

Q. 1) Consider the following statements about the Forest Rights Act (FRA), 2006

1. It gives ownership rights to new lands for the families of Forest Dwelling Scheduled Tribes (FDST).
2. It provides for rehabilitation in case of illegal eviction or forced displacement.
3. It provides an expansion of the mandate in the Fifth and the Sixth Schedules of the Constitution.

Choose the correct code:

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

Q.1) Solution: (b)

Explanation:

- **The Forest Rights Act (FRA)** enacted in 2006 recognises the rights of forest-dwelling tribal communities and other traditional forest dwellers to forest resources on which these communities were dependent for a variety of needs, including livelihood, habitation, and other sociocultural needs.
- It recognizes and vests the forest rights and occupation in Forest land in Forest Dwelling Scheduled Tribes (FDST) and Other Traditional Forest Dwellers (OTFD) who have been residing in such forests for generations.
- It strengthens the conservation regime of the forests while ensuring the livelihood and food security of the FDST and OTFD.
- The Gram Sabha is the authority to initiate the process for determining the nature and extent of Individual Forest Rights (IFR), Community Forest Rights (CFR) or both that may be given to FDST and OTFD.

- The Act gives FDST and OTFD the right to ownership of land farmed by tribals or forest dwellers subject to a maximum of 4 hectares.
- Ownership is only for land that is actually being cultivated by the concerned family and no new lands will be granted. **Hence statement 1 is incorrect.**
- The Act provides for rehabilitation **in case of illegal eviction or forced displacement**, and to basic amenities, subject to restrictions for forest protection.
- It includes the right to protect, regenerate or conserve or manage any community forest resource which they have been traditionally protecting and conserving for sustainable use. **Hence statement 2 is correct.**
- The Act **expands the mandate of the Fifth and the Sixth Schedules** of the Constitution that protect the claims of indigenous communities over tracts of land or forests they inhabit. **Hence statement 3 is correct.**

Q. 2) Consider the following statements about the Wetlands (Conservation and Management) Rules, 2017

1. It replaces the Central Wetlands Regulatory Authority with the National Wetland Committee (NWC).
2. River channels, paddy fields, and man-made water bodies are included in its definition of wetlands.

Choose the correct code:

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

Q.2) Solution: (a)

Explanation:

- Wetlands are ecosystems saturated with water, either seasonally or permanently. They include mangroves, marshes, rivers, lakes, deltas, floodplains and flooded forests, rice fields, coral reefs, marine areas no deeper than 6 metres at low tide, as well as human-made wetlands such as waste-water treatment ponds and reservoirs.
- For effective conservation and management of wetlands in the country, the Wetlands (Conservation and Management) Rules, 2017 supersede the Wetlands (Conservation and Management) Rules, 2010.
- The Wetlands (Conservation and Management) Rules, 2017 act as the regulatory framework for the conservation and management of wetlands in India.
- It replaces the Central Wetlands Regulatory Authority with the National Wetland Committee (NWC), which will be led by the MoEFCC secretary.
- It specifies that a State Wetland Authority (SWA) be established in each state and union territory, to be led by the state's environment minister. **Hence statement 1 is correct.**
- The rules forbid activities like encroachment of any kind, the establishment, and growth of industries, waste disposal, and the discharge of untreated wastes and effluents from businesses, cities, towns, villages, and other human settlements.
- State authorities are required to compile a list of all wetlands and a list of wetlands that need to be informed within six months.
- River channels, paddy fields, man-made water bodies/tanks specifically constructed for drinking water purposes, and structures specifically constructed for aquaculture, salt production, recreation, and irrigation purposes are not included in the 2017 rules' definition of a wetland. **Hence statement 2 is incorrect.**

Q. 3) Consider the following statements about the Biological Diversity Act, 2002

1. It envisaged a three-tier structure to regulate the access to biological resources.
2. It prohibits any person from obtaining any biological resource for its commercial utilisation without prior approval from the National Biodiversity Authority.

3. It can recommend to central government to notify threatened species and prohibit or regulate their collection, rehabilitation, and conservation.

Choose the correct code:

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

Q.3) Solution: (d)

Explanation:

- The **Biological Diversity Act of 2002** was born out of India's attempt to realise the objectives enshrined in the **United Nations Convention on Biological Diversity (CBD) 1992** which recognizes the sovereign rights of states to use their biological resources.
- It **aims at the conservation of biological resources**, managing their **sustainable use**, and **enabling fair and equitable sharing of benefits** arising out of the use and knowledge of biological resources with the local communities.
- The act envisaged a three-tier structure to regulate access to biological resources:
 - ✓ The National Biodiversity Authority (NBA) at the national level.
 - ✓ The State Biodiversity Boards (SBBs) at the state level.
 - ✓ The Biodiversity Management Committees (BMCs) at the local level.

Hence statement 1 is correct.

