to?

- a) Western Ghats
- b) Eastern Ghats
- c) Purvanchal hills
- d) Andaman & Nicobar

#### ANS: A

**Explanation:** The Agasthyamala Biosphere Reserve is located in the southernmost end of the Western Ghats and incorporates peaks towering 1,868 m above sea level.

It covers 3,500 km2 and encompasses tropical forest ecosystems that fall within the Tirunelveli and Kanyakumari districts of Tamil Nadu and the Thiruvananthapuram and Kollam districts of Kerala. **Source: FORUMIAS** 



# Environment & Ecology

### Q.1) Which of the following is/are characteristic/s of "ecotone"?

- 1. It may be very narrow or quite wide.
- 2. It is a zone of tension.
- 3. Well developed ecotones contain some organisms which are entirely different from that of the adjoining communities.

# How many of the statements given above are correct?

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

# ANS: C

**Explanation:** Characteristics of Ecotone:

- It may be very narrow or quite wide. It has the conditions intermediate to the adjacent ecosystems. Hence it is a zone of tension.
- It is linear as it shows progressive increase in species composition of one in coming community and a simultaneous decrease in species of the other out going adjoining community.
- Well developed ecotones contain some organisms which are entirely different from that of the adjoining communities.

#### Source: Shankar IAS

# Q.2) Consider the following statements regarding "ecological niche":

- 1. It is the unique functional role or place of a species in an ecosystem.
- 2. A niche is unique for a species, which means no two species have exact identical niches.

# 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

# ANS: C

**Explanation:** A niche is the unique functional role or place of a species in an ecosystem.

- It is a description of all the biological, physical and chemical factors that a species needs to survive, stay healthy and reproduce.
- A niche is unique for a species, which means no two species have exact identical niches.
- Niche plays an important role in conservation of organisms.

#### Source: Shankar IAS



#### Q.3) Which of the following spices is/are found in "tundra forest"?

- 1. Reindeer
- 2. Snowy owl
- 3. Lemming

### How many of the statements given above are correct?

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

# ANS: C

**Explanation:** Devoid of trees except stunted shrubs in the southern part of tundra biome, ground flora includes lichen, mosses and sedges.

- The typical animals are reindeer, arctic fox, polar bear, snowy owl, lemming, arctic hare, and ptarmigan.
- Reptiles and amphibians are almost absent.

#### Source: Shankar IAS

# Q.4) Consider the following statements regarding "Tropical rain forest":

- 1. It covers about 7% of the earth's surface & 40% of the world's plant and animal species.
- 2. Most animals and epiphytic plants are concentrated in the canopy or tree top zones.

# 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

#### ANS: C

**Explanation:** Tropical rainforest covers about 7% of the earth's surface & 40% of the world's plant and animal species.

- Multiple storeys of broad-leafed evergreen tree species are in abundance.
- Most animals and epiphytic plants are concentrated in the canopy or tree top zones.

# Source: Shankar IAS



### Q.5) Which of the following is/are example/s of "lotic water system"?

- 1. Freshwater streams
- 2. Springs
- 3. Creeks

# How many of the statements given above are correct?

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

# ANS: C

**Explanation:** Fresh water ecosystem is classified as lotic (moving water) or lentic (still or stagnant water).

Lotic water system includes freshwater streams, springs, rivulets, creeks, brooks, and rivers.

Source: Shankar IAS

# Q.6) Which of the following is NOT a lentic water system?

- a) Swamps
- b) Bogs
- c) Pools
- d) Rivers

#### ANS: D

**Explanation:** Fresh water ecosystem is classified as lotic (moving water) or lentic (still or stagnant water).

- Lotic water system includes freshwater streams, springs, rivulets, creeks, brooks, and rivers.
- Lentic water bodies include pools, ponds, some swamps, bogs and lakes.
- They vary considerably in physical, chemical and biological characteristics.
- Source: Shankar IAS

# Q.7) Consider the following statements regarding "Environmental Information System (ENVIS)":

- 1. It is a Central Sector Scheme has been implemented since 1982.
- 2. Its purpose is to integrate country-wide efforts in environmental information.

