

Q.1) Consider the following statements about Petroleum and Explosives Safety Organization (PESO).

1. The PESO has been testing samples of crackers for all types of pollutions.
2. It functions under Ministry of Petroleum and Natural Gas.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) None

Q.1) Solution (d)

Petroleum and Explosives Safety Organisation (PESO)

It is the apex department to control and administer manufacture, storage, transport and handling of explosives, petroleum, compressed gases and other hazardous substances in India.

Procurement of raw materials for fireworks does not come under the purview of the Explosives Act. **The PESO has been testing samples of crackers only for adherence to the sound limit of 125 decibels at a distance of four meters.**

It functions under the **Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry.** HQ at Nagpur

It administers the responsibilities delegated under the Explosives Act 1884 and Petroleum Act 1934.

Do you know?

- Supreme Court imposed a ban on the use of antimony, lithium, mercury, arsenic and lead in the manufacture of firecrackers to prevent air pollution. SC entrusted the Petroleum and Explosive Safety Organization (PESO) with the responsibility of ensuring compliance.

THINK!

- Health hazards from fire crackers.

(Source <http://www.thehindu.com/news/national/after-sc-order-focus-on-chemicals-in-firecrackers/article19440256.ece>)

Q.2) consider the following pairs.

Protected areas of India	IUCN equivalent category
National parks	IUCN category II
Biosphere reserve	IUCN category V
Community reserve	IUCN category VI
Wildlife sanctuaries	IUCN category IV

Which of the above pairs is/are correctly matched?

- a) 1, 2 and 3 only
- b) 2 and 3 only
- c) 2, 3 and 4 only
- d) All the above

Q.2) Solution (d)

National parks (IUCN Category II)

A national park (IUCN Category II) is similar to a wilderness area in its size and its main objective of protecting functioning ecosystems. However, national parks tend to be more lenient with human visitation and its supporting infrastructure. National parks are managed in a way that may contribute to local economies through promoting educational and recreational tourism on a scale that will not reduce the effectiveness of conservation efforts.

Wildlife sanctuaries (IUCN Category IV)

A habitat or species management area (IUCN Category IV) is similar to a natural monument or feature but focuses on more specific areas of conservation (though size is not necessarily a distinguishing feature), like an identifiable species or habitat that requires continuous protection rather than that of a natural feature.

Biosphere reserve (UNESCO designation roughly corresponding to IUCN Category V)

A protected landscape or protected seascape (IUCN Category V) covers an entire body of land or ocean with an explicit natural conservation plan, but usually also accommodates a range of for-profit activities.

Conservation reserve and Community reserve (IUCN Category V and VI respectively)

Though human involvement is a large factor in the management of these protected areas, developments are not intended to allow for widescale industrial production. The IUCN

recommends that a proportion of the land mass remains in its natural condition—a decision to be made on a national level, usually with specificity to each protected area. Governance has to be developed to adapt the diverse—and possibly growing—range of interests that arise from the production of sustainable natural resources.

Do you know?

- Leaders for Nature (LfN) is a business biodiversity network, initiated in the Netherlands by IUCN in 2005. LfN engages multinationals to work towards greening the economy. By offering knowledge and training, hands-on project support and inspiration, LfN stimulates and facilitates companies to take the lead on incorporating natural capital into their core business.

THINK!

- Sustainable Agriscapes for the Future project.

(Source https://en.wikipedia.org/wiki/IUCN_protected_area_categories#Category_II .E2.80.94 National Park

https://en.wikipedia.org/wiki/Protected_areas_of_India)

Q.3) Consider the following statements about Convention on Long-Range Transboundary Air Pollution, often abbreviated as Air Pollution or CLRTAP.

1. It is implemented by UNEP.
2. India is party to this convention.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) None

Q.3) Solution (d)

The Convention on Long-Range Transboundary Air Pollution, often abbreviated as Air Pollution or CLRTAP, is intended to protect the human environment against air pollution and to gradually reduce and prevent air pollution, including long-range transboundary air pollution. **It is implemented by the European Monitoring and Evaluation Programme (EMEP)**, directed by the United Nations Economic Commission for Europe (UNECE).

India is not signatory to this convention.