- The Act provides these authorities with special funds and a separate budget in order to carry out any research project dealing with the biological natural resources of the country.
- The Act prohibits the following activities without prior approval from the National Biodiversity Authority:

- ✓ Any person or organisation (either based in India or not) obtaining any biological resource occurring in India for its research or commercial utilisation.
- ✓ The transfer of the results of any research relating to any biological resources occurring in, or obtained from, India.
- ✓ The claim of any intellectual property rights on any invention is based on the research made on the biological resources obtained from India.

Hence statement 2 is correct.

- Under this act, the Central Government in consultation with the NBA:
 - ✓ Shall notify threatened species and prohibit or regulate their collection, rehabilitation, and conservation
 - ✓ Designate institutions as repositories for different categories of biological resources
- The act stipulates all offences under it as cognizable and non-bailable. **Hence statement 3 is correct.**

Q. 4) Consider the following statements about the National Green Tribunal (NGT)

1. It is a specialised body set up under the Environment Protection Act of 1986.
2. It is mandated to make disposal of applications finally within 6 months of the filing of the same.
3. Its Chairperson is appointed by the Central Government in consultation with the Chief Justice of India (CJI).
4. It is endowed with suo motu powers to take up environmental issues across the country.

Choose the correct code:

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

Q.4) Solution: (c)

Explanation:

- The National Green Tribunal (NGT) is a specialised body set up under the **National Green Tribunal Act (2010)** for effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources.
- With the establishment of the NGT, India became the third country in the world to set up a specialised environmental tribunal, only after Australia and New Zealand, and the first developing country to do so. **Hence statement 1 is incorrect.**
- NGT is mandated to make disposal of applications or appeals finally within 6 months of the filing of the same.
- The NGT has five places of sittings, New Delhi is the Principal place of sitting, and Bhopal, Pune, Kolkata, and Chennai are the other four. **Hence statement 2 is correct.**
- The Tribunal comprises the Chairperson, the Judicial Members, and Expert Members. They shall hold office for the term of three years or till the age of sixty-five years, whichever is earlier, and are not eligible for reappointment.
- There are to be at least 10 and a maximum of 20 full-time Judicial members and Expert Members in the tribunal.
- The Chairperson is appointed by the Central Government in consultation with the Chief Justice of India (CJI).
- A Selection Committee shall be formed by the central government to appoint the Judicial Members and Expert Members. **Hence statement 3 is correct.**
- The Tribunal has jurisdiction over all civil cases involving substantial questions relating to the environment.
- The Supreme Court in 2021 declared the National Green Tribunal's (NGT) position as a "unique" forum endowed with suo motu powers to take up environmental issues across the country.
- As per SC, the role of the NGT is not simply adjudicatory; it has to perform equally vital roles that are preventative, ameliorative, or remedial. **Hence statement 4 is correct.**

Q. 5) Consider the following statements about the Environment (Protection) Act,1986

1. Its roots lie in the United Nations Conference on the Human Environment held in Stockholm in 1972.
2. It empowers the Central Government to establish authorities charged with the mandate of preventing environmental pollution.
3. In case of any non-compliance, the violator can be punished with imprisonment for up to 1 year or with a fine up to Rs 10,00,000.

Choose the correct code:

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

Q.5) Solution: (a)

Explanation:

- The Environment (Protection) Act (EPA), 1986 establishes the framework for studying, planning, and implementing long-term requirements of environmental safety and laying down a system of speedy and adequate response to situations threatening the environment.'
- It **was enacted under Article 253 of the Indian Constitution** which provides for the **enactment of legislation for giving effect to international agreements.**
- The roots of the enactment of the EPA lie in the United Nations Conference on the Human Environment held in Stockholm in June 1972 (Stockholm Conference), in which India participated, to take appropriate steps for the improvement of the human environment.
- The Act implements the decisions made at the Stockholm Conference. **Hence statement 1 is correct.**

- It empowers the Central Government to establish authorities charged with the mandate of preventing environmental pollution in all its forms and to tackle specific environmental problems that are peculiar to different parts of the country.
- It also empowers the Government to plan and execute a nationwide programme for the prevention, control, and abatement of environmental pollution.
- It gives power to the central government to lay down standards for the quality of the environment in its various aspects like emission or discharge of environmental pollutants from various sources.
- As per the Act, the central government has the power to direct the closure, prohibition, or regulation of any industry, operation, or process and to stop or regulation of the supply of electricity or water, or any other service. **Hence statement 2 is correct.**
- In case of any non-compliance or contravention of the current provisions of the EPA, or of the rules under this Act, the violator can be punished with imprisonment up to 5 years or with a fine up to Rs 1,00,000, or with both.
- In case of continuation of such violation, an additional fine of up to Rs 5,000 for every day during which such contravention continues after the conviction for the first such contravention can be levied.
- If the violation continues beyond a period of one year after the date of conviction, the offender can be punished with imprisonment for a term that may extend to seven years. **Hence statement 3 is incorrect.**

Q. 6) Consider the following statements about the Air (Prevention and Control of Pollution) Act of 1981

1. The Central Pollution Control Board (CPCB) was established under this act.
2. It defines air pollution but does not define air pollutants.
3. It includes a citizen's suit provision and noise pollution.