# 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

# ANS: C

**Explanation:** Environmental Information System (ENVIS), a Central Sector Scheme of the Ministry has been implemented since 1982.



The purpose of the scheme is to integrate country-wide efforts in environmental information collection, collation, storage, retrieval and dissemination through ENVIS websites, which are dedicated to different interesting themes.

#### Source: Shankar IAS

### Q.8) Consider the following statements regarding "energy flow" in ecosystem:

- 1. Energy is the basic force responsible for all metabolic activities.
- 2. The flow of energy from producer to top consumers is called energy flow which is unidirectional.

# 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

#### ANS: C

**Explanation:** Energy is the basic force responsible for all metabolic activities.

- The flow of energy from producer to top consumers is called energy flow which is unidirectional.
- The study of Tropic level interaction in an ecosystem gives an idea about the energy flow through the ecosystem.

#### Source: Shankar IAS

#### Q.9) Which of the following is/are cetacean/s?

- 1. Dolphin
- 2. Porpoise
- 3. Whale

# How many of the statements given above are correct?

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

#### ANS: C

**Explanation:** Dolphins, Porpoises and whales are called cetaceans.

A cetacean is a creature belonging to a group of water living mammals that have no hind limbs and a blowhole for breathing. They are not fish!

Source: Shankar IAS



#### Q.10) The Pilibhit Tiger Reserve is recently seen in news located at?

- a) Rajasthan
- b) Gujarat
- c) Madhya Pradesh
- d) Uttar Pradesh

#### ANS: D

**Explanation:** The Pilibhit Tiger Reserve is situated in the Pilibhit district and Shahjahanpur District of Uttar Pradesh, forming part of the Terai Arc Landscape, in the upper Gangetic Plain Biogeographic Province.

- Some river originating from the reserve, which is also the catchment of several others like Sharda, Chuka and Mala, Khannot.
- The habitat is characterized by sal forests, tall grasslands and swamp maintained by periodic flooding from rivers.

#### **Source: FORUMIAS**



# Protected Areas

#### Q.1) The wildlife protection act is often seen in news enacted in?

- a) 1958
- b) 1966
- c) 1970
- d) 1972

# ANS: D

**Explanation:** The adoption of a National Policy for Wildlife Conservation in 1970 and the enactment of the Wildlife (Protection) Act in 1972 lead to a significant growth in the protected areas network, from 5 national parks and 60 sanctuaries to a network of 669 Protected Areas with geographical area of the country, 4.92%.

#### Source: Shankar IAS

#### Q.2) Which of the following statements is/are NOT correct?

- 1. Grazing activities are permitted in national park.
- 2. Wildlife sanctuary can be created for a particular species whereas the national park is not primarily focused on a particular species.
- 3. The Central Government may also declare, Wild Life Sanctuary and National Park under certain conditions.

#### How many of the statements given above are correct?

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

#### ANS: A

**Explanation:** National Parks enjoy a greater degree of protection than sanctuaries.

- Certain activities which are regulated in sanctuaries, such as grazing of livestock, are prohibited in National Parks.
- Wildlife sanctuary can be created for a particular species (for e.g. grizzled giant squirrel w.l.s in srivalliputhur) whereas the national park is not primarily focused on a particular species.
- The Central Government may also declare, Wild Life Sanctuary and National Park under certain conditions.

Source: Shankar IAS



# Q.3) The Marble Palace Zoo, which was established in the year 1854, is the oldest existing zoo in the country is located at?

- a) Madras
- b) Kolkata
- c) Mumbai
- d) Delhi

### ANS: B

**Explanation:** The Marble Palace Zoo in Calcutta city which was established in the year 1854 is the oldest existing zoo in the country.

Source: Shankar IAS

#### Q.4) Consider the following statements:

- 1. Biosphere reserves are sites established by countries and recognized under UNESCO's Man and the Biosphere (MAB) Programme.
- 2. The national Biosphere Reserve Programme in India was initiated in 1986.