Map showing signatories of the Convention on Long-Range Transboundary Air Pollution

Do you know?

- Gothenburg Protocol: It aims to Abate Acidification, Eutrophication and Ground-level Ozone and is a part of is part of the Convention on Long-range Transboundary Air Pollution.

THINK!

- International Nitrogen Initiative (INI)
- Kyoto Protocol

Q.4) Scientific Committee on Problems of the Environment (SCOPE)'s primary function is

- To advise the UN members on key environmental issues.
- To study the environmental impact of Scientific inventions.
- To develop scientific reviews of key environmental issues.
- All the above

Q.4) Solution (c)

The Scientific Committee on Problems of the Environment (SCOPE) was established by the 10th meeting of the Executive Committee of **the International Council for Science (ICSU)** in 1969. SCOPE's members include 38 national science academies and research councils, and 22 international scientific unions. **The secretariat is located in the Netherlands.**

SCOPE exists **primarily to develop scientific reviews of key environmental issues** around the themes of managing societal and natural resources, ecosystem processes, and biodiversity, health and environment.

Do you know?

- The International Council for Science (ICSU, after its former name, International Council of Scientific Unions) is an international organization devoted to international cooperation in the advancement of science.
- India is member of this council.

THINK!

- International Environmental Law (IEL)

Q.5) Consider the following statements about United Nations Convention to Combat Desertification (UNCCD).

1. It is the only internationally legally binding framework set up to address the problem of desertification.
2. The Convention is based on the principles of participation, partnership and decentralization.
3. The Conference of the Parties (COP) will be held biennial.

Which of the above statements is/are correct?

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

Q.5) Solution (d)

The **United Nations Convention to Combat Desertification** in Those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa (UNCCD) is a Convention to combat desertification and mitigate the effects of drought through national action programs that incorporate long-term strategies supported by international cooperation and partnership arrangements.

The Convention, the only convention stemming from a direct recommendation of the Rio Conference's Agenda 21, was adopted in Paris, France on 17 June 1994 and entered into force in December 1996. **It is the only internationally legally binding framework set up to address the problem of desertification. The Convention is based on the principles of participation, partnership and decentralization**—the backbone of Good Governance and Sustainable Development. It has 197 parties, making it near universal in reach.

The first five sessions of the COP were held annually from 1997 to 2001. Starting 2001 sessions are held on a biennial basis.

Do you know?

- Loss of soil cover, mainly due to rainfall and surface runoff, is one of the biggest reasons for desertification. It is responsible for 10.98 per cent of desertification in the country. Water erosion is observed in both hot and cold desert areas, across various land covers and with varying levels of severity. The next big reason is wind erosion.

THINK!

- UNFCCC (United Nations Framework Convention on Climate Change)

Q.6) Consider the following statements about Strategic Approach to International Chemicals Management (SAICM).

1. It was adopted by the First International Conference on Chemicals Management (ICCM1).
2. India is the member of this Multilateral Environmental Agreement.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) None

Q.6) Solution (c)

Adopted by the First International Conference on Chemicals Management (ICCM1) on 6 February 2006 in Dubai, the Strategic Approach to International Chemicals Management (SAICM) is a policy framework to promote chemical safety around the world.

SAICM was developed by a multi-stakeholder and multi-sectoral Preparatory Committee and supports the achievement of the 2020 goal agreed at the 2002 Johannesburg World Summit on Sustainable Development. SAICM overall objective is the achievement of the sound management of chemicals throughout their life cycle so that by the year 2020, chemicals are produced and used in ways that minimize significant adverse impacts on the environment and human health.

India is the member of this Multilateral Environmental Agreement.

Do you know?

- SAICM comprises the **Dubai Declaration on International Chemicals Management**, expressing high-level political commitment to SAICM, and an Overarching Policy Strategy which sets out its scope, needs, objectives, financial considerations underlying principles and approaches, and implementation and review arrangements.

THINK!

- Stockholm Convention on Persistent Organic Pollutants (POPs).

(Source <http://www.saicm.org/About/SAICMOverview/tabid/5522/language/en-US/Default.aspx>)

Q.7) Consider the following statements about International Whaling Commission (IWC).