Identify the incorrect statements:

- a) 1 and 2

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

Q.6) Solution: (a)

Explanation:

- The **Air (Prevention and Control of Pollution) Act of 1981, or the Air Act**, was a law passed by the Parliament of India **to prevent and control the harmful effects of air pollution in India**.
- This act is seen as the first concrete step taken by the government of India to combat air pollution.
- The main objectives of this Act are to improve the quality of air and to prevent, control, and abate air pollution in the country.
- However, The Central Pollution Control Board (CPCB), statutory organisation, was constituted in September, 1974 under the Water (Prevention and Control of Pollution) Act, 1974. Further, CPCB was entrusted with the powers and functions under the Air (Prevention and Control of Pollution) Act, 1981. **Hence statement 1 is incorrect.**
- The act defines air pollution **as the presence of any dangerous pollutant that makes the air unbreathable**.
- Section 2(a) defines an air pollutant as any solid liquid or gaseous substance which may cause harm or damage the environment, humans, plants, animals, or even damage property. **Hence statement 2 is incorrect.**
- Failure to comply with the Central Pollution Control Board directives would result in **imprisonment of 1 year. It can be extended to 6 years with a fine with the additional fine of 5000 Rs per day** added provided the directives are still not met.
- The 1987 amendment to this act introduced a citizen's suit provision and extended the Act to include noise pollution. **Hence statement 3 is correct.**

Q. 7) Consider the following statements

1. Forests and the protection of wild animals and birds are included in the Union List of the Indian Constitution.
2. Controlling soil erosion and denudation in the river is one of the objectives of the National Forest Policy, 1988.

Choose the correct code:

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

Q.7) Solution: (b)

Explanation:

- According to Article 51 A (g) of the Constitution, it is every citizen's fundamental obligation to safeguard and develop the natural environment, especially forests and wildlife.
- Article 48 A of the Directive Principles of State Policy states that the State must attempt to maintain and develop the environment, as well as to safeguard the country's forests and animals.
- Forests and the Protection of Wild Animals and Birds were transferred from the State to the Concurrent List by the 42nd Amendment Act of 1976.
- Forests and the protection of wild animals and birds are included in the Concurrent List of the Indian Constitution.
- The primary goal of the 1988 National Forest Policy is to preserve environmental stability and the maintenance of ecological balance, especially atmospheric equilibrium, which are essential for the survival of all life forms, humans, animals, and plants. **Hence statement 1 is incorrect.**
- The objectives of the National Forest Policy 1988 are:

- ✓ Conserving the country's natural heritage by maintaining the surviving natural forests with their diverse flora and animals, symbolise the country's exceptional biological richness and genetic resources.
- ✓ Controlling soil erosion and denudation in the river, lake, and reservoir catchment regions in the "interest of soil and water conservation, flood and drought mitigation, and reservoir siltation prevention."
- ✓ Checking the extent of sand dunes in Rajasthan's desert areas and along the shore.
- ✓ Increasing the country's forest/tree cover significantly through extensive afforestation and social forestry programmes, particularly in all deforested, degraded, and unproductive regions.
- ✓ Increasing forest production to satisfy critical national demands.
- ✓ Encourage effective use of forest products and maximise wood substitution.

Hence statement 2 is correct.

Q. 8) Consider the following statements about the Ozone Depleting Gas Index

1. It was released by the National Oceanic and Atmospheric Administration (NOAA).
2. It tracks the overall stratospheric concentration only of ozone-depleting chlorine.

Choose the correct code:

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

Q.8) Solution: (a)

Explanation:

- Ozone is a highly reactive molecule formed of three oxygen atoms found mostly in the Stratosphere.

- The region of the stratosphere with the highest amount of ozone is called the ozone layer.
- It protects the Earth from harmful ultraviolet (UV) rays from the Sun. Without the Ozone layer in the atmosphere, life on Earth would be very difficult.
- Plants cannot live and grow in heavy ultraviolet radiation, nor can the planktons that serve as food for most of the ocean life.
- The ozone Depleting Gas Index by the National Oceanic and Atmospheric Administration (NOAA). **Hence statement 1 is correct.**
- It tracks the overall stratospheric concentration of ozone-depleting **chlorine and bromine. Hence statement 2 is incorrect.**
- They Collect air samples around the globe and analyze them annually.
- Recently they found that the overall concentration of Ozone depleting substances (ODS) in the lower stratosphere had declined by over 50%.
- However, the pace of reduction in ODSs over Antarctica has been slower.

Q. 9) Consider the following statements about the Man and Biosphere Programme

1. It is an intergovernmental scientific programme by UNESCO.
2. There are 18 biosphere reserves in India that have been recognized internationally under this programme.
3. It aims to minimize the conflict between development and conservation.