# 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

#### ANS: C

**Explanation:** Biosphere reserves are sites established by countries and recognized under UNESCO's Man and the Biosphere (MAB) Programme to promote sustainable development based on local community efforts and sound science.

- The national Biosphere Reserve Programme was initiated in 1986.
- To ensure participation of local inhabitants for effective management and devise means of improving livelihood of the local inhabitants through sustainable use.

#### Source: Shankar IAS

# Q.5) Which of the following is/are biodiversity hot spots present in India?

- 1. The Himalayas
- 2. Indo-Burma
- 3. Sunderland

#### How many of the statements given above are correct?

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

ANS: C

Explanation: There are 4 biodiversity hot spots present in India.



They are: 1. The Himalayas 2. Indo- Burma and 3. The western Ghats & Sri Lanka 4. Sunderland **Source: Shankar IAS** 

#### Q.6) Which of the following is called as "Sahyadri Hills"?

- a) Eastern Ghats
- b) The Eastern Himalayas
- c) Western Ghats
- d) The Western Himalayas

#### ANS: B

**Explanation:** Western Ghats, also known as the "Sahyadri Hills" encompasses the mountain forests in the southwestern parts of India.

#### **Source: Shankar IAS**

#### Q.7) Which of the following "National Park" is located at Sawai Madhopur district?

- a) Sariska
- b) Ranathambore
- c) Gir
- d) Sunderbans

#### ANS: B

**Explanation:** Ranthambore National Park is one of the biggest and most renowned national parks in Northern India.

The park is located in the Sawai Madhopur district of southeastern Rajasthan, which is about 130 km from Jaipur.

#### **Source: FORUMIAS**

#### Q.8) The "Project Tiger" centrally sponsored scheme was launched in?

- a) 1952
- b) 1962
- c) 1973
- d) 1988

# ANS: C

**Explanation:** Project Tiger centrally sponsored scheme was launched in 1973. **Source:** Shankar IAS



#### Q.9) Which of the following is/are sub species of tiger?

- 1. Bengal
- 2. South China
- 3. Siberian

### How many of the statements given above are correct?

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

# ANS: C

**Explanation:** The scientific name for the tiger is Panthera tigris. There are eight subspecies of tiger: among the eight, at present five subspecies are present in the wild.

They are - Bengal, South China, Indochinese, Sumatran, and Siberian. Three subspecies of tiger— Caspian, Bali, and Javan—are extinct.

### Source: Shankar IAS

# Q.10) The "Dehing Patkai" national park is recently seen in news located at?

- a) Assam
- b) Tripura
- c) Nagaland
- d) Mizoram

#### ANS: A

**Explanation:** Dehing Patkai National Park is located in the Dibrugarh and Tinsukia districts of Assam and covers an area of 231.65 km2 (89.44 sq mi) rainforest.

- It was declared a wildlife sanctuary on 13 June 2004. On 13 December 2020 Government of Assam upgraded it into a national park.
- On 9 June 2021 Forest Department of Assam officially notified it as a national park.

#### Source: FORUMIAS



# Protected Areas

#### Q.1) Consider the following statements regarding "tiger reserves":

- 1. Core zone of tiger reserve areas are notified by the State Government in consultation with an Expert Committee.
- 2. Buffer zone aims at promoting co-existence between wildlife and human activity.

#### 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

#### ANS: C

**Explanation:** Core zone: Critical tiger habitat areas established, on the basis of scientific and objective criteria.

- These areas are notified by the State Government in consultation with an Expert Committee (constituted for that purpose).
- Buffer zone aims at promoting co-existence between wildlife and human activity with due recognition of the livelihood, developmental, social and cultural rights of the local people.

#### Source: Shankar IAS

#### Q.2) Which of the following is/are power/s of National Tiger Conservation Authority?

- 1. To approve the Tiger Conservation Plan prepared by the State Government.
- 2. To evaluate and assess various aspects of sustainable ecology and disallow any ecologically unsustainable land use.
- 3. To lay down normative standards for tourism activities and guidelines for project tiger.

