

**Q.1) Consider the following statements about Global Warming Potential (GWP)**

1. It is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of carbon Dioxide (CO<sub>2</sub>)
2. Gases with higher GWP absorb more energy, per pound than gases with lower GWP.
3. Sulfur Hexafluoride has lower GWP than Hydro fluorocarbons.

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

- a) 1 and 2
- b) Only 1
- c) 1 and 3
- d) 1,2 and 3

**Q.1) Solution (a)**

The Global Warming Potential (GWP) was developed to allow comparisons of the global warming impacts of different gases. Specifically, it is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of carbon dioxide (CO<sub>2</sub>).

Hence statement 1 is correct.

The larger the GWP, the more that a given gas warms the Earth compared to CO<sub>2</sub> over that time period. The time period usually used for GWPs is 100 years.

Hence statement 2 is correct.

According to IPCC 5<sup>TH</sup> Assessment Report, GWP of Sulfur Hexafluoride is 23500 times that of CO<sub>2</sub>. GWP of Hydro fluorocarbons is around 13000 times that of CO<sub>2</sub>.

Hence statement 3 is incorrect.

**Q.2) Which of the following statements is/are correct regarding Biodiversity Hotspots?**

1. There are 5 Biodiversity Hotspots in India.
2. Contain at least 1,500 species of vascular plants found nowhere else on Earth (known as "endemic" species).
3. Have lost at least 70 percent of its animal species.

**Select from the given codes:**

- a) Only 3

- b) Only 2
- c) 1 and 2
- d) 1,2 and 3

**Q.2) Solution (b)**

To qualify as a biodiversity hotspot, an area must meet two strict criteria:

1. Contain at least 1,500 species of vascular plants found nowhere else on Earth (known as "endemic" species).
2. Have lost at least 70 percent of its primary native vegetation.

Hence Statement 2 is correct and statement 3 is incorrect.

There are currently 36 recognized biodiversity hotspots. Out of these 4 are in India.

1. Himalaya: Includes the entire Indian Himalayan region (and that falling in Pakistan, Tibet, Nepal, Bhutan, China and Myanmar)
2. Indo-Burma: Includes entire North-eastern India, except Assam and Andaman group of Islands (and Myanmar, Thailand, Vietnam, Laos, Cambodia and southern China)
3. Sundalands: Includes Nicobar group of Islands (and Indonesia, Malaysia, Singapore, Brunei, Philippines)
4. Western Ghats and Sri Lanka: Includes entire Western Ghats (and Sri Lanka)

**Q.3) Consider the following statements regarding Hazardous and Other Wastes (Management & Transboundary Movement) Amendment Rules, 2019**

1. Solid plastic waste has been prohibited from import into the country excluding Special Economic Zones (SEZ) and by Export Oriented Units (EOU).
2. Exporters of silk waste have now been given exemption from requiring permission from the Ministry of Environment, Forest and Climate Change.

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

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) None of the above

**Q.3) Solution (b)**

In order to strengthen the implementation of environmentally sound management of hazardous waste in the country, the Ministry of Environment, Forest and Climate Change has amended the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.

Some of the salient features of the Hazardous and Other Wastes (Management & Transboundary Movement) Amendment Rules, 2019 are as follows:

1. Solid plastic waste has been prohibited from import into the country including in Special Economic Zones (SEZ) and by Export Oriented Units (EOU).

Hence statement 1 is wrong.

2. Exporters of silk waste have now been given exemption from requiring permission from the Ministry of Environment, Forest and Climate Change.

Hence statement 2 is correct.

3. Electrical and electronic assemblies and components manufactured in and exported from India, if found defective can now be imported back into the country, within a year of export, without obtaining permission from the Ministry of Environment, Forest and Climate Change.
4. Industries which do not require consent under Water (Prevention and Control of Pollution) Act 1974 and Air (Prevention and Control of Pollution) Act 1981, are now exempted from requiring authorization also under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016, provided that hazardous and other wastes generated by such industries are handed over to the authorized actual users, waste collectors or disposal facilities.

**Q.4) Consider the following statements regarding National Clean Air Programme (NCAP)**

1. The NCAP will be a Five year action plan with 2019 as the first year.
2. The programme may be further extended to a longer time horizon after a mid-term review of the outcomes.
3. NCAP is implemented by WHO.
4. NCAP is a part of National Action Plan on Climate Change (NAPCC).

**Which of the statements given above are correct?**

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

**Q.4) Solution (d)**

A time bound national level strategy for pan India implementation to tackle the increasing air pollution problem across the country in a comprehensive manner in the form of National Clean Air Programme (NCAP) was launched.

The NCAP will be a mid-term, five-year action plan with 2019 as the first year.

Hence statement 1 is correct.

The programme may be further extended to a longer time horizon after a mid-term review of the outcomes.

Hence statement 2 is correct.

The NCAP will be institutionalized by respective ministries and will be organized through inter-sectoral groups, which include, Ministry of Road Transport and Highway, Ministry of Petroleum and Natural Gas, Ministry of New and Renewable Energy, Ministry of Heavy Industry, Ministry of Housing and Urban Affairs, Ministry of Agriculture, Ministry of Health, NITI Aayog, CPCB, experts from the industry, academia, and civil society.

City specific action plans are being formulated for 102 non-attainment cities identified for implementing mitigation actions under NCAP.

Institutional Framework at Centre and State Level comprising of Apex Committee at the Ministry of Environment Forest and Climate Change in the Centre and at Chief Secretary Level in the States are to be constituted.

In addition, sectoral working groups, national level Project Monitoring Unit, Project Implementation Unit, state level project monitoring unit, city level review committee under the Municipal Commissioner and DM level Committee in the Districts are to be constituted under NCAP for effective implementation and success of the Programme.

WHO is not the implementing agency.

Hence statement 3 is incorrect.

NCAP is not a part of NAPCC. So, statement 4 is incorrect.

**Q.5) Consider the following statements**

1. The theme for International Day for the Preservation of the Ozone Layer 2018 is “Caring for all life under the Sun”.
2. This event commemorates the date of the signing of the Montreal Protocol on Substances that Deplete the Ozone Layer.

**Which of the above statements is/are *INCORRECT*?**

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

**Q.5) Solution (a)**

“Keep Cool and Carry on” is the theme of this year’s (2018) International Day for the Preservation of the Ozone Layer. It celebrates the progress in protecting the ozone layer and moves to phase out ozone depleting chemicals which are also potent greenhouse gases.

The theme for International Day for the Preservation of the Ozone Layer 2018 is “Caring for all life under the Sun”.

Hence statement 1 is incorrect.

The United Nations' (UN) International Day for the Preservation of the Ozone Layer (World Ozone Day) is celebrated on September 16 every year. This event commemorates the date of the **signing of the Montreal Protocol** on Substances that Deplete the Ozone Layer in 1987.

Hence statement 2 is correct.

**Q.6) Consider the following statements**

1. The Kigali Amendment to the Montreal Protocol is legally binding.

2. Kigali amendment is to phase down the usage of HFC's.
3. The Agreement upholds the principle of Common but Differentiated Responsibilities and Respective Capabilities (CBDR & RC).

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

- a) 1 and 3
- b) 1 and 2
- c) 2 and 3
- d) All of the above

**Q.6) Solution (d)**

The Kigali Amendment to the Montreal Protocol is legally binding and will come into force from January 1, 2019.

Hence statement 1 is correct.

The Agreement upholds the principle of Common but Differentiated Responsibilities and Respective Capabilities (CBDR & RC). It recognizes the development imperatives of high-growth economies like India, and provides a realistic and viable roadmap for the implementation of a phase-out schedule for high global warming potential (GWP) HFCs.

Hence statement 2 and 3 are correct.