Choose the correct code:

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

Q.9) Solution: (c)

Explanation:

- Biosphere Reserve (BR) is an international designation by the United Nations Educational, Scientific and Cultural Organization (UNESCO) for representative parts of natural and cultural landscapes extending over large areas of terrestrial or coastal/marine ecosystems or a combination of both.
- The Man and Biosphere Programme was launched in 1971, by UNESCO is an intergovernmental scientific programme that aims to establish a scientific basis for the improvement of relationships between people and their environments. **Hence statement 1 is correct.**
- There are 18 biosphere reserves in India:
 - ✓ Cold Desert, Himachal Pradesh
 - ✓ Nanda Devi, Uttarakhand
 - ✓ Khangchendzonga, Sikkim
 - ✓ Dehang-Debang, Arunachal Pradesh
 - ✓ Manas, Assam
 - ✓ Dibru-Saikhowa, Assam
 - ✓ Nokrek, Meghalaya
 - ✓ Panna, Madhya Pradesh
 - ✓ Pachmarhi, Madhya Pradesh
 - ✓ Achanakmar-Amarkantak, Madhya Pradesh-Chhattisgarh
 - ✓ Kachchh, Gujarat (Largest Area)
 - ✓ Similipal, Odisha
 - ✓ Sundarban, West Bengal
 - ✓ Seshachalam, Andhra Pradesh
 - ✓ Agasthyamala, Karnataka-Tamil Nadu-Kerala
 - ✓ Nilgiri, Tamil Nadu-Kerala (First to be Included)
 - ✓ Gulf of Mannar, Tamil Nadu
 - ✓ Great Nicobar, Andaman & Nicobar Island

- Biosphere Reserves are nominated by the national government and meet a minimal set of criteria under the Man and Biosphere Reserve Program of UNESCO.
- There are currently 738 biosphere reserves in 134 countries, including 22 transboundary sites.
- There are a total of 12 biosphere reserves in India that have been recognized internationally under the Man and Biosphere Reserve program:
 - ✓ Nilgiri (First to be included)
 - ✓ Gulf of Mannar
 - ✓ Sunderban
 - ✓ Nanda Devi
 - ✓ Nokrek
 - ✓ Pachmarhi
 - ✓ Similipal
 - ✓ Achanakmar - Amarkantak
 - ✓ Great Nicobar
 - ✓ Agasthyamala
 - ✓ Khangchendzonga
 - ✓ Panna, Madhya Pradesh

Hence statement 2 is incorrect.

- Biosphere Reserves try to balance economic and social development and maintenance of associated cultural values along with the preservation of nature.
- Biosphere Reserves are thus special environments for both people and nature and are living examples of how human beings and nature can co-exist while respecting each other's needs.
- MAB combines natural and social sciences, economics, and education to improve human livelihoods and the equitable sharing of benefits, and to safeguard natural and managed ecosystems, thus promoting innovative approaches to economic development that are socially and culturally appropriate, and environmentally sustainable. **Hence statement 3 is correct.**

Q. 10) Consider the following statements about the Commission for Air Quality Management (CAQM)

1. With its formation the erstwhile Environment Pollution (Prevention and Control) Authority (EPCA) was dissolved.
2. It is a statutory authority chaired by the Minister of Environment, Forest, and Climate Change.

Choose the correct code:

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

Q.10) Solution: (a)

Explanation:

- The **Commission for Air Quality Management (CAQM)** dissolved the erstwhile **Environment Pollution (Prevention and Control) Authority (EPCA)**.
- The Commission will supersede bodies such as the central and state pollution control boards of Delhi, Punjab, Haryana, UP, and Rajasthan. **Hence statement 1 is correct.**
- The Parliament approved the Commission for Air Quality Management in National Capital Region and Adjoining Areas Bill. So it is a statutory authority chaired by a government official of the rank of Secretary or Chief Secretary.
- The chairperson will hold the post for three years or until s/he attains the age of 70 years. **Hence statement 2 is incorrect.**
- Its powers are:
 - ✓ It will have members from several Ministries as well as representatives from the stakeholder States.
 - ✓ It will have experts from the Central Pollution Control Board (CPCB), Indian Space Research Organisation (ISRO), and Civil Society.

- ✓ It will have the power to issue directions to these state governments on issues pertaining to air pollution.
- ✓ It will entertain complaints as it deems necessary for the purpose of protecting and improving the quality of the air in the NCR and adjoining areas.
- ✓ It will also lay down parameters for the control of air pollution.
- ✓ It will also be in charge of identifying violators, monitoring factories and industries, and any other polluting unit in the region, and will have the power to shut down such units.
- ✓ It will also have the power to overrule directives issued by the state governments in the region, that may be in violation of pollution norms.

Q. 11) Consider the following statements about the Animal Welfare Board of India (AWBI)

1. It is a statutory body under the Environment Protection Act of 1986.
2. It is an advisory body advising the Government of India on animal welfare laws.
3. It is headquartered in the Faridabad District of Haryana.