#### How many of the statements given above are correct?

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

#### ANS: C

**Explanation:** National Tiger Conservation Authority (NTCA): The Amendment Act of 2006 provides for the constitution of a statutory authority known as the National Tiger Conservation Authority to aid in the implementation of measures for the conservation of the tiger.

- To approve the Tiger Conservation Plan prepared by the State Government.
- To evaluate and assess various aspects of sustainable ecology and disallow any ecologically unsustainable land use such as mining, industry and other projects within tiger reserves.



- To lay down normative standards for tourism activities and guidelines for project tiger from time to time for tiger conservation in the buffer and core area of tiger reserves and ensure their due compliance.
- To provide information on protection measures including future conservation plan, estimation of population of tiger and its natural prey species.

### Source: Shankar IAS

# Q.3) Consider the following statements regarding "project elephant":

- 1. It was launched in February, 1982.
- 2. It is a centrally sponsored scheme to assist states for conservation of elephants.

# 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

#### ANS: B

**Explanation:** Project Elephant was launched in February, 1992 as centrally sponsored scheme to assist states having free ranging populations of wild elephants and to ensure long term survival of identified viable populations of elephants in their natural habitats.

### Source: Shankar IAS

# Q.4) Which of the following animal/s is/are poached for their tusk?

- 1. Walrus
- 2. Narwhal
- 3. Hippopotamus

#### How many of the statements given above are correct?

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

#### ANS: C

**Explanation:** The hippopotamus, walrus, narwhal, mammoth, Rhino and most commonly, Asian and African elephants are poached for their ivory tusk.

Source: Shankar IAS



#### Q.5) The "MIKE" programme is often seen in news related to?

- a) Leopard
- b) Butterflies
- c) Elephants
- d) Tigers

### ANS: C

**Explanation:** Monitoring of Illegal Killing of Elephants (MIKE) Programme: Mandated by COP resolution of CITES, MIKE program started in South Asia in the year 2003 with following purpose: To provide information needed for elephant range States to make appropriate management and enforcement decisions, and to build institutional capacity within the range States for the long-term management of their elephant populations.

Source: Shankar IAS

# Q.6) Which of the following is most affected species of drug "diclofenac"?

- a) Vultures
- b) Elephants
- c) Tigers
- d) Leopards

# ANS: A

**Explanation:** Diclofenac is a non-steroidal anti-inflammatory drug (NSAID) administered to reduce inflammation and to reduce pain in certain conditions.

- NSAIDs are associated with adverse kidney (renal) failure which is caused due to the reduction in synthesis of renal prostaglandins.
- Vultures which were unable to break down the chemical diclofenac, suffer from kidney failure when they eat the carcass of animals which have been administered with the drug Diclofenac.

Source: Shankar IAS

#### Q.7) In which of the following state/s is/are snow leopard commonly found?

- 1. Himachal Pradesh
- 2. Arunachal Pradesh
- 3. Sikkim

#### How many of the statements given above are correct?

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

#### ANS: C

**Explanation:** The snow leopard is a globally endangered species. Merely 7,500 are estimated to be surviving over two million square kilometers in the Himalaya and Central Asian mountains, where they are facing tremendous human pressures.



- Distribution in India in Indian Himalayas, high altitude areas located above the forests (alpine meadows and cold deserts) Areas above 3000m broadly constitute snow leopard range in India.
- In the five Himalayan states of Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh.

#### Source: Shankar IAS

### Q.8) The "Dachigam National Park" is often seen in news located at?

- a) Kashmir
- b) Sikkim
- c) Himachal Pradesh
- d) Assam

# ANS: A

**Explanation:** The Kashmir stag (Cervus affinis hanglu) also called Hangul is a subspecies of Central Asian Red Deer native to northern India.