1. IWC adopted a moratorium on commercial whaling, which was welcomed by all UN members.
2. Indian Ocean Whale Sanctuary is the only designated sanctuary by IWC.

Which of the above statements is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) None

Q.7) Solution (d)

The International Whaling Commission (IWC) is an international body set up by the terms of the International Convention for the Regulation of Whaling (ICRW), which was signed in Washington, D.C., United States, on December 2, 1946 to **"provide for the proper conservation of whale stocks and thus make possible the orderly development of the whaling industry.**

In 1982 the IWC adopted a moratorium on commercial whaling. **Currently, Japan, Russia, and a number of other nations oppose this moratorium.**

The Indian Ocean Whale Sanctuary is an area in the Indian Ocean where the International Whaling Commission (IWC) has banned all types of commercial whaling. The IWC has at present designated two such sanctuaries, the other being the **Southern Ocean Whale Sanctuary.**

Do you know?

- India is member of IWC.

THINK!

- CMS
- CITES
- TRAFFIC

Q.8) Consider the following statements regarding Cartagena Protocol:

1. The protocol seeks to protect biodiversity from environmental threats like acid rain, pollution, land degradation etc.
2. It allows member countries to ban imports of genetically modified organisms if they feel that there is not enough scientific evidence that the product is safe.

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 (b)**Cartagena Protocol on Biosafety**

The Cartagena Protocol on Biosafety to the Convention on Biological Diversity is an international agreement on biosafety as a supplement to the Convention on Biological Diversity effective since 2003. The Biosafety Protocol seeks to protect biological diversity from the potential risks posed by genetically modified organisms resulting from modern biotechnology.

The Biosafety Protocol makes clear that products from new technologies must be based on the precautionary principle and allow developing nations to balance public health against economic benefits. It will for example let countries ban imports of genetically modified organisms if they feel there is not enough scientific evidence that the product is safe and requires exporters to label shipments containing genetically altered commodities such as corn or cotton.

Objective

the objective of the Protocol is to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of 'living modified organisms resulting from modern biotechnology' that may have adverse effects on the conservation and sustainable

use of biological diversity, taking also into account risks to human health, and specifically focusing on transboundary movements

Living Modified Organism

The protocol defines a 'living modified organism' as any living organism that possesses a novel combination of genetic material obtained through the use of modern biotechnology, and 'living organism' means any biological entity capable of transferring or replicating genetic material, including sterile organisms, viruses and viroids. 'Modern biotechnology' is defined in the Protocol to mean the application of in vitro nucleic acid techniques, or fusion of cells beyond the taxonomic family, that overcome natural physiological reproductive or recombination barriers and are not techniques used in traditional breeding and selection. 'Living modified organism (LMO) Products' are defined as processed material that are of living modified organism origin, containing detectable novel combinations of replicable genetic material obtained through the use of modern biotechnology. Common LMOs include agricultural crops that have been genetically modified for greater productivity or for resistance to pests or diseases. Examples of modified crops include tomatoes, cassava, corn, cotton and soybeans. 'Living modified organism intended for direct use as food or feed, or for processing (LMO-FFP)' are agricultural commodities from GM crops. Overall the term 'living modified organisms' is equivalent to genetically modified organism – the Protocol did not make any distinction between these terms and did not use the term 'genetically modified organism.'

Q.9) Recently Kigali Agreement was in the news. Which of the following statements is/are correct regarding Kigali Agreement?

1. It is an amendment in Kyoto protocol.
2. As per the agreement, member countries are expected to reduce the manufacture and use of Hydrofluorocarbons (HFCs) by roughly 80-85% from their respective baselines, till 2045.

Select the code from below:

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

Q.9) Solution (b)

Kigali Agreement

- In the 28th meeting of the Parties to the Montreal Protocol, negotiators from 197 nations have signed a historic agreement to amend the Montreal Protocol in Kigali, a capital city of a tiny African country, Rwanda on 15th October 2016.
- As per the agreement, these countries are expected to reduce the manufacture and use of **Hydrofluorocarbons (HFCs)** by roughly 80-85% from their respective baselines, till 2045.
- This phase down is expected to arrest the global average temperature rise up to 0.5° C by 2100.
- Kigali agreement is an amendment to Montreal Protocol.