Choose the correct code:

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

Q.11) Solution: (b)

Explanation:

- The Animal Welfare Board of India (AWBI) is a statutory body under Section 4 of The Prevention of Cruelty to Animals Act, 1960. **Hence statement 1 is incorrect.**
- It is an advisory body advising the Government of India on animal welfare laws and promotes animal welfare in the country of India.

- The Board consists of 28 Members, who serve for a period of 3 years.
- It works to ensure that animal welfare laws in the country are followed and provides grants to Animal Welfare Organisations.
- The Board was initially within the jurisdiction of the Government of India's Ministry of Food and Agriculture. In 1990, the subject of Prevention of Cruelty to Animals was transferred to the Ministry of Environment and Forests, where it now resides. **Hence statement 2 is correct.**
- It is headquartered in the Faridabad District of Haryana. **Hence statement 3 is correct.**

Q. 12) Consider the following statements about the India Cooling Action Plan

1. It aims to reduce cooling energy requirements by 25% to 40% by 2037-38.
2. It aims to reduce refrigerant demand by 50% to 30% by 2037-38.

Choose the correct code:

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

Q.12) Solution: (a)

Explanation:

- The India Cooling Action Plan (ICAP) provides an integrated vision towards cooling across sectors encompassing, *INTER ALIA*, reduction of cooling demand, refrigerant transition, enhancing energy efficiency, and better technology options by 2037-38 through forging synergies with ongoing programmes/ schemes of the Government.
- It is launched by the Ozone Cell of the Union Minister for Environment, Forest and Climate Change(MoEFCC)

- ICAP aims to provide sustainable cooling while keeping in mind, at the same time, the need to protect the ozone layer
- It provides a 20-year perspective, with projections for cooling needs in 2037-38.
- The India Cooling Action seeks to:
 - ✓ reduce cooling energy requirements by 25% to 40% by 2037-38. **Hence statement 1 is correct.**
 - ✓ reduce cooling demand across sectors by 20% to 25% by 2037-38.
 - ✓ reduce refrigerant demand by 25% to 30% by 2037-38. **Hence statement 2 is incorrect.**
 - ✓ recognize cooling and related areas as a thrust area of research under the national S&T Programme.
 - ✓ training and certification of 100,000 servicing sector technicians by 2022-23, synergizing with the Skill India Mission.

Q. 13) Consider the following statements about the Koronivia Joint Work

1. It is a decision under the United Nations Environment Programme.
2. It emphasizes reducing emissions of greenhouse gases due to the agriculture sector.
3. It addresses topics such as soils, nutrient use, water, and livestock.

Choose the correct code:

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

Q.13) Solution: (b)

Explanation:

- **Koronivia Joint Work** is a decision under the **United Nations Framework Convention on Climate Change (UNFCCC)**. Hence statement 1 is incorrect.
- It seeks to recognize the unique potential of agriculture in tackling climate change.
- It emphasizes reducing **emissions of greenhouse gases** due to the **agriculture sector**. Hence statement 2 is correct.
- The Koronivia decision addresses **six interrelated topics** on soils, nutrient use, water, livestock, methods for assessing adaptation, and the socio-economic and food security dimensions of climate change across the agricultural sectors. Hence statement 3 is correct.

Q. 14) Consider the following statements about the Global Offshore Wind Alliance

1. It was set up by the International Renewable Energy Agency (IRENA).
2. Belgium, Colombia, and India are members of this alliance.

Choose the correct code:

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

Q.14) Solution: (a)

Explanation:

- Global Offshore Wind Alliance (GOWA) was established to ramp up offshore wind in order to tackle the climate and energy security crises.
- It was set up by the International Renewable Energy Agency (IRENA), Denmark, and the Global Wind Energy Council (GWEC).

- GWEC was established in 2005 to provide a credible and representative forum for the entire wind energy sector at an international level. **Hence statement 1 is correct.**
- Wind energy today typically comes in two different types:
 - ✓ Onshore wind farms are large installations of wind turbines located on land, and offshore wind farms which are installations located in bodies of water.
 - ✓ Offshore wind energy refers to the deployment of wind farms inside the water bodies. They utilise the sea winds to generate electricity. These wind farms either use fixed-foundation turbines or floating wind turbines.
- The nine new countries sign up for Global Offshore Wind Alliance at COP27.
- They are Belgium, Colombia, Germany, Ireland, Japan, the Netherlands, Norway, the UK, and the US.
- To date, fourteen countries, including Australia, Belgium, Colombia, Denmark, Germany, Ireland, Japan, the Netherlands, Norway, Portugal, Spain, Saint Lucia, the United Kingdom, and the United States of America have joined the Alliance, pledging to a rapid ramp-up of offshore wind. **Hence statement 2 is incorrect.**

Q. 15) Consider the following statements about the World Restoration Flagships

1. They represent large-scale ecosystem restoration in any country or region.
2. National Mission for Clean Ganga initiative has been recognised under it.