In Kashmir, it's found in Dachigam National Park at elevations of 3,035 meters. **Source: Shankar IAS** 

#### Q.9) Which of the following is/are fresh water dolphins?

- 1. Baiji
- 2. Bhulan
- 3. Boto

### How many of the statements given above are correct?

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

#### ANS: C

**Explanation:** The Ganges Dolphin is among the four "obligate" freshwater dolphins found in the world – the other three are the 'baiji' found in the Yangtze River (China), the 'bhulan' of the Indus (Pakistan) and the 'boto' of the Amazon River (Latin America). **Source: Shankar IAS** 

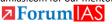
#### Q.10) The "Indravati National Park" is recently seen in news located at?

- a) Tamil Nadu
- b) Uttar Pradesh
- c) Chhattisgarh
- d) Kerala

# ANS: C

**Explanation:** Indravati National Park is a national park located in Bijapur district of Chhattisgarh state in India.

The park derives its name from the Indravati River, which flows from east to west and forms the northern boundary of the reserve with the Indian state of Maharashtra. **Source: FORUMIAS** 



# Biodiversity & Conservation

### Q.1) Which of the following stage/s diversity is/are exist?

- 1. Genetic level
- 2. Species level
- 3. Ecosystem level

# How many of the statements given above are correct?

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

# ANS: C

**Explanation:** Biodiversity is part of our daily lives and livelihood, and constitutes resources upon which families, communities, nations and future generations depend.

Biodiversity is considered to exist at three levels: genetics, species, and ecosystems.

# Source: Shankar IAS

# Q.2) Which of the following is/are causes of biodiversity loss?

- 1. Floods
- 2. Landslides
- 3. Rivalry among species

#### How many of the statements given above are correct?

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

# ANS: C

**Explanation:** The extinction of species takes place when they are exploited for economic gain or hunted as sport or for food.

- Extinction of species may also occur due to environmental reasons like ecological substitutions, biological factors and pathological causes which can be caused either by nature or man.
- Natural causes: floods, earthquakes, landslides, rivalry among species, and lack of pollination and diseases.

#### Source: Shankar IAS



#### Q.3) Which of the following is NOT an in-situ conservation method?

- a) National park
- b) Wildlife sanctuary
- c) Biosphere reserve
- d) Zoological park

#### ANS: D

**Explanation:** Conserving the animals and plants in their natural habitats is known as in-situ conservation. The established natural habitats are:

- National parks
- Sanctuaries
- Biosphere reserves
- Reserved forests
- Protected forests

#### Source: Shankar IAS

# Q.4) The "Red Data Book" is often seen in news released by?

- a) IUCN
- b) UNEP
- c) UNDP
- d) WEF

#### ANS: A

**Explanation:** Species judged as threatened are listed by various agencies as well as by some private organizations. The most cited of these lists is the Red Data Book.

- It is a loose-leaf volume of information on the status of many kinds of species.
- This volume is continually updated and is issued by the International Union for Conservation of Nature (IUCN) located in Morges, Switzerland.

Source: Shankar IAS

#### Q.5) Which of the following biome/s is/are found in India?

- 1. Tropical Humid Forests
- 2. Tropical Deciduous Forests
- 3. Coniferous forests

#### How many of the statements given above are correct?

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

#### ANS: C

**Explanation:** The term biome means the main groups of plants and animals living in areas of certain climate patterns. It includes the way in which animals, vegetation and soil interact together.



The plants and animals living in the area are adapted to that environment. The five biomes of India are:

- 1) Tropical Humid Forests
- 2) Tropical Dry or Deciduous Forests (including Monsoon Forests)
- 3) Warm deserts and semi-deserts
- 4) Coniferous forests and
- 5) Alpine meadows.

### Source: Shankar IAS

#### Q.6) In which of the following place/s lichens grow?

- 1. Rocks
- 2. Tree trunks
- 3. Dead wood

# How many of the statements given above are correct?

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

# ANS: C

**Explanation:** Lichen is a peculiar combination of an alga and a fungus– the two live deriving mutual benefits.

They are group of grayish green plants which grow on rocks, tree-trunks, dead wood, etc. **Source: Shankar IAS** 

# Q.7) Consider the following statements regarding "Bryophytes":

- 1. They usually grow in moist places.
- 2. They are the second largest group of green plants in 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

# ANS: C

**Explanation:** The plant body is differentiated into a small stem and simple leaves, but true roots are absent.

- They usually grow in moist places. E.g. Liverworts, mosses.
- They are the second largest group of green plants in India distributed largely in Eastern Himalaya, North-eastern India, Western Himalaya and the Western Ghats.