**Additional information:**

The Agreement upholds the principle of Common but Differentiated Responsibilities and Respective Capabilities (CBDR & RC). It recognizes the development imperatives of high-growth economies like India, and provides a realistic and viable roadmap for the implementation of a phase-out schedule for high global warming potential (GWP) HFCs.

On October 15, 2016, with the United States' leadership, 197 countries adopted an amendment to phase down HFCs under the Montreal Protocol in Kigali, Rwanda. Under the amendment, countries committed to cut the production and consumption of HFCs by more than 80 percent over the next 30 years. The ambitious phase down schedule will avoid more than 80 billion metric tons of carbon dioxide equivalent emissions by 2050—avoiding up to 0.5° Celsius warming by the end of the century—while continuing to protect the ozone layer.

**Q.7) Which of the following Biosphere Reserves from India are part of UNESCO designated World Network of Biosphere Reserves (WNBR)**

1. Khangchendzonga Biosphere Reserve
2. Gulf of Mannar Biosphere Reserve
3. Manas Biosphere Reserve
4. Agasthyamala Biosphere Reserve

**Select from the given codes:**

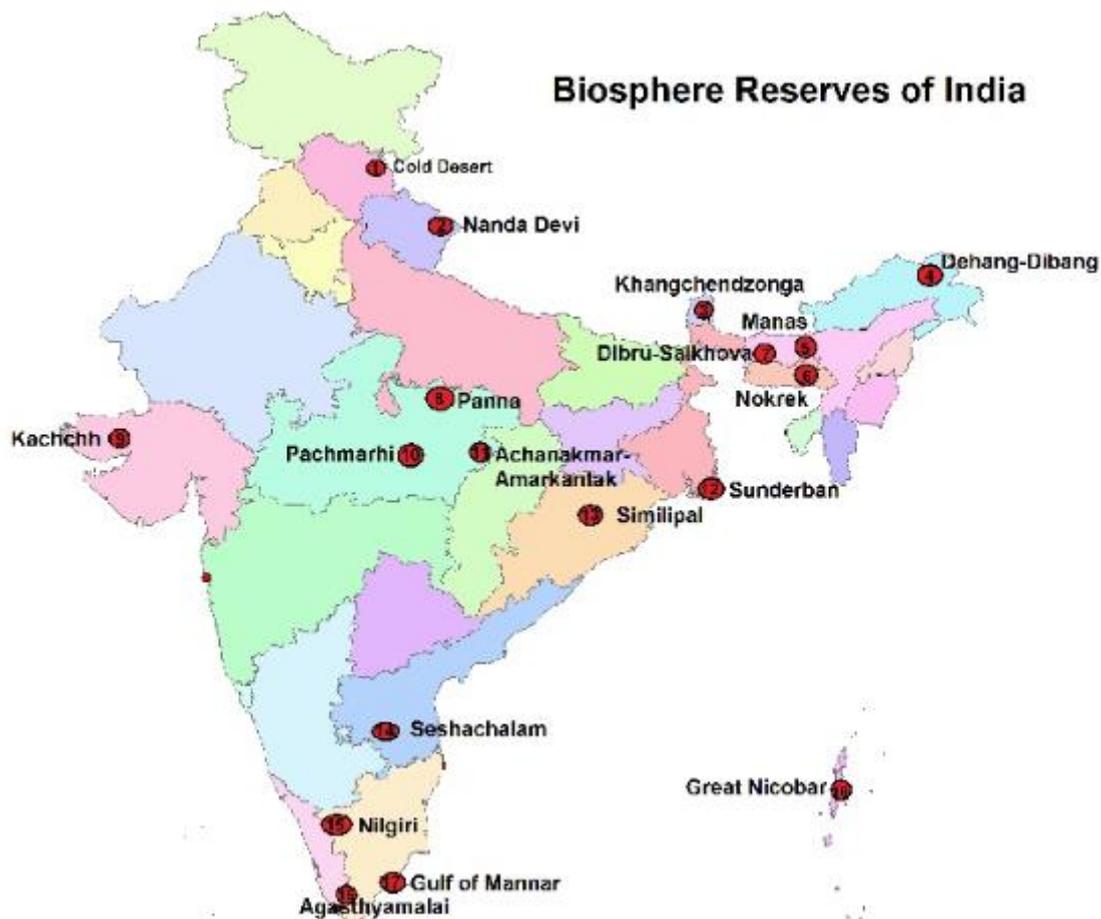
- a) 1 and 3
- b) 1, 2 and 4
- c) 2 and 4
- d) 1,2 and 3

**Q.7) Solution (b)**

Thoroughly go through the list of 18 Biosphere Reserves designated by India.

Out of these 11 (which are in bold letters) are a part of UNESCO designated World Network of Biosphere Reserves (WNBR). They are:

1. **Nilgiri, Tamil Nadu, Kerala and Karnataka.** (WNBR)
2. **Nanda Devi, Uttarakhand.** (WNBR)
3. **Nokrek, Meghalaya.** (WNBR)
4. Manas, Assam.
5. **Sunderban, West Bengal.** (WNBR)
6. **Gulf of Mannar, Tamil Nadu.** (WNBR)
7. **Great Nicobar, Andaman and Nicobar islands.** (WNBR)
8. **Similipal, Odisha.** (WNBR)
9. Dibru-Saikhova, Assam.
10. Dehang-Dibang , Arunachal Pradesh.
11. **Pachmarhi, Madhya Pradesh.** (WNBR)
12. **Khangchendzonga, Sikkim.** (WNBR)
13. **Agasthyamalai, Tamil Nadu and Kerala.** (WNBR)
14. **Achanakmar- Amarkantak, Madhya Pradesh and Chattisgarh.** (WNBR)
15. Kachchh , Gujarat.
16. Cold Desert, Himachal Pradesh.
17. Seshachalam , Andhra Pradesh.
18. Panna, Madhya Pradesh



Q.8) Consider the following statements regarding WAYU (Wind Augmentation Purifying Unit)

1. The device has filters for Particulate Matter removal, but lacks filters to remove activated carbon (charcoal).
2. It has been indigenously developed by TERI - The Energy and Resources Institute

Which of the above statements is/are correct?

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

Q.8) Solution (d)

WAYU is developed by **Council of Scientific and Industrial Research – National Environmental Engineering Research Institute (CSIR-NEERI)** as a part of Technology Development Project being funded by Department of Science and Technology.

Hence statement 2 is incorrect.

The device works on two principles mainly Wind generation for dilution of air pollutants and Active Pollutants removal.

The device has filters for Particulate Matter removal and activated carbon (charcoal) and UV lamps for poisonous gases removal such as VOCs and Carbon Monoxide.

Hence statement 2 is incorrect.

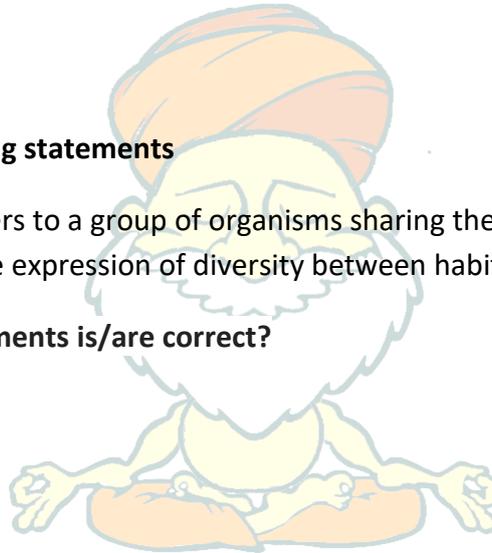
The device has one fan and filter for sucking and removing Particulate Matter. There are two UV lamps and half kg of activated carbon charcoal coated with special chemical Titanium Dioxide.

**Q.9) Consider the following statements**

1. Alpha diversity refers to a group of organisms sharing the same habitat.
2. Beta diversity is the expression of diversity between habitats.