Kigali Agreement: Important Points

- It is a **legally binding agreement** between the signatory parties with non-compliance measures.
 - It will come into effect from 1st January 2019 provided it is ratified by at least 20 member parties by then.
 - It has shown a considerable flexibility in approach while setting phase-down targets for different economies accommodating their developmental aspirations, different socio-economic compulsions, and scientific & technological capabilities.
 - It has divided the signatory parties into three groups-
1. **The first group** consists of rich and developed economies like USA, UK and EU countries who will start to phase down HFCs by 2019 and reduce it to 15% of 2012 levels by 2036.
 2. **The second group** consists of emerging economies like China, Brazil as well as some African countries that will start phase down by 2024 and reduce it to 20% of 2021 levels by 2045.
 3. **The third group** consists of developing economies and some of the hottest climatic countries like India, Pakistan, Iran, Saudi Arabia who will start phasing down HFCs by 2028 and reduce it to 15% of 2024-2026 levels till 2047.

Q.10) Which of the following statements regarding Biocarbon Fund Initiative are correct?

1. The BioCarbon Fund Initiative for Sustainable Forest Landscapes collaborates with forest countries around the world to reduce emissions from the land sector.
2. It is a multilateral fund managed by UNFCCC.
3. It seeks to promote reduced greenhouse gas emissions from the land sector, from deforestation and forest degradation in developing countries (REDD+), and from sustainable agriculture, as well as smarter land-use planning, policies and practices.

Select the code from following:

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

Q.10) Solution (c)

BioCarbon Fund Initiative

The BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL) is a multilateral fund, supported by donor governments and managed by the **World Bank**. It seeks to promote reduced greenhouse gas emissions from the land sector, from deforestation and forest degradation in developing countries (REDD+), and from sustainable agriculture, as well as smarter land-use planning, policies and practices.

The initiative will be managed by the BioCarbon Fund, a public-private program housed within the World Bank that mobilizes finance for activities that sequester or conserve carbon emissions in forest and agricultural systems.

The new *Initiative for Sustainable Forest Landscapes* seeks to scale up land-management practices across large landscapes, including improved livestock management, climate-smart agriculture, and sustainable forest management, with a focus on protecting forests and greening and securing supply chains.

Think

- Global Environment Fund

Q.11) The Central Zoo Authority of India (CZA) is the body of the government of India responsible for oversight of zoos. Which of the following statements are correct regarding CZA?

1. It is a statutory body
2. It is an affiliate member of the World Association of Zoos and Aquariums (WAZA)
3. It regulates the exchange of animals of endangered category Listed under Schedule-I and II of the Wildlife Protection Act among zoos.

Select the code from following:

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

Q.11) Solution (d)**Central Zoo Authority of India (CZA)**

The Central Zoo Authority of India (CZA) is the body of the government of India responsible for oversight of zoos. It is an affiliate member of the World Association of Zoos and Aquariums (WAZA).

The Central Zoo Authority has been constituted under the Wild Life (Protection) Act. The Authority consists of a Chairman, ten members and a Member Secretary. The main objective of the authority is to complement the national effort in conservation of wild life. Standards and norms for housing, upkeep, health care and overall management of animals in zoos has been laid down under the Recognition of Zoo Rules, 1992. Every zoo in the country is required to obtain recognition from the Authority for its operation. The Authority evaluates the zoos with reference to the parameters prescribed under the Rules and grants recognition accordingly. Zoos which have no potential to come up to the prescribed standards and norms may be refused recognition and asked to close down.

Apart from the primary function of grant of recognition and release of financial assistance, the Central Zoo Authority also regulates the exchange of animals of endangered category (Listed under Schedule-I and II of the Wildlife Protection Act) among zoos. Exchange of animals between Indian and foreign zoos is also approved by the Authority before the requisite clearances under EXIM Policy and the CITES permits are issued by the competent authority.

Think

- Ex – Situ Conservation
- Gene pool

Q.12) Kappatagudda Forest has been in news for removal of conservation tag and restoration of the same. In which state does it lie?