#### Source: Shankar IAS



#### Q.8) Consider the following statements regarding "Malabar Civet":

- 1. It is endemic to India.
- 2. It is nocturnal in nature.

### 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

# ANS: C

**Explanation:** Malabar Civet (Viverra civettina) is considered to be one of the world's rarest mammals.

- It is endemic to India and was first reported from Travancore, Kerala.
- It is nocturnal in nature and found exclusively in the Western Ghats.

#### Source: Shankar IAS

#### Q.9) Consider the following statements regarding "penguins":

- 1. They don't live near freshwater.
- 2. They drink salt water.

#### 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

### ANS: C

**Explanation:** Penguins don't live near freshwater. They drink salt water.

They have a special gland in their bodies that takes the salt out of the water they drink and pushes it out of grooves in their bill.

#### Source: Shankar IAS

# Q.10) The "Namdapha Tiger Reserve" is recently seen in news located at?

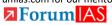
- a) Arunachal Pradesh
- b) Tamil Nadu
- c) Sikkim
- d) Tripura

#### ANS: A

**Explanation:** Namdapha Tiger Reserve was declared in the year 1983 as the 15th Tiger Project of the country with a core area of 1985.245 Sq.Km and a buffer area of 245 Sq.Km.

- Thus the total area of the Reserve is 1985 Sq.Km.
- Namdapha is in fact the name of a river which originates from Daphabum (Dapha is the name of hill, Bum means peak of hill) and meets Noa-Dehing river.
- This river flows right across in a North-South direction of the National Park and hence the name Namdapha has been given.

#### **Source: FORUMIAS**



# **Environment Legislations**

# Q.1) ""The state shall endeavor to protect and improve the environment and to safeguard forest and wildlife of the country" – related to?

- a) Article 32
- b) Article 44
- c) Article 47
- d) Article 48 A

#### ANS: D

**Explanation**: Article-48-A of the constitution provides: "The state shall endeavor to protect and improve the environment and to safeguard forest and wildlife of the country."

# Source: Shankar IAS

#### Q.2) The "Management Effective Evaluation" is often seen in news related to?

- a) Protected areas
- b) Green energy
- c) Sustainable habitat
- d) Organic farming

#### ANS: A

**Explanation:** Management Effective Evaluation (MEE), MEE conducted by the National Tiger Conservation Authority and the Wildlife Institute of India is the assessment of how well protected areas are being managed and their effectiveness in conserving target flora and fauna, the reserves were put into four categories — 'very good', 'good', 'fair' and 'poor'.

#### Source: Shankar IAS

#### Q.3) Consider the following statements regarding "the Environment (Protection) Act, 1986":

- 1. It empowers the State Government to take all appropriate measures to prevent and control pollution.
- 2. It prescribes a special procedure for handling hazardous substances and the concerned person has to handle the hazardous substances according to the procedure of the Act.

#### 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

# ANS: B

**Explanation:** As compared to all other previous laws on environment protection, the Environment (Protection) Act, 1986 is a more effective and bold measure to fight the problem of pollution.



- The Act empowers the Central Government to take all appropriate measures to prevent and control pollution and to establish effective machinery for the purpose of protecting and improving the quality of the environment and protecting controlling and abating environmental pollution.
- The Act prescribes a special procedure for handling hazardous substances and the concerned person has to handle the hazardous substances according to the procedure of the Act.

#### Source: Shankar IAS

# Q.4) The "Fair and equitable sharing" is associated with which of the following act?

- a) Wildlife protection act, 1972
- b) Environment protection act, 1981
- c) Biological diversity act, 2002
- d) National Green Tribunal act, 2010

#### ANS: C

**Explanation:** The Biological Diversity Act 2002 was born out of India's attempt to realize the objectives enshrined in the United Nations Convention on Biological Diversity (CBD) 1992 which recognizes the sovereign rights of states to use their own Biological Resources.