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

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



**Q.9) Solution (c)**

Alpha diversity refers to the average species diversity in a habitat or specific area. It is dependent on species richness and species evenness.

Hence statement 1 is correct.

Beta diversity refers to ratio between local diversity and regional diversity. This is the diversity of species between two habitats or regions.

Hence statement 2 is correct.

Gamma diversity is the total diversity of the landscape.

**Q.10) Consider the following statements**

1. Keystone species have low functional redundancy.
2. Flagship species play a major role in creating or maintaining a habitat.

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

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

**Q.10) Solution (a)**

**A keystone species** is an organism that helps define an entire ecosystem. It plays a critical role in maintaining the structure of an ecological community and whose impact on the community is greater than would be expected based on its relative abundance or total biomass.

Keystone species have low functional redundancy. This means that if the species were to disappear from the ecosystem, no other species would be able to fill its ecological niche. The ecosystem would be forced to radically change, allowing new and possibly invasive species to populate the habitat.

Hence statement 1 is correct.

**A flagship species** is a species selected to act as an ambassador, icon or symbol for a defined habitat, issue, campaign or environmental cause.

Hence statement 2 is incorrect.

Flagship species are usually relatively large, and considered to be 'charismatic' in western cultures.

Flagship species may or may not be keystone species and may or may not be good indicators of biological process.

**Additional Information:**

**Umbrella species** are often conflated with keystone species. Both terms describe a single species on which many other species depend. The key distinction between umbrella species and keystone species is that the value of an umbrella species is tied to its geographic species range.

**Foundation species** play a major role in creating or maintaining a habitat.

Corals are a key example of a foundation species. These tiny animals grow as a colony of thousands and even millions of individual polyps. The rocky exoskeletons of these polyps create enormous structures around islands: coral reefs.

**Q.11) Consider the following statements**

1. Ecosystem engineer is a plant or animal that is very sensitive to environmental changes in its ecosystem.
2. Autogenic engineers modify their environment by modifying their own biology.
3. Allogenic engineers physically change their environment from one state to another.

**Which of the above statements is/are *INCORRECT*?**

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

**Q.11) Solution (a)**

Like foundation species, ecosystem engineers contribute to the physical geography of their habitat. Ecosystem engineers modify, create, and maintain habitats.

An indicator species describes an organism that is very sensitive to environmental changes in its ecosystem.

Hence statement 1 is incorrect.

**Autogenic engineers** modify their environment by modifying their own biology. Corals and trees are autogenic engineers. As they grow, they are a living part of the environment, providing food and shelter to other organisms.

Hence statement 2 is correct.

**Allogenic engineers** physically change their environment from one state to another. Beavers are a classic example of allogenic engineers. Beavers help maintain woodland ecosystems by thinning out older trees and allowing young saplings to grow.

Hence statement 3 is correct.

**Q.12) Consider the following statements**

1. The Ministry of Environment, Forest and Climate Change (MoEF&CC) has promulgated Green Highways (Plantation, Transplantation, Beautification & Maintenance) Policy-2015
2. Ministry of Environment, Forest and Climate Change (MoEF&CC) implements National Mission for Green India (GIM) scheme for plantations along the highway sides and on vacant land along railway tracks.

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

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

**Q.12) Solution (d)**

The **Ministry of Road Transport & Highways** has promulgated Green Highways (Plantation, Transplantation, Beautification & Maintenance) Policy-2015, under which plantations have been initiated in collaboration with Forest Departments and other agencies.

Hence statement 1 is incorrect.

Ministry of Environment, Forest and Climate Change (MoEF&CC) **does not implement any scheme for plantations along the highway sides and on vacant land along railway tracks.**

Hence statement 2 is incorrect.

**Additional Information:**

MOEF&CC for afforestation and to increase forest cover in the country implements two Centrally Sponsored Schemes namely, National Afforestation Programme (NAP) and National Mission for a Green India (GIM). While NAP is being implemented for afforestation of degraded forest lands, GIM aims at improving the quality of forest/increase in forest cover besides cross-sectoral activities on landscape basis. These two schemes involve local people through Joint Forest Management Committees (JFMC) at the village level in the afforestation efforts and decision making in their area of implementation.

**Q.13) Consider the following statements**

1. The difference between the Community and Conservation reserve is that the former comprises community or private land and the latter comprises government land.
2. The number of Protected Areas under Wildlife Protection Act (1972) has steadily increased over the years.

**Which of the above statements is/are *INCORRECT*?**

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

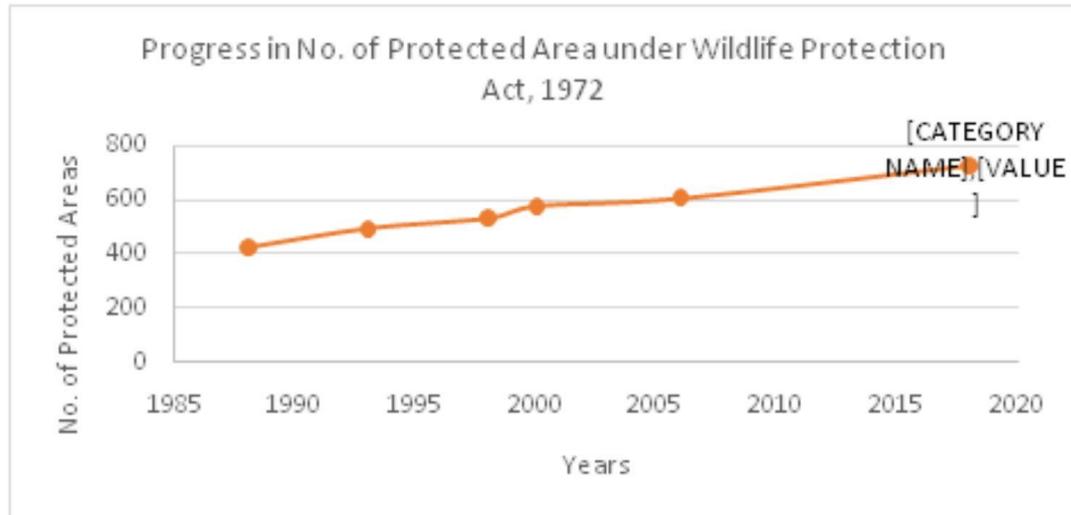
**Q.13) Solution (d)**

Legally protected areas in India fall into four categories –

- Reserved/ Designated Forest Areas declared as such under the Indian Forest Act, 1927.
- Protected Areas declared under any of the four categories of the Wildlife Protection Act, 1972– National Parks, Wildlife Sanctuaries, Community Reserves and Conservation Reserves.
- The difference between the Community and Conservation reserve is that the former comprises community or private land and the latter comprises government land.
- Hence statement 1 is correct.
- Biodiversity Heritage Sites notified under the Biological Diversity Act, 2002.
- Wetlands identified and notified under Wetland (Conservation and Management) Rules, 2017.

**The number of Protected Areas under Wildlife Protection Act (1972) has steadily increased over the years.**

Hence statement 2 is correct.

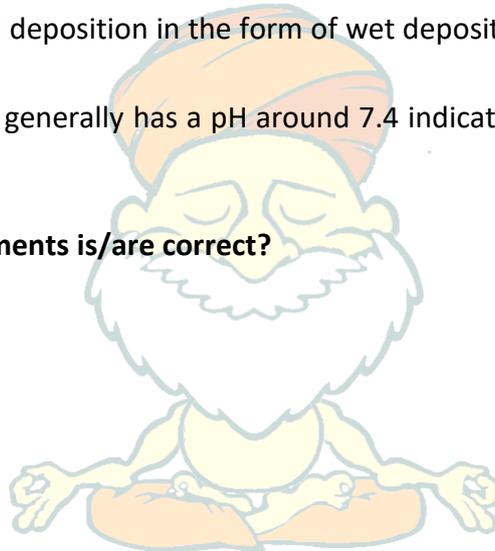


**Q.14) Consider the following statements regarding Acid Rain:**

1. The amount of acid deposition in the form of wet deposition is higher in all the areas across the globe.
2. Normal Rain water generally has a pH around 7.4 indicating that it is slightly basic in 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



**Q.14) Solution (d)**

The amount of acidity in the atmosphere that deposits to earth through dry deposition depends on the amount of rainfall an area receives. For example, in desert areas the ratio of dry to wet deposition is higher than an area that receives several inches of rain each year.