- a) Tamil Nadu
- b) Kerala
- c) Chhattisgarh

d) Karnataka

Q.12) Solution (d)

On November 4 2016, the government decided to withdraw the conservation tag which was accorded to Kappatagudda in the preceding year of 2015, leading to an agitation in Gadag district. Environmentalists considered it as doomsday for the forest reserve.

With the forest having deposits of close to 50 tonnes of unadulterated and pure gold reserves, the Ramgad Mines and Minerals limited (RMML), a subsidiary of the Baldota group of companies, had been given a mining license in 2012 itself.

Karnataka chief minister has decided to go along with larger consensus in the controversial environment versus development issue in the Kappatagudda forest reserve case and restore the "conservation reserve" tag.

Q.13) The State Government in consultation with local bodies may notify the areas of biodiversity importance as Biodiversity Heritage Sites (BHS). Which of the following statements regarding BHS is/are correct?

1. In order to get BHS tag, the area should have 10 or 0.5% of the vascular endemic species.
2. 70% of the biodiversity in the area should have been destroyed.

Select the code from following:

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

Q.13) Solution (d)

“Biodiversity Heritage Sites” (BHS)

Under Section 37 of Biological Diversity Act, 2002 (BDA) the State Government in consultation with local bodies may notify in the official gazette, areas of biodiversity importance as Biodiversity Heritage Sites (BHS).

“Biodiversity Heritage Sites” (BHS) are well defined areas that are unique, ecologically fragile ecosystems – terrestrial, coastal and inland waters and, marine having rich biodiversity comprising of any one or more of the following components: richness of wild as well as

domesticated species or intra-specific categories, high endemism, presence of rare and threatened species, keystone species, species of evolutionary significance, wild ancestors of domestic/cultivated species or their varieties, past pre-eminence of biological components represented by fossil beds and having significant cultural, ethical or aesthetic values and are important for the maintenance of cultural diversity, with or without a long history of human association with them. All other terms used are as defined in Section 2 of the Biological Diversity Act (2002).

Significance and objectives of Biodiversity Heritage sites

- a. Biodiversity is closely linked to ecological security and therefore, human welfare. To strengthen the biodiversity conservation in traditionally managed areas and to stem the rapid loss of biodiversity in intensively managed areas, such areas need special attention.
- b. Such areas also often represent a positive interface between nature, culture, society, and technologies, such that both conservation and livelihood security are or can be achieved, and positive links between wild and domesticated biodiversity are enhanced.
- c. To have a BHS in or around a community should be a matter of pride and honour to such community and this virtuous act of community may work as an example to the entire nation apart from ensuring availability of the resources to their own future generation. The areas like existing sacred grooves in general and those existing in Western Ghats in particular can be straight away be declared and notified as BHS.
- d. It is necessary to instill and nurture conservation ethics in all sections of the society. The creation of BHS will ensure bringing home these values in the society and thereby put an end to over-exploitation of natural resources and avoid environmental degradation.
- e. The creation of BHS may not put any restriction on the prevailing practices and usages of the local communities, other than those voluntarily decided by them. The purpose is to enhance the quality of life of the local communities through this conservation measure.

Do you know?

- **Ameenpur Lake** has the distinction of being the **first water body in the country to be declared a Biodiversity Heritage Site**. Ameenpur Lake dates back to the time of Ibrahim Qutb Shah, who ruled the kingdom of Golconda between 1550 and 1580.

Q.14) Consider the following statements regarding Cryopreservation:

1. It is the process of preserving biological material by freezing it at extreme temperatures.
2. In the process the material is heated to boiling point in water and then suddenly the temperature is dropped to freezing point.
3. It is used to increase the shelf life of fruits and vegetables.

Which of the above statements are NOT correct?

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

Q.14) Solution (b)

Cryopreservation

Cryopreservation is the process of freezing biological material at extreme temperatures; most common $-196\text{ }^{\circ}\text{C}/-321\text{ }^{\circ}\text{F}$ in liquid nitrogen (N_2). At these low temperatures, all biological activity stops, including the biochemical reactions that lead to cell death and DNA degradation. This preservation method in theory makes it possible to store living cells as well as other biological material unchanged for centuries.