Objectives: (i) Conservation of biological diversity; (ii) Sustainable use of its components; and (iii) Fair and equitable sharing of the benefits arising from the utilization of genetic resources.

#### Source: Shankar IAS

# Q.5) Which of the following is the nodal agency for implementation of "forest rights act, 2006"?

- a) Ministry of environment and forest
- b) Ministry of tribal affairs
- c) Ministry of home affairs
- d) Ministry of agriculture

#### ANS: B

**Explanation:** Forest Rights Act, 2006 provides for the restitution of deprived forest rights across India, including both individual rights to cultivated land in forestland and community rights over common property resources.

Nodal Agency for the implementation of forest rights act, 2006 is Ministry of Tribal Affairs. Source: Shankar IAS



# Q.6) According to forest rights act, 2006, what is the maximum limit for recognizing the rights on forest land?

- a) 2 hectares
- b) 4 hectares
- c) 6 hectares
- d) 8 hectares

# ANS: B

**Explanation:** The maximum limit of the recognizing rights on forest land is 4 ha. **Source: Shankar IAS** 

# Q.7) Consider the following statements regarding "fire corals":

- 1. They are more closely related to jellyfish than corals.
- 2. Generally found in murky inshore waters and display a tolerance for siltation.

# 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

# ANS: C

**Explanation:** Fire corals: They are more closely related to jellyfish than corals. On contact, one usually feels a burning sensation similar to a sting from a jellyfish.

Habitat: Generally found in murky inshore waters and display a tolerance for siltation. They often are found in clear offshore sites.

#### Source: Shankar IAS

# Q.8) Consider the following statements regarding "Epiphytes":

- 1. They grow on the host plant.
- 2. They do not draw food from the host plant.

# 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

# ANS: C

**Explanation:** Epiphytes - plant growing on the host plant but not nourished by the host plant.

- They do not draw food from the host plant. They only take the help of the host plant in getting access to light. Their roots perform two functions.
- While changing roots establish the plant on the branches of the host plant, aerial roots draw moisture from the air. Eg. Vanda.

# Source: Shankar IAS



#### Q.9) Consider the following statements regarding "bats":

- 1. They nurse their babies with milk and have fur.
- 2. They are only mammals that can fly.

# 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

# ANS: C

**Explanation:** Bats are MAMMALS. They are warm blooded, nurse their babies with milk and have fur. Bats are only mammals that can fly.

#### Source: Shankar IAS

#### Q.10) The "Ntangki National Park" is recently seen in news located at?

- a) Nagaland
- b) Tripura
- c) Sikkim
- d) Himachal Pradesh

# ANS: A

**Explanation:** Located 40 km from the town of Peren and about 37 km from Dimapur is the Ntangki National Park also known as the Intanki by many.

- Spread over a distance of 200 sq km, this park was established by the British administrators in the year 1923.
- Considered one of the best National Parks in the North East, it has thick rain forests which creates natural habitat for many birds, reptiles and mammals.
- Mountains, cliffs and dense forests make it a great place for camping and other adventurous activities.
- Here in this National Park you can see wild buffaloes (mithun) and hoolok gibbon which is found only in Nagaland.

# Source: FORUMIAS



# Revision

### Q.1) Which of the following is/are "detritus feeders"?

- 1. Earthworm
- 2. Nematodes
- 3. Arthropods

# How many of the statements given above are correct?

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

# ANS: C

**Explanation:** Earthworm and certain soil organisms (such as nematodes, and arthropods) are detritus feeders and help in the decomposition of organic matter and are called detrivores. **Source: Shankar IAS** 

# Q.2) Consider the following statements regarding "ecosystem":

- 1. They can regulate their own species structure and functional processes.
- 2. This capacity of ecosystem of self regulation is known as homeostasis.

# 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

# ANS: C

Explanation: Ecosystems are capable of maintaining their state of equilibrium.