Hence statement 1 is incorrect.

Normal, clean rain generally has a pH value of between 5.0 and 5.5, which is slightly acidic.

Hence statement 2 is incorrect.

**Background:**

Acid rain results when sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) are emitted into the atmosphere and transported by wind and air currents. The SO<sub>2</sub> and NO<sub>x</sub> react with water, oxygen and other chemicals to form sulfuric and nitric acids. These then mix with water and other materials before falling to the ground.

There are two forms of Acid Deposition

### **Wet Deposition**

Wet deposition is what we most commonly think of as **acid rain**. The sulfuric and nitric acids formed in the atmosphere fall to the ground mixed with rain, snow, fog, or hail.

### **Dry Deposition**

Acidic particles and gases can also deposit from the atmosphere in the absence of moisture as dry deposition. The acidic particles and gases may deposit to surfaces (water bodies, vegetation, buildings) quickly or may react during atmospheric transport to form larger particles that can be harmful to human health. When the accumulated acids are washed off a surface by the next rain, this acidic water flows over and through the ground, and can harm plants and wildlife, such as insects and fish.

### **Q.15) Which of the following correctly explains the term Bio-prospecting?**

- a) Systematic exploration of biological diversity with the purpose of developing commercially valuable products.
- b) Appropriating a biological resource without obtaining prior informed consent of the country providing these.
- c) Systematic estimation of the biodiversity of a natural landscape.
- d) The method of valuation used in cost benefit analysis and environmental accounting.

### **Q.15) Solution (a)**

**Bio prospecting** refers to Systematic exploration, extraction and screening of biological diversity with the purpose of developing commercially valuable products.

**Contingent valuation** refers to the method of valuation used in cost benefit analysis and environmental accounting.

**Bio piracy** or misappropriation refers to appropriating a biological resource without obtaining prior informed consent of the country providing these.

**Q.16) Consider the following statements**

1. Ecologically Sensitive Areas (ESAs) have been notified by the Ministry of Environment, Forest and Climate Change.
2. Notifications declaring areas as ESAs are issued under the Environment (Protection) Act 1986.

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

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

**Q.16) Solution (c)**

Ecologically Sensitive Areas (ESAs) have been identified and notified by the Indian Ministry of Environment, Forest and Climate Change since 1989.

Hence statement 1 is correct.

Notifications declaring areas as ESAs are issued under the Environment (Protection) Act 1986.

Hence statement 2 is correct.

Western Ghats is one of the ESA's in India.

**Q.17) Consider the following statements**

1. All Algal Blooms are harmful.
2. All Harmful Algal Blooms (HAB's) are toxic.
3. Harmful Algal Blooms (HAB's) are generally referred to as "red tides"

**Which of the above statements is/are INCORRECT?**

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

**Q.17) Solution (a)**

Not all algal blooms are harmful. Most blooms, in fact, are beneficial because the tiny plants are food for animals in the ocean. In fact, they are the major source of energy that fuels the ocean food web.

Hence statement 1 is incorrect.

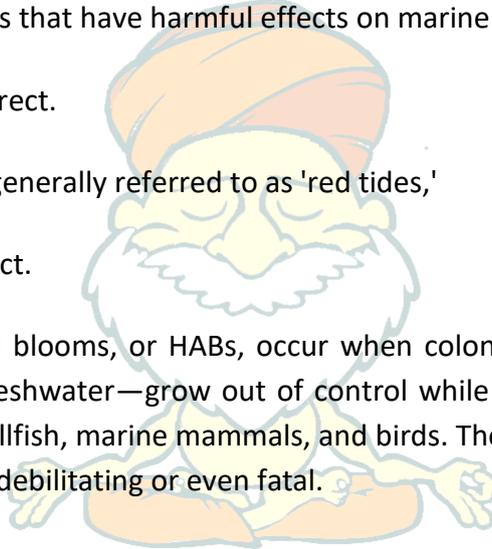
A small percentage of algae, however, produce powerful toxins that can kill fish, shellfish, mammals, and birds, and may directly or indirectly cause illness in people. HABs also include blooms of non-toxic species that have harmful effects on marine ecosystems.

Hence statement 2 is incorrect.

Harmful Algal Blooms are generally referred to as 'red tides,'

Hence statement 3 is correct.

Background: Harmful algal blooms, or HABs, occur when colonies of algae—simple plants that live in the sea and freshwater—grow out of control while producing toxic or harmful effects on people, fish, shellfish, marine mammals, and birds. The human illnesses caused by HABs, though rare, can be debilitating or even fatal.

**Q.18) Consider the following statements**

1. Cisgenesis (among plants) is the genetic modification of a recipient plant with a natural gene from a crossable, sexually compatible plant.
2. Transgenesis is the genetic modification of a recipient plant with genes from any non-plant organism, or from a donor plant that is sexually incompatible with the recipient plant.

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

- a) 1 only
- b) 2 only
- c) Both 1 and 2

d) Neither 1 nor 2

**Q.18) Solution (c)**

Cisgenesis is the genetic modification of a recipient plant with a natural gene from a crossable, sexually compatible plant.

Hence statement 1 is correct.

Transgenesis is the genetic modification of a recipient plant with one or more genes from any non-plant organism, or from a donor plant that is sexually incompatible with the recipient plant. This includes gene sequences of any origin in the anti-sense orientation, any artificial combination of a coding sequence and a regulatory sequence, such as a promoter from another gene, or a synthetic gene.

Hence statement 2 is correct.

Transgenesis and Cisgenesis both use the same genetic modification techniques. (namely the introduction of one or more genes and their promoters into a plant). Cisgenesis involves only genes from the plant itself or from a close relative, and these genes could also be transferred by traditional breeding techniques.

**Q.19) Consider the following statements**

1. Noise as a pollutant is recognised as part of air pollution under of Air (Prevention and Control of Pollution) Act, 1981
2. Silence zone is referred as areas up to 500 meters around such premises as hospitals, educational institutions and courts.
3. As per existing rules, noise standards should not exceed 25 decibels (dB) in a Silence zone.
4. The Noise Pollution (Regulation and Control) Rules, 2000 framed by the Central Government under the provisions of Environment (Protection) Act, 1986

**Which of the above statements is/are INCORRECT?**

- a) 1, 2 and 4
- b) 2 and 3
- c) 1 and 4

d) Only 3

**Q.19) Solution (b)**

Although originally, the Air (Prevention and Control of Pollution) Act 1981 was enacted exclusively for the control of air pollution, but by Amendment Act 1987, the problem of **noise** was also **covered within the definition of air pollutants** under this Act. In this Act no specific provision for the control of noise pollution has been made.

Hence statement 1 is correct

Silence zone is referred as areas up to **100 meters** around such premises as hospitals, educational institutions and courts.

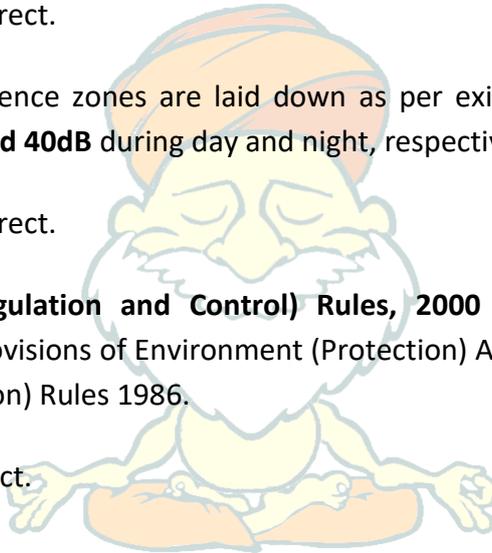
Hence statement 2 is incorrect.