The challenge of cryopreservation is to help cells to survive both cooling to extreme temperatures and thawing back to physiological conditions. Intracellular ice formation in particular is a critical issue that has to be controlled to keep the cell membrane intact and the cells alive. The crucial elements to prevent this are the freezing rate (degrees per minute) and the composition of the freezing medium used. The freezing medium generally consists of a diluter, (sometimes) a protein source, as well as a cryoprotectant compound. The choice of most suitable cryoprotectant will influence the preservation result and will be different between different cells and different species.

Cryopreservation technology is important in breeding programs to preserve desired genes, but also provides an opportunity to save endangered species.

Do you know?

- In physics, **cryogenics** is the production and behaviour of materials at very low temperatures.

- **Cryonics**- the practice or technique of deep-freezing the bodies of people who have just died, in the hope that scientific advances may allow them to be revived in the future.

Q.15) The theme of World Environment Day 2018 is –

- a) "Beat Plastic Pollution"
- b) "Wetlands for a Sustainable Urban Future"
- c) "End Plastic Pollution"
- d) "Nature for Water" – exploring nature-based solutions to the water challenges we face in the 21st century.

Q.15) Solution (a)

World Environment Day 2018

India to host World Environment Day 2018

India is the global host of 2018 World Environment Day which will take place on June 5, 2018. With "**Beat Plastic Pollution**" as the theme for this year's edition, the world is coming together to combat single-use plastic pollution.

Earth Day 2018

The theme of Earth Day 2018 is "**End Plastic Pollution**". Earth Day 2018 is dedicated to providing the information and inspiration needed to fundamentally change human attitude and behavior about plastics.

The idea is to encourage people to cut down on their plastic consumption by paying a closer attention to the number of plastic items each person consumes annually and make a conscious effort to reduce the amount. According to a paper published in scientific journal Chemistry & Biology in 2009, plastic is non-biodegradable and disposed plastic can remain in the environment for up to 2,000 years.

Do you know?

- The first Earth day was celebrated on April 22, 1970 and has ever since been an annual event.
- The person credited for organising the event 48 years ago is US Senator Gaylord Nelson.

Q.16) Recently, a river turtle with a distinctive green punk-rock hairstyle, two spikes under its chin and the ability to breathe through its genitals (called Mary River Turtle) was added to a new list of endangered reptiles. This unique turtle is endemic to?

- a) Antarctica
- b) Australia
- c) North America
- d) South America

Q.16) Solution (b)

Turtle with punk hairdo on endangered species list

Boasting a green, punk hairdo and the unusual ability to breathe through its backside, an Australian turtle has become famous overnight but not only for its eccentricity.

Unfortunately, just as many people are discovering the Mary River Turtle's tantalising traits, it has become the latest creature to join the **"EDGE of Existence"** list of endangered species compiled by the Zoological Society of London (ZSL).

Where is it found?

- A **native of Queensland, Australia**, the turtle was one of 100 reptiles added to the catalogue this week.
- It lives **only in the Mary River** from which it takes its name.

Do you know?

- The green-haired turtle is 30th on a new list of reptiles in trouble put out by the Zoological Society of London that ranks reptiles on a combination of how distinctive and how endangered they are. It has special organs in the end of its digestive system that allow it to draw oxygen from the water. It can stay underwater for up to three days.

Source: <http://www.thehindu.com/todays-paper/tp-life/turtle-with-punk-hairdo-on-endangered-species-list/article23532566.ece>

Q.17) Consider the following statements about National Air Quality Monitoring Programme: (NAMP)

1. CPCB has been executing a nationwide Programme of ambient air quality monitoring known as NAMP.

2. Currently, System of Air Quality and Weather Forecasting and Research (SAFAR), run out of Indian Institute of Tropical Meteorology (IITM), Pune, serves as apex forecaster of pollution trends in Delhi, Mumbai, Pune and Ahmedabad.
3. The National Ambient Air Quality Standards has undertaken 5 pollutants only.

Which of the statement given above is/are correct?

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

Q.17) Solution (a)

In India, The Central Pollution Control Board (CPCB) has been executing a nationwide Programme of ambient air quality monitoring known as National Air Quality Monitoring Programme (NAMP).