Choose the correct code:

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

Q.15) Solution: (c)

Explanation:

- World Restoration Flagships of the UN Decade are the first and most promising examples of large-scale and long-term ecosystem restoration in any country or region.
- They enable the UN Decade to make ecosystem restoration visible to a broad audience and inspire a global movement to enhance efforts to prevent, halt, and reverse the degradation of ecosystems worldwide and raise awareness of the importance of successful ecosystem restoration. **Hence statement 1 is correct.**
- National Mission for Clean Ganga initiative, also called as Namami Gange initiative has been recognised by the United Nations (UN) as one of the Top 10 World Restoration Flagships programmes aimed at reviving the natural world.
- It was selected from over 150 such initiatives from 70 countries across the globe.
- The winning initiatives were unveiled at the UN Biodiversity Conference (COP15) in Montreal.
- The initiative is selected under the United Nations Decade on Ecosystem Restoration, a global movement coordinated by the United Nations Environment Programme (UNEP) and the United Nations Food and Agriculture Organization (FAO). **Hence statement 2 is correct.**

Q. 16) Consider the following statements

1. A climate emergency is a situation in which urgent action is required to reduce or halt climate change.
2. New Zealand is the first and the only country to declare a climate emergency.

Choose the correct code:

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

Q.16) Solution: (a)

Explanation:

- The Oxford Dictionary defines a climate emergency as “a situation in which urgent action is required to reduce or halt climate change and avoid potentially irreversible environmental damage resulting from it”. **Hence statement 1 is correct.**
- The UK was the first country in the world to declare a climate emergency following declarations by Scotland and Wales.
- The UK, Ireland, Canada, New Zealand, and France have all declared climate emergencies. **Hence statement 2 is incorrect.**

Q. 17) Consider the following statements about the Asian Waterbird Census

1. It is part of the global International Waterbird Census (IWC) coordinated by Wetlands International.
2. It noted that duck species like Northern Shoveler and Common teal found during previous surveys are missing.
3. It is jointly coordinated with the Bombay Natural History Society (BNHS) in India.

Choose the correct code:

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

Q.17) Solution: (d)

Explanation:

- Asian Waterbird Census is a citizen-science programme supporting the conservation and management of wetlands and waterbirds worldwide.

- AWC is part of the global International Waterbird Census (IWC) coordinated by Wetlands International.
- AWC runs in parallel with other regional programmes of the IWC in Africa, Europe, West Asia, the Neotropics, and the Caribbean.
- It gives an idea of the birds at the wetland and the health of the wetland; the more the waterbirds, the more suitable the wetland is.
- It helps in better implementation of the Convention on Migratory Species (CMS) and the Convention on Biological Diversity (CBD). **Hence statement 1 is correct.**
- The **Asian Waterbird Census (AWC) 2023** noted that duck species like Northern Shoveler and Common teal found during previous surveys are missing.
- It also noted climate change has affected the number of birds visiting the region. However, the precise impact of climate change on bird migration requires more detailed studies. **Hence statement 2 is correct.**
- AWC in India was initiated in 1987 and since then has grown rapidly to cover major regions of Asia, from Afghanistan eastwards to Japan, Southeast Asia, and Australasia.
- In India, AWC is jointly coordinated by the Bombay Natural History Society (BNHS) and Wetlands International. **Hence statement 3 is correct.**

Q. 18) Consider the following statements about the Purse Seine Fishing

1. It has contact with the seabed and can have high levels of bycatch.
2. It decreases the stock of small, pelagic shoaling fish such as sardines and mackerel.
3. It is used in the open ocean to target dense schools of single-species pelagic (midwater) fish like tuna and mackerel.

Choose the correct code:

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

Q.18) Solution: (b)

Explanation:

- A purse seine fishing is made of a long wall of netting framed with floating and leadline and having purse rings hanging from the lower edge of the gear, through which runs a purse line made from steel wire or rope which allows the pursing of the net.
- The technique has been widely deployed on India's western coasts.
- Purse-seine fishing in open water is considered to be an efficient form of fishing.
- It has no contact with the seabed and can have low levels of bycatch. **Hence statement 1 is incorrect.**
- In some States, this technique is linked to concerns about the decreasing stock of small, pelagic shoaling fish such as sardines, mackerel, anchovies, and trevally on the western coasts.
- The scientific community argues that climatic conditions, including the El Nino phenomenon, are responsible for the declining catch of such fish in the last ten years. **Hence statement 2 is correct.**
- It can also be used to catch fish congregating around fish aggregating devices
- It is used in the open ocean to target dense schools of single-species pelagic (midwater) fish like tuna and mackerel. **Hence statement 3 is correct.**

Q. 19) Consider the following statements about the Wildlife Conservation Bond

1. It is the world's first wildlife bond launched by the World Economic Forum.
2. It is an outcome-based financial instrument to achieve the conservation of black rhino populations.