The noise standards in Silence zones are laid down as per existing rules, and should not exceed **45 decibels (dB) and 40dB** during day and night, respectively.

Hence statement 3 is incorrect.

The **Noise Pollution (Regulation and Control) Rules, 2000** is framed by the Central Government under the provisions of Environment (Protection) Act, 1986 read with Rule 5 of the Environment (Protection) Rules 1986.

Hence statement 4 is correct.



**Q.20) Consider the following statements about 'Ocean Acidification'**

1. It leads to increase in the concentration of hydrogen ions and decreases the concentration of carbonate ions.
2. Ocean water is naturally slightly acidic in nature.

**Which of the above statements is/are INCORRECT?**

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

**Q.20) Solution (b)**

Ocean acidification is the ongoing decrease in the pH of the Earth's oceans, caused by the increased uptake of carbon dioxide (CO<sub>2</sub>) from the atmosphere. (due to increased CO<sub>2</sub> levels because of human activity)

There are two important things that happen when carbon dioxide dissolves in seawater. First, there is an increase in concentration of hydrogen ions (due to chemical reactions), because of which the pH of seawater water gets lower as it becomes more acidic. Second, this process binds up carbonate ions and makes them less abundant.

Hence statement 1 is correct.

Carbonate ions that corals, oysters, mussels, and many other shelled organisms need to build shells and skeletons.

Ocean pH has been **slightly basic**, averaging about 8.2. Today, it is around 8.1, a drop of 0.1 pH units, representing a 25-percent increase in acidity over the past two centuries.

Hence statement 2 is incorrect.

**Q.21) Which of the following statements regarding Convention on Biological Diversity (CBD) is/are correct?**

1. The Nagoya Protocol and Cartagena Protocol are supplementary agreements under CBD.
2. Global Biodiversity Outlook is the flagship publication of CBD.

**Select from the given codes:**

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

**Q.21) Solution (c)**

The Convention on Biological Diversity provides a global legal framework for action on biodiversity. It brings together the Parties in the Conference of the Parties (COP) which is the Convention's governing body that meets every two years, or as needed, to review progress in the implementation of the Convention,

The Nagoya Protocol and Cartagena Protocol are supplementary agreements under CBD.

Hence statement 1 is correct.

**Global Biodiversity Outlook (GBO)** is the flagship publication of the Convention on Biological Diversity. It is a periodic report that summarizes the latest data on the status and trends of biodiversity and draws conclusions relevant to the further implementation of the Convention.

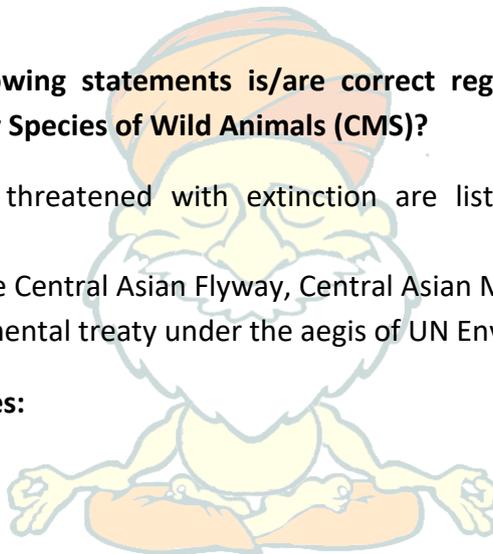
Hence statement 2 is correct.

**Q.22) Which of the following statements is/are correct regarding Convention on the Conservation of Migratory Species of Wild Animals (CMS)?**

1. Migratory species threatened with extinction are listed on Appendix II of the Convention.
2. India is a part of the Central Asian Flyway, Central Asian Mammals Initiative.
3. CMS is an environmental treaty under the aegis of UN Environment Programme.

**Select from the given codes:**

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



**Q.22) Solution (b)**

CMS is an environmental treaty under the aegis of the **United Nations Environment Programme**, CMS provides a global platform for the conservation and sustainable use of migratory animals and their habitats.

Hence statement 3 is correct.

Migratory species threatened with extinction are listed on **Appendix I** of the Convention.

Hence statement 1 is incorrect.

CMS Parties strive towards strictly protecting these animals, conserving or restoring the places where they live, mitigating obstacles to migration and controlling other factors that might endanger them.

Migratory species that need or would significantly benefit from international co-operation are listed in **Appendix II** of the Convention.

India is a part of the Central Asian Flyway, Central Asian Mammals Initiative.

Hence statement 2 is correct.

**Additional Information:**

As the **only** global convention specializing in the conservation of migratory species, their habitats and migration routes, CMS complements and co-operates with a number of other international organizations, NGOs and partners in the media as well as in the corporate sector.

**CMS acts as a framework Convention.** The agreements may range from legally binding treaties (called Agreements) to less formal instruments, such as Memoranda of Understanding, and can be adapted to the requirements of particular regions.

**Q.23) Consider the following statements**

1. The International Whaling Commission (IWC) is an Inter-governmental Organisation.
2. All member countries of the IWC are signatories to the International Convention for the Regulation of Whaling.
3. India is a member country to the International Convention for the Regulation of Whaling.

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

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

**Q.23) Solution (d)**

The International Whaling Commission is an **Inter-governmental Organisation** whose purpose is the conservation of whales and the management of whaling.

Hence statement 1 is correct.

The legal framework of the IWC is the International Convention for the Regulation of Whaling. This Convention was established in 1946, making it one of the first pieces of international environmental legislation. **All member countries of the IWC are signatories to this Convention.**

Hence statement 2 is correct.

India, China, USA are all members to the International Convention for the Regulation of Whaling.

Hence statement 3 is correct.

**Additional Information:**

The USA acts as the depository nation for the International Convention for the Regulation of Whaling.

Membership of the IWC is open to any country in the world that formally adheres to the 1946 Convention. Each member country is known as a Contracting Government and represented by a Commissioner, who is assisted by experts and advisers.

The Chair and Vice-chair are elected from among the Commissioners and usually serve for four years, first as Vice-chair for two years, and then as Chair.

**Q.24) Consider the following statements**

1. The National Biodiversity Authority (NBA) is a statutory body under the Biological Diversity Act (2002).
2. Any application for Intellectual Property Right (IPR) based on biological resources should be approved by NBA.

**Which of the above statements is/are INCORRECT?**

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

**Q.24) Solution (d)**

The National Biodiversity Authority (NBA) was established in 2003 by the Central Government to implement India's Biological Diversity Act (2002). The NBA is a **Statutory body** and that performs facilitative, regulatory and advisory function for Government of India on issue of Conservation, sustainable use of biological resource and fair equitable sharing of benefits of use.

Hence statement 1 is correct.

The Biological Diversity Act covers foreigners, non-resident Indians, body corporate, association or organization that is either not incorporated in India or incorporated in India with non-Indian participation in its share capital or management. These individuals or entities require the approval of the National Biodiversity Authority when they access/ use biological resources and associated knowledge occurring in India for commercial or research purposes or for the purposes of bio-survey or bio-utilisation.

Indians and Indian institutions do not require the approval of the National Biodiversity Authority when they engage in the above mentioned activities. However they would need to inform the State Biodiversity Boards prior to undertaking any research with the intent of commercialisation.

Any application for IPR based on biological resources should be approved by NBA.

Hence statement 2 is correct.