The National Air Quality Monitoring Programme (NAMP) is undertaken in India

- i) to determine status and trends of ambient air quality;
- ii) to ascertain the compliance of NAAQS;
- iii) to identify non-attainment cities;
- iv) to undertake preventive and corrective measures.

Annual average concentration of SO_x levels are within the prescribed National Ambient Air Quality Standards (NAAQS).

The NAAQS has been revisited and revised for 12 pollutants which includes;

1. Sulphur dioxide
2. Nitrogen dioxide
3. PM(10)
4. PM(2.5)
5. ozone
6. lead
7. carbon monoxide
8. arsenic
9. nickel
10. benzene
11. ammonia
12. benzopyrene

Q.18) Consider the following pairs and identify the correct pairs:

1. Basel Convention : : Control of Transboundary Movements of Hazardous Wastes and their Disposal
2. Rotterdam Convention: : certain Hazardous Chemicals and Pesticides in International Trade
3. Stockholm Convention : : persistent Organic Pollutants (POPs)

Choose correct answer:

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

Q.18) Solution (d)

Basel Convention

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal was adopted in 1989 in Basel, Switzerland. The overarching objective of the Basel Convention is to protect human health and the environment against the adverse effects of hazardous wastes. Its scope of application covers a wide range of wastes defined as “hazardous wastes” based on their origin and/or composition and their characteristics, as well as two types of wastes defined as “other wastes” (household waste and incinerator ash).

Rotterdam Convention

The Rotterdam Convention on the prior informed consent procedure for certain Hazardous Chemicals and Pesticides in International Trade came into force in 2004. India acceded to the convention a year later.

There are 47 chemicals listed in Annex III to this Convention, which include 33 pesticides and 14 industrial chemicals that have been banned or severely restricted for health or environmental reasons.

Stockholm Convention

The Stockholm Convention on persistent Organic Pollutants (POPs) is a global treaty to protect human health and the environment from POPs. The Convention sought initially 12 chemicals, for restriction or elimination of the production and release. Now, the Convention covers 23 chemicals.

Q.19) Consider the following International Conventions

1. Aarhus Convention
2. Geneva Convention
3. Stockholm Convention
4. Rotterdam Convention
5. Basel Convention
6. Bonn Convention

Which of the above are related to Hazardous Substances?

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

Q.19) Solution (b)

Aarhus Convention- The UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, usually known as the Aarhus Convention.

Bonn Convention- The Convention on the Conservation of Migratory Species of Wild Animals -- more commonly abbreviated to just the Convention on Migratory Species (CMS) or the Bonn Convention -- aims to conserve terrestrial, marine and avian migratory species throughout their range.

Q.20) 'BioCarbon Fund Initiative for Sustainable Forest Landscapes' is managed by the

- a) Asian Development Bank
- b) International Monetary Fund
- c) United Nations Environment Programme
- d) World Bank

Q.20) Solution (d)

Housed within the Carbon Finance Unit of the World Bank, the BioCarbon Fund is a public-private sector initiative mobilizing financing to help for development of projects that sequester or conserve carbon in forest and agro-ecosystems. It was created in 2004.

Q.21) Consider the following regarding 'Conservation International'

1. It is an international organization under United Nation Environment Program (UNEP) that aims to help stabilize global climate, protect fresh water, and ensure human well-being.
2. Biodiversity Hotspots is an initiative of Conservation International.

Select the correct statement/s

- a) 1 only
- b) 2 only
- c) Both
- d) None

Q.21) Solution (b)**Conservation International (CI)**

An American non-profit environmental organization headquartered in Arlington, Virginia. Its goal is to protect nature as a source of food, fresh water, livelihoods and a stable climate.

It employs scientists and policy experts to balance healthy ecosystems with sustainable human use. Conservation International aims to help stabilize global climate, protect fresh water, and ensure human well-being. To achieve their goals they work with indigenous peoples and non-governmental organization. Conservation International's primary initiatives include climate, fresh water, food, health, culture, and biodiversity.

Of all the significant initiatives Conservation International has achieved, its Biodiversity Hotspots project is the most impressive. This project identifies and protects biological hotspots—places that exhibit the richest diversity and most threatened collections of plants and animals on our planet.

Q.22) Which of the following were regarded as the Trinity of modern Carnatic music?