- They can regulate their own species structure and functional processes.
- This capacity of ecosystem of self regulation is known as homeostasis.

# Source: Shankar IAS



#### Q.3) Which of the following fauna is/are found in "Savannah"?

- 1. Antelopes
- 2. Rhinoceros
- 3. Mongoose

#### How many of the statements given above are correct?

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

#### ANS: C

**Explanation:** Savannah is most extensive in Africa. Grasses with scattered trees and fire resisting thorny shrubs.

The fauna include a great diversity of grazers and browsers such as antelopes, buffaloes, zebras, elephants and rhinoceros; the carnivores include lion, cheetah, hyena; and mongoose, and many rodents.

#### Source: Shankar IAS

# Q.4) The "fresh water from rivers meet ocean water and the two are mixed by action of tides" – describes?

- a) Lakes
- b) Mangroves
- c) Estuaries
- d) Seepage

#### ANS: C

**Explanation:** Coastal bays, river mouths and tidal marshes form the estuaries. In estuaries, fresh water from rivers meet ocean water and the two are mixed by action of tides. Estuaries are highly productive as compared to the adjacent river or sea.

#### Source: Shankar IAS

#### Q.5) Consider the following statements regarding "Bioaccumulation":

- 1. It refers to how pollutants enter a food chain.
- 2. It is an increase in concentration of a pollutant from the environment to the first organism in a food chain.

#### 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

#### ANS: C

**Explanation:** Bioaccumulation refers to how pollutants enter a food chain.



In bioaccumulation there is an increase in concentration of a pollutant from the environment to the first organism in a food chain.

# Source: Shankar IAS

# Q.6) In which of the following process, one species benefits, the other is unaffected?

- a) Mutualism
- b) Commensalism
- c) Amensalism
- d) Competition

#### ANS: B

**Explanation:** Commensalism: one species benefits, the other is unaffected. Example: cow dung provides food and shelter to dung beetles. The beetles have no effect on the cows. **Source: Shankar IAS** 

#### Q.7) Which of the following process is/are involved in carbon return back to atmosphere?

- 1. Respiration
- 2. Decomposition
- 3. Photosynthesis

# How many of the statements given above are correct?

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

#### ANS: B

Explanation: Carbon is present in the atmosphere, mainly in the form of carbon dioxide (CO2).

- Carbon cycle involves a continuous exchange of carbon between the atmosphere and organisms.
- Carbon from the atmosphere moves to green plants by the process of photosynthesis, and then to animals.
- By process of respiration and decomposition of dead organic matter it returns back to atmosphere.

# Source: Shankar IAS



#### Q.8) Consider the following statements regarding "Tropical rain forests":

- 1. It occurs near the equator.
- 2. They are the most diverse and rich communities on the earth.

#### 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

# ANS: C

**Explanation:** Tropical rain forests: Tropical rain forests occur near the equator. Tropical rain forests are among the most diverse and rich communities on the earth.

- Both temperature and humidity remain high and more or less uniform.
- The annual rainfall exceeds 200 cm and is generally distributed throughout the year.

#### Source: Shankar IAS

# Q.9) The "Rajbari National Park" is often seen in news located at?

- a) Tripura
- b) Nagaland
- c) West Bengal
- d) Assam

#### ANS: A

**Explanation:** Situated in the Trishna Wildlife Sanctuary, the Rajbari (Bison) National Park is one of India's well-known National Parks. It is located at Tripura, India. The park is spread over a whopping 31.63 square kilometres.

#### Source: FORUMIAS

# Q.10) The Kalakad Mundanthurai Tiger Reserve (KMTR) is recently seen in news located at?

- a) Tamil Nadu
- b) Goa
- c) Chhattisgarh
- d) Assam

#### ANS: A

**Explanation:** The Kalakad Mundanthurai Tiger Reserve (KMTR) in Tirunelveli and Kanyakumari district of Tamil Nadu is one of the protected areas having diverse flora and fauna.

This region has got vegetation types which gradually changes from dry thorn forest to dry deciduous.

#### **Source: FORUMIAS**