**Additional Information:**

The Biological Diversity Act **excludes** Indian biological resources that are normally traded as commodities. Such exemption holds only so far the biological resources are used as commodities and for no other purpose. The Act also excludes traditional uses of Indian biological resources and associated knowledge and when they are used in collaborative research projects between Indian and foreign institutions with the approval of the central government.

**Q.25) Consider the following statements**

1. State government has the power to declare reserve forests.
2. State government has the power to declare protected forests.
3. Central government makes rules to regulate the transit of Timber.

**Which of the above statements is/are INCORRECT?**

- a) 2 only
- b) 3 only

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

**Q.25) Solution (b)**

The State Government may constitute any forest-land or waste-land which is the property of Government, or over which the Government has proprietary rights, or to the whole or any part of the forest-produce of which the Government is entitled, a reserved forest in the manner provided in The Indian Forest Act, 1927.

Hence statement 1 is correct.

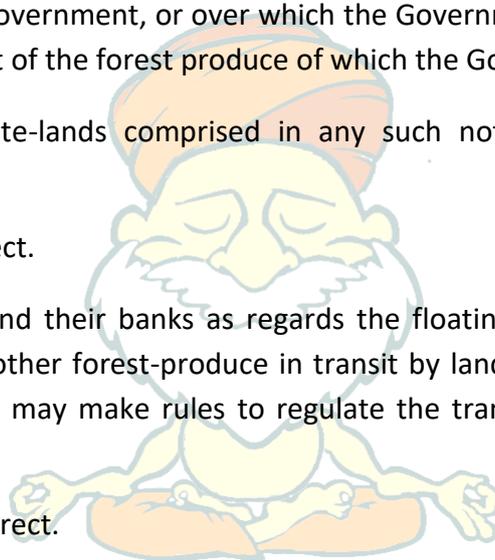
The State Government may, by notification in the Official Gazette, declare the provisions applicable to any forest-land or waste-land which, is not included in a reserved forest but which is the property of Government, or over which the Government has proprietary rights, or to the whole or any part of the forest produce of which the Government is entitled.

The forest-land and waste-lands comprised in any such notification shall be called a "protected forest".

Hence statement 2 is correct.

The control of all rivers and their banks as regards the floating of timber, as well as the control of all timber and other forest-produce in transit by land or water, **is vested in the State Government**, and it may make rules to regulate the transit of all timber and other forest-produce.

Hence statement 3 is incorrect.

**Q.26) Consider the following statements**

1. The Cartagena Protocol seeks to protect biological diversity from the potential risks posed by living modified organisms resulting from modern biotechnology.
2. The Nagoya Protocol aims at sharing the benefits arising from the utilization of genetic resources in a fair and equitable way.

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

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

**Q.26) Solution (c)**

The Cartagena Protocol on Biosafety to the Convention on Biological Diversity is an international agreement which aims to ensure the safe handling, transport and use of living modified organisms (LMOs) resulting from modern biotechnology that may have adverse effects on biological diversity, taking also into account risks to human health.

Hence statement 1 is correct.

The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity is an international agreement which aims at sharing the benefits arising from the utilization of genetic resources in a fair and equitable way.

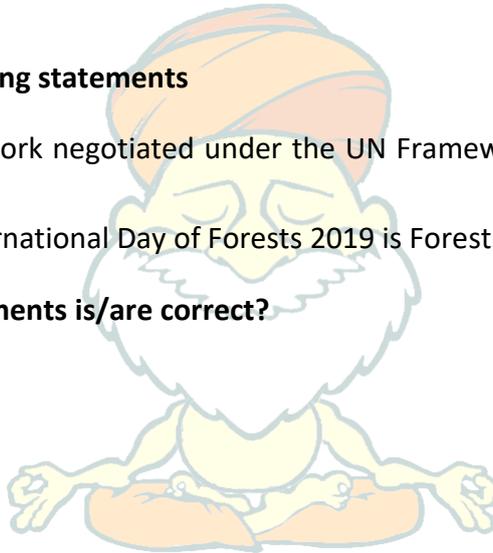
Hence statement 2 is correct.

**Q.27) Consider the following statements**

1. REDD+ is a framework negotiated under the UN Framework Convention on Climate Change (UNFCCC)
2. The theme for International Day of Forests 2019 is Forests and Education.

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

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

**Q.27) Solution (c)**

Reducing emissions from deforestation and forest degradation (REDD+) is a mechanism developed by Parties to the United Nations Framework Convention on Climate Change (UNFCCC).

Hence statement 1 is correct.

The United Nations General Assembly proclaimed 21 March the International Day of Forests (IDF) in 2012. The Day celebrates and raises awareness of the importance of all types of forests.

The theme for each International Day of Forests is chosen by the Collaborative Partnership on Forests. The **theme for 2019 is Forests and Education**.

The theme for 2018 was “Forests and Sustainable Cities”.

Hence statement 2 is correct.

**Additional information:**

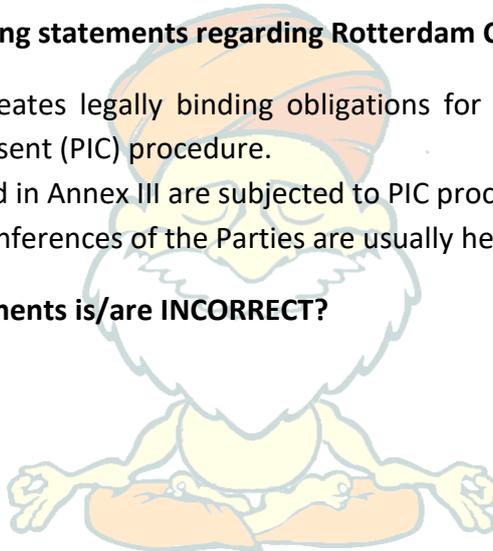
The United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries was launched in 2008 and builds on the convening role and technical expertise of the Food and Agriculture Organization of the United Nations (FAO), the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP).

**Q.28) Consider the following statements regarding Rotterdam Convention**

1. The Convention creates legally binding obligations for the implementation of the Prior Informed Consent (PIC) procedure.
2. The chemicals listed in Annex III are subjected to PIC procedure.
3. Meetings of the Conferences of the Parties are usually held every year.

**Which of the above statements is/are INCORRECT?**

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



**Q.28) Solution (c)**

The Convention creates legally binding obligations for the implementation of the Prior Informed Consent (PIC) procedure. It built on the voluntary PIC procedure, initiated by UNEP and FAO in 1989 and ceased on 24 February 2006.

Hence statement 1 is correct.

The chemicals listed in Annex III include pesticides and industrial chemicals that have been banned or severely restricted for health or environmental reasons by two or more Parties and which the Conference of the Parties has decided to subject to the PIC procedure.

Hence statement 2 is correct.

Meetings of the Conferences of the Parties are usually held **every two years**.

Hence statement 3 is incorrect.

The Conference of the Parties reviews and evaluates the implementation of the Convention. It reviews chemicals brought forward for its consideration by the Chemical Review Committee. It also reviews and adopts the programme of work and budget of the Convention for each biennium.

**Q.29) Consider the following statements regarding Stockholm Convention**

1. Parties must take measures to eliminate the production and use of the chemicals listed under Annex A.
2. A party to the convention cannot export the chemicals listed under Annex A to a non-Party state under any circumstances.
3. USA has not ratified the Stockholm Convention.

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

- a) Only 1
- b) 2 and 3
- c) 1 and 3
- d) 1,2 and 3

**Q.29) Solution (c)**

Parties must take measures to eliminate the production and use of the chemicals listed under Annex A. Specific exemptions for use or production are listed in the Annex and apply only to Parties that register for them.

Hence statement 1 is correct.

Parties to the Stockholm Convention have an obligation to ensure that chemicals listed in Annex A for which any specific exemption is in effect or a chemical listed in Annex B for which a specific exemption or acceptable purpose is in effect are only exported to States that are not Parties to the Convention which have provided annual certification to the exporting Party.