1. Tyagaraja
2. Syama Sastri
3. Muthuswami Dikshitar

Select the correct statements

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

d) All of the above

Q.22) Solution (d)

Thyāgarāja

- He was one of the greatest composers of Carnatic music
- He was a prolific composer and highly influential in the development of the South Indian classical music tradition.
- Thyāgarāja has composed thousands of devotional compositions, most of them in praise of Lord Rāma — most of which remain very popular even today.
- He is one of the Music trinities in Carnātic music.
- Tyagaraja and his contemporaries Syama Sastri and Muthuswami Dikshitar were regarded as the Trinity of modern Carnatic music.
- He saw the reigns of four kings of Maratha dynasty — Tulaja II (1763-1787), Amarasimha (1787-1798), Serfoji II (1798-1832) and Sivaji II (1832-1855).

Source: <http://pib.nic.in/PressReleseDetail.aspx?PRID=1517159>

Q.23) The criteria presently followed for specification of a community as a Scheduled Tribe are

1. Indications of primitive traits
2. Distinctive culture
3. Inadequate representation in the Central Government posts and services
4. Geographical Isolation

Select the correct code:

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

Q.23) Solution (c)

The criteria presently followed for specification of a community as a Scheduled Tribe are

- indications of primitive traits
- distinctive culture

- geographical isolation
- shyness of contact with the community at large
- backwardness

Criteria for SCs

- Extreme social, educational and economic backwardness arising out of traditional practice of untouchability.

OBCs

- Social, educational, economic backwardness and inadequate representation in the Central Government posts and services.

Q.24) Consider the following statements about 'The Sexual Harassment of Women at Workplace Act, 2013'

1. The Act is for any woman who is harassed in any workplace
2. Under the Act, the victims can directly approach the court
3. It replaced the guidelines laid down by the Supreme Court in the Vishaka case judgment

Select the correct statements

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

Q.24) Solution (a)**The Sexual Harassment of Women At Workplace (Prevention, Prohibition And Redressal) Act, 2013**

- It had replaced the guidelines laid down by the Supreme Court in the historic Vishaka case judgment
- This Act makes it illegal to sexually harass women in the workplace.
- It talks about the different ways in which someone can be sexually harassed and how they can complain against this kind of behaviour.
- This Act is only for women who are sexually harassed in workplaces.

- This Act is for any woman who is harassed in any workplace. It is not necessary for the woman to be working at the workplace in which she is harassed. A workplace can be any office, whether government or private.
- Even if there are no cases of sexual harassment at the moment, it is still necessary for the Internal Complaints Committee to be set up (if you employ more than 10 workers) and for all rules to be followed.
- The Act gives a choice between dealing with the offender within the office or approaching a court.
- If a woman wishes, she can file a criminal complaint instead of approaching the Internal/Local Complaints Committee.

Q.25) Consider the following statements about 'Credit Enhancement Fund'

1. The credit enhancement fund by providing partial guarantees on the bonds of infrastructure projects will increase the attractiveness of such project bonds for institutional investors.
2. It is anchored by Industrial Finance Corporation of India (IFCI)

Select the correct statements

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

Q.25) Solution (a)

Credit Enhancement Fund

- It is anchored by India Infrastructure Finance Company Limited (IIFCL)
- It will help raise credit rating of bonds floated by infrastructure companies and facilitate investments from long-term investors.
- To ease the flow of institutional credit to infrastructure projects

Q.26) Consider the following statements

1. A whip is a member of a political party's parliamentary body, having a central role in 'Floor Management' in both the Houses of Parliament and is responsible for discipline within the party.

2. The First All India Whips Conference was organised at Indore in 1952

Select the correct statements

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

Q.26) Solution (c)

Whip

- A whip is an important member of a political party's parliamentary body, having a central role in 'Floor Management' in both the Houses of Parliament and is responsible for discipline within the party.
- Their main job is ensuring that their members in Parliament and legislature vote in line with the party's official policy on important issues and make sure that the members turn out for important votes.
- Such an importance of Whips in the Parliamentary system had been acknowledged by organizing the First All India Whips Conference at Indore in 1952, in the very first year of general elections to the First Lok Sabha.