Choose the correct code:

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

d) Neither 1 nor 2

Q.19) Solution: (b)

Explanation:

- The Wildlife Conservation Bond is **the world's first wildlife bond** priced by the **World Bank**. Hence statement 1 is incorrect.
- It will **raise around USD 150 million which will be partly used for the conservation of black rhinos in South Africa**.
- **It is an outcome-based**, financial instrument that channels investments to achieve conservation outcomes measured in this case by an increase in black rhino populations. The program could be expanded to protect other wildlife species.
- There are five rhino species globally (white and black rhinos in Africa, and the greater one-horned, Javan, and Sumatran), with most of the animals in South Africa and almost all of them are white rhinos as the number of black rhinos is decreasing day by day. **Hence statement 2 is correct.**

Q. 20) Consider the following statements about the world's first Global Registry of Fossil Fuels

1. It is the first-of-its-kind database for tracking the world's fossil fuel production, reserves, and emissions.
2. It has been launched by Carbon Tracker and the Global Energy Monitor.

Choose the correct code:

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

Q.20) Solution: (c)

Explanation:

- The Global Registry of Fossil Fuels is the first-of-its-kind database for tracking the world's fossil fuel production, reserves, and emissions.
- It includes data from over 50,000 oil, gas, and coal fields in 89 countries. That covers 75% of global reserves, production, and emissions. This registry is available for public use. **Hence statement 1 is correct.**
- It has been launched by Carbon Tracker and the Global Energy Monitor. **Hence statement 2 is correct.**

Q.21) Consider the following statements about Right to be forgotten

1. The Right to be Forgotten is the right to remove or erase content so that it's not accessible to the public.
2. In K.S.Puttaswamy vs Union of India Case, 2017, Supreme Court has recognized the right to be forgotten as under the right to privacy.
3. Information Technology Act, 2000 explicitly defines the right to be forgotten.

Choose the correct statements:

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

Q.21) Solution (a)

Explanation:

Right to be forgotten

- The “Right to be Forgotten” is the right to remove or erase content so that it’s not accessible to the public at large. Hence statement 1 is correct.
- It empowers an individual to have information in the form of news, video, or photographs deleted from internet records so it doesn’t show up through search engines.
- While the right is not recognized by a law or a statute in India expressly, the courts have repeatedly held it to be endemic to an individual’s Right to Privacy under Article 21. Hence statement 3 is not correct.
- Apex Court’s 2017 ruling in “K.S.Puttaswamy vs Union of India”. In this case, a nine-judge bench, including CJI Chandrachud, referred to the European Union Regulation of 2016. Hence statement 2 is correct.
- It recognized “the right to be forgotten” an individual’s right to remove personal information from the system when “he is no longer desirous of his personal data to be processed or stored” or when “its no longer necessary, relevant, or is incorrect and serves no legitimate interest”.

Source: [CLICK HERE](#)

Q.22) With reference to ‘Uroosi’, consider the following statements

1. It is a Mughal era architecture element introduced by Shah Jahan
2. They are wooden doors with sloping roof which can withstand seismic shocks
3. Uroosi work contains octagonal and decagonal ornamental pillars

Choose the correct answer using the code given below

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

Q.22) Solution (c)

Explanation:

- **Uroosi is a Mughal-era home architectural element which was introduced by Shah Jahan to Kashmir. Hence statement 1 is correct.**
- Uroosis are **wooden shutters used as partition walls within homes**, instead of concrete walls. The wooden shutters could **be rolled up to make one room**, or rolled down from hanging grooves in ceiling chambers, to partition the space into separate areas. However, it has the **ability to absorb seismic shocks and withstand it. Hence statement 2 is not correct.**
- Uroosi work includes **octagonal and decagonal ornamental pillars too. Hence statement 3 is correct.**

Source: [CLICK HERE](#)

Q.23) Consider the following statements about global targets of Muscat Ministerial Manifesto

1. It includes a global target to minimize the amount of antimicrobials used in agrifood systems by at least 30 to 50 per cent by the end of this decade.
2. It aims to that 'Access' group antibiotics represent at least 60 percent of overall antibiotic consumption in humans by 2030.

Choose the incorrect statements:

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

Q.23) Solution (d)

Explanation:

- The World Antimicrobial Awareness Week 2022 concluded recently with the Muscat Ministerial Manifesto on AMR being agreed upon at the Third Global High-level Ministerial Conference on Antimicrobial Resistance (AMR).

Background:

- This Conference is a follow up of two earlier high level conferences held in the Netherlands in 2014 and 2019.

Theme of the Conference:

- The AMR Pandemic: From Policy to One Health Action.

Three Global Targets:

- **Reducing the total amount of antimicrobials used in agrifood systems** by at least 30 per cent-50 per cent by 2030. **Hence statement 1 is correct.**
- **Preserving critically important antimicrobials for human medicine** and ending the use of medically important antimicrobials for growth promotion in animals.
- Ensuring that **'Access' group antibiotics** (a category of antibiotics that are affordable, safe and have a low AMR risk) represent at least 60 percent of overall antibiotic consumption in humans by 2030. **Hence statement 2 is correct.**

Source: [CLICK HERE](#)

Q.24) Consider the following statements about Roche Limit

1. Roche limit is the minimum distance to which a large satellite can approach its primary body (like Moon and Earth) without being torn apart by tidal forces.
2. Inside the Roche limit, orbiting material will tend to disperse and form rings.