This indicates that a party to the convention can export the chemicals listed under Annex A to a non-Party state. **(With some conditions and specific procedure)**

Hence statement 2 is incorrect.

USA has not ratified the Convention, while China and India has ratified.

Hence statement 3 is correct.

**Background:**

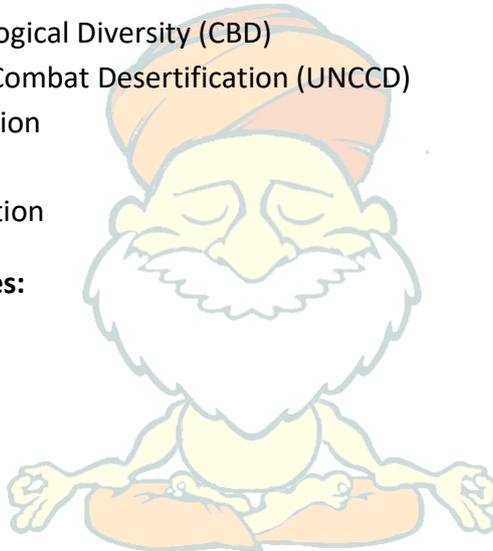
The Stockholm Convention on Persistent Organic Pollutants (POPs), a global treaty with an objective to protect human health and the environment from persistent organic pollutants was adopted by the Conference of Plenipotentiaries on 22 May 2001 in Stockholm, Sweden. The Convention entered into force on 17 May 2004 and requires its parties to take measures to eliminate or reduce the release of POPs into the environment.

**Q.30) Global Environment Facility (GEF) serves as a financial mechanism for which of the following conventions?**

1. Convention on Biological Diversity (CBD)
2. UN Convention to Combat Desertification (UNCCD)
3. Stockholm Convention
4. Basel Convention
5. Rotterdam Convention

**Select from the given codes:**

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



**Q.30) Solution (a)**

The Global Environment Facility was established on the eve of the 1992 Rio Earth Summit to help tackle our planet's most pressing environmental problems.

The GEF provides funding to assist developing countries in meeting the objectives of international environmental conventions. The GEF serves as "financial mechanism" to five conventions, which are

- **Convention on Biological Diversity (CBD),**
- **United Nations Framework Convention on Climate Change (UNFCCC),**
- **Stockholm Convention on Persistent Organic Pollutants (POPs),**
- **UN Convention to Combat Desertification (UNCCD), and**

- **Minamata Convention on Mercury.**

The conventions, for which the GEF serve as financial mechanism, provide broad strategic guidance to the two governing bodies of the GEF: the GEF Council and the GEF Assembly. The GEF Council converts this broad guidance into operational criteria (guidelines) for GEF projects.

**Q.31) Consider the following statements**

1. Nations that have pledged to take part in Agenda 21 are monitored by the International Commission on Sustainable Development.
2. The Agenda 21 is a non-binding programme of action.

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

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

**Q.31) Solution (c)**

Agenda 21, established at the 1992 United Nations Conference on Environment and Development, or “Earth Summit”, in Rio de Janeiro, Brazil, is the blueprint for sustainability in the 21st century. Agenda 21 is a commitment to sustainable development, which was agreed by many of the world’s governments.

Nations that have pledged to take part in Agenda 21 are monitored by the **International Commission on Sustainable Development**, and are encouraged to promote Agenda 21 at the local and regional levels within their own countries.

Hence statement 1 is correct.

The Agenda 21 is a non-binding programme of action. The implementation of the Agenda is primarily the responsibility of governments, through national strategies, plans, policies and procedures. International and regional organizations are also called upon to contribute to this effort.

Hence statement 2 is correct.

**Q.32) Consider the following statements**

1. Global Footprint Network is an inter-governmental organization under UNFCCC.
2. Global Footprint Network publishes Living Planet Report.
3. Earth Overshoot Day is calculated by Global Footprint Network.

**Which of the above statements is/are is INCORRECT?**

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

**Q.32) Solution (a)**

Global Footprint Network, an international non-profit organization founded in 2003, envisions a future where all can thrive within the means of our one planet.

Hence statement 1 is incorrect.

The Living Planet Report documents the state of the planet—including biodiversity, ecosystems, and demand for natural resources—and what it means for humans and wildlife. **Published by WWF every two years**, the report brings together a variety of research to provide a comprehensive view of the health of the Earth.

Hence statement 2 is incorrect.

Earth Overshoot Day is an initiative of Global Footprint Network, an international research organization that is changing the way the world measures and manages its natural resources.

Hence statement 3 is correct.

**Q.33) Consider the following statements**

1. Earth Hour is organized by WWF (World Wildlife Fund)
2. Global Environment Outlook is published by WWF.

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

- a) 1 only
- b) 2 only
- c) Both 1 and 2

d) Neither 1 nor 2

**Q.33) Solution (a)**

Starting as a symbolic lights out event in Sydney in 2007, Earth Hour is now the world's largest grassroots movement for the environment, inspiring millions of people to take action for our planet and nature. **It is organized by WWF.**

Starting as a symbolic lights out event in Sydney in 2007, Earth Hour is now the world's largest grassroots movement for the environment, inspiring millions of people to take action for our planet and nature.

Hence statement 1 is correct.

Global Environment Outlook is published by United Nations Environment Programme (UNEP).

Hence statement 2 is incorrect.

**Q.34) Consider the following statements**

1. The United Nations Environment Assembly was created in 1992, during the United Nations Conference on Environment and Development (UNCED) held in Rio.
2. The theme of Fourth Environment Assembly 2019 is “Towards a pollution-free planet”.

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

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

**Q.34) Solution (d)**

The United Nations Environment Assembly was created in June 2012, when world leaders called for UN Environment to be strengthened and upgraded during the United Nations Conference on Sustainable Development, also referred to as RIO+20.

Hence statement 1 is incorrect.

The Third Environment Assembly took place in Nairobi 4-6 December 2017 Assembly under the overarching theme “Towards a pollution-free planet”.

The Fourth Environment Assembly took place in Nairobi 11-15 March 2019, focusing on the theme “**Innovative solutions for environmental challenges and sustainable consumption and production**”.

Hence statement 2 is incorrect.

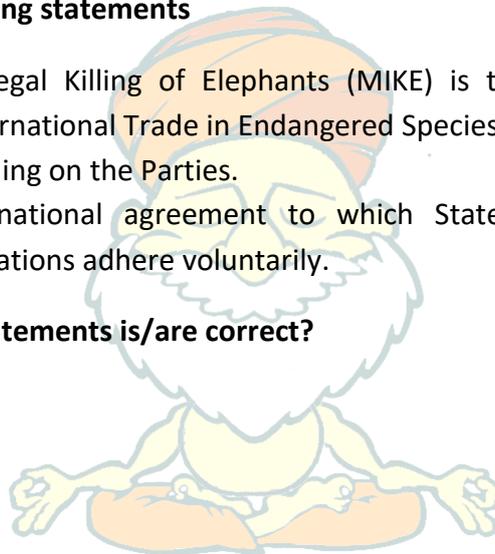
The United Nations Environment Assembly is the world’s highest-level decision-making body on the environment. It addresses the critical environmental challenges facing the world today. Understanding these challenges and preserving and rehabilitating our environment is at the heart of the 2030 Agenda for Sustainable Development.

**Q.35) Consider the following statements**

1. Monitoring the Illegal Killing of Elephants (MIKE) is the initiative of CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora).
2. CITES is legally binding on the Parties.
3. CITES is an international agreement to which States and regional economic integration organizations adhere voluntarily.

**Which of the following statements is/are correct?**

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



**Q.35) Solution (d)**

CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival.

CITES is an international agreement to which States and regional economic integration organizations adhere voluntarily.

Hence statement 3 is correct.

States that have agreed to be bound by the Convention (joined CITES) are known as Parties. Although **CITES is legally binding on the Parties** – in other words they have to implement

the Convention – it does not take the place of national laws. Rather it provides a framework to be respected by each Party, which has to adopt its own domestic legislation to ensure that CITES is implemented at the national level.

Hence statement 2 is correct.

The **CITES Monitoring the Illegal Killing of Elephants (MIKE)** Programme is a site-based system designed to monitor trends in the illegal killing of elephants, build management capacity and provide information to help range States make appropriate management and enforcement decisions.

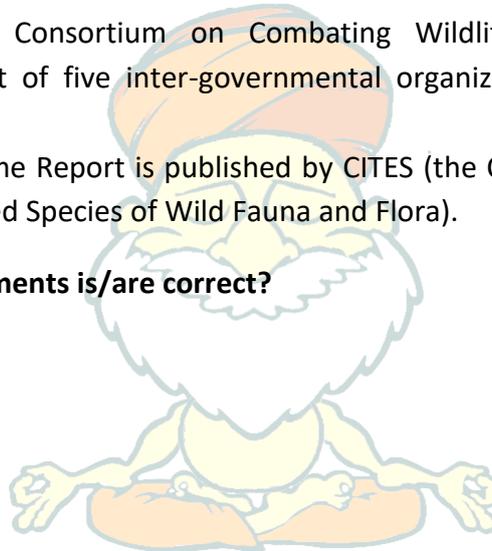
Hence statement 1 is correct.

**Q.36) Consider the following statements**

1. The International Consortium on Combating Wildlife Crime (ICCWC) is the collaborative effort of five inter-governmental organizations of which the World Bank is one.
2. World Wildlife Crime Report is published by CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora).

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

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



**Q.36) Solution (a)**

ICCWC is the collaborative effort of five inter-governmental organizations working to bring coordinated support to the national wildlife law enforcement agencies and to the sub-regional and regional networks that, on a daily basis, act in defense of natural resources. The ICCWC partners are the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Secretariat, INTERPOL, the United Nations Office on Drugs and Crime, **the World Bank** and the World Customs Organization.

Hence statement 1 is correct.

**UNODC published World Wildlife Crime Report.**

The report was developed by UNODC with data provided by partner organizations under the International Consortium on Combating Wildlife Crime (ICWC), including the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the World Customs Organization (WCO).

Hence statement 2 is incorrect.

**Q.37) Consider the following statements**

1. The Global Tiger Forum (GTF) is a non- governmental body.
2. UK (United Kingdom) is also a member of Global Tiger Forum.

**Which of the following statements is/are correct?**

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

**Q.37) Solution (b)**

The Global Tiger Forum (GTF) is the only inter- governmental international body established with members from willing countries to embark on a global campaign to protect the Tiger.

Hence statement 1 is incorrect.

Membership of 7 Tiger range countries (India, Bangladesh, Bhutan, Nepal, Myanmar, Cambodia, Vietnam) and UK- Non Tiger Range countries willing to support and/or participate in Tiger conservation programs).

Hence statement 2 is correct.

**Additional Information:**

The GTF was formed in 1993 on recommendations from an international symposium on Tiger Conservation at New Delhi, India.

The GTF has a General Assembly meeting every 3 years and Standing committee meetings at least once a year.

The Secretariat of GTF is headed by a Secretary General and is located in New Delhi, India.

**Q.38) Consider the following statements**

1. The Regional Seas Programme is the initiative of United Nations Framework Convention on Climate Change (UNFCCC).
2. The South Asian Seas Programme is one of the 18 Regional Seas Programmes.

**Which of the following statements is/are correct?**

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

**Q.38) Solution (b)**

The Regional Seas Programme, launched in 1974 in the wake of the 1972 United Nations Conference on the Human Environment held in Stockholm, is one of **UNEP's** most significant achievements in the past 35 years. The Regional Seas Programme aims to address the accelerating degradation of the world's oceans and coastal areas through the sustainable management and use of the marine and coastal environment, by engaging neighboring countries in comprehensive and specific actions to protect their shared marine environment.

Hence statement 1 is incorrect.

The South Asian Seas Programme is one of 18 such programmes & the South Asian Seas Action Plan was adopted in March 1995 and today enjoys the unqualified support of the region's five countries (Bangladesh, India, Maldives, Pakistan and Sri Lanka).

Hence statement 2 is correct.

**Q.39) Consider the following statements**

1. South Asia Co-operative Environment Programme (SACEP) is an inter-governmental organization.
2. SACEP serves as the secretariat of South Asian Seas Programme (SASP).
3. All the members of SAARC (South Asian Association for Regional Cooperation) are members of SACEP.

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

- a) 1 and 2

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

**Q.39) Solution (d)**

South Asia Co-operative Environment Programme (SACEP) is an **inter-governmental organization**, established in 1982 by the governments of South Asia to promote and support protection, management and enhancement of the environment in the region.

Hence statement 1 is correct.

SACEP also serves as the secretariat of South Asian Seas Programme (SASP).

Hence statement 2 is correct.

The member countries of SACEP are Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. These are the member states of SAARC.

Hence statement 3 is correct.

**Q.40) Consider the following statements**

1. The World Sustainability Forum (WSF) is an annual sustainability conference organized by the Sustainable Development Solutions Network (SDSN)
2. The 7th World Sustainability Forum (2018) was organized in India.

**Which of the above statements is/are INCORRECT?**

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

**Q.40) Solution (c)**

The World Sustainability Forum (WSF) is an annual sustainability conference organized by the **MDPI Sustainability Foundation**. Held for the first time in 2011, the forum covers research in a variety of fields that are closely related to sustainability and sustainable development.

Hence statement 1 is incorrect.

The 7th World Sustainability Forum (2018) was organized in **Beijing, China**.

Hence statement 2 is incorrect.

Additional Information:

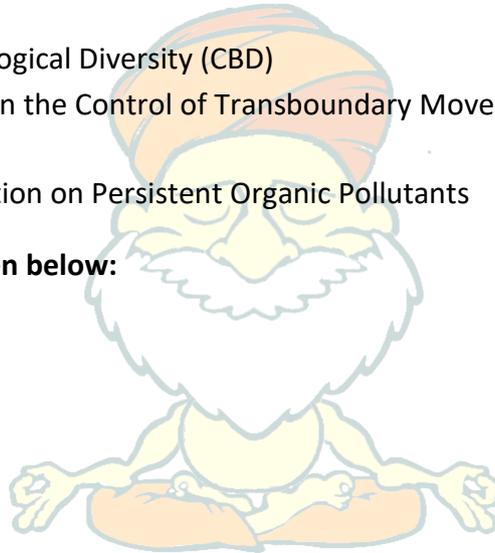
**The World Sustainability Award** is funded by the MDPI Sustainability Foundation to encourage new initiatives and developments in sustainability with the ultimate aim to foster the transfer from sustainability research to sustainable practices and societies.

**Q.41) Arrange the following in the chronological order of their entry into force**

1. CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora)
2. Convention on Biological Diversity (CBD)
3. Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.
4. Stockholm Convention on Persistent Organic Pollutants

Select from the codes given below:

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



**Q.41) Solution (b)**

CITES entered into force on 1<sup>st</sup> July **1975**.

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was adopted on 22 March 1989 and entered into force on 5 May **1992**.

The Convention on Biological Diversity (CBD) was opened for signature at the Earth Summit in Rio de Janeiro on 5 June 1992 and entered into force on 29 December **1993**.

The Stockholm Convention on Persistent Organic Pollutants was adopted on 22 May 2001 and entered into force on 17 May **2004**.

**Note:** It is not that one must memorize all the dates and years. The focus should be on a broad understanding of timeline of various important environmental events which will many

times help to solve questions directly or indirectly. (Note that UPSC has asked similar questions from various subjects in previous years)