Select the correct code

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

Q.24) Solution (c)

Explanation:

Roche limit

- **Roche limit is the minimum distance to which a large satellite can approach its primary body (like Moon and Earth) without being torn apart by tidal forces. Hence statement 1 is correct.**
- **Inside the Roche limit, orbiting material will tend to disperse and form rings. Hence statement 2 is correct.**
- The Roche limit doesn't just exist between just the Earth and the moon.
- It is **applicable to any planet and the celestial bodies around it.**
- For instance, Saturn. The beautiful rings that you see around the planet are within the Roche limit and therefore, there are no moons in that area.

Source: [CLICK HERE](#)

Q.25) 'Omorgus Khandesh' which was discovered recently is a species of

- a) Honeybee
- b) Bird
- c) Beetle
- d) Tortoise

Q.25) Solution (c)

Explanation:

Omorgus Khandesh

- It is a **beetle** and is **important for forensic science** as it helps **detect the time of death of an animal or human**.
- Omorgus Khandesh is **necrophagous and is, therefore, also called a keratin beetle**.
- During the decomposition of a body, blowflies are amongst the first ones to arrive in the early stages.
- Meanwhile, the final successional stage is with the arrival of the keratin feeders, thus their importance in forensic science.
- The new species belongs to the Trogidae family. With the addition of this new species, now there are a total of 14 extant species of this family in India.
- The beetles of this group are sometimes called hide beetles as they tend to cover their body under the soil and hide.
- **They are not photogenic, they are usually black or grey and encrusted in dirt.**

Source: [CLICK HERE](#)

Directions for the following 2(two) questions: Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusion/s logically follow/s from the statements.

Q.26) Statements: All liquids are solids. Some solids are gases. All gases are clouds

Conclusions:

I. Some clouds are solids

II. Some clouds are liquids

III. Some gases are liquids

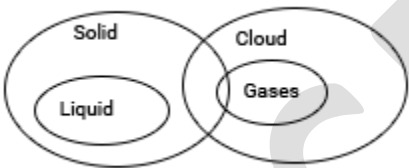
IV. Some solids are clouds

Choose the correct code:

- a) All conclusions I, II and III follow
- b) Either conclusion II or III follows
- c) Only conclusions I and IV follow
- d) Only conclusion II and either conclusion I or III follow

Q.26) Solution (c)

Explanation:



From the Venn diagram,

Only conclusion I and Conclusion IV follow.

Hence, option c is correct.

Q.27) Statements: All Gold is Platinum. No Platinum is silver. Some Diamonds are silver.

Conclusions:

- I. Some Diamonds are Gold
- II. Some Diamonds are Platinum

III. Some Gold is Silver

IV. No Silver is Gold

Choose the correct code:

- a) Either conclusion I or III and conclusion II follow
- b) Only conclusions II and III follow
- c) Only conclusions I and II follow
- d) Only conclusion IV follows

Q.27) Solution (d)

Explanation:



From the Venn diagram,

Only conclusion IV is true for all possibilities.

Hence, option d is correct

Q.28) Identify the conclusions which can be concluded by given statements

Statements

All integers are rationals.

All rationals are reals.

Conclusions

Some reals are not integers.

All integers are reals.

Choose the correct code:

- a) Only conclusion 1 follows
- b) Only conclusion 2 follows
- c) Both conclusions 1 and 2 follow
- d) Neither conclusion 1 nor 2 follows

Q.28) Solution (b)

Explanation:

Statement 1: All integers are rationals.

Statement 2: All rationals are reals.

Conclusion 1: Some reals are not integers. False, it is not stated.

Conclusion 2: All integers are reals. True, all integers are rationals, which are all real. So, all integers are reals.

Q.29) Consider the following statements followed by two conclusions:

Statements: All green are white.

No white is black.

All blacks are blue.

Conclusion I: Some green being black is a possibility.

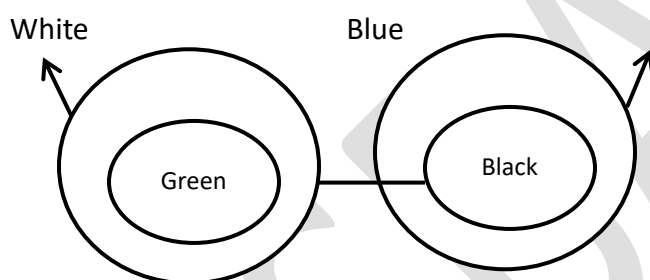
Conclusion II: At least some white are green.

Which one of the following is correct?

- a) Only conclusion I is valid
- b) Only conclusion II is valid
- c) Both the conclusions are valid
- d) Neither of the conclusions is valid

Q.29) Solution (b)

Explanation:



Conclusions:

- I. Some green being black is a possibility. - False - Since no white is black.
- II. At least some white are green. - True - Since all green is white.

Hence, only conclusion II is valid.

Read the following passage and answer the item that follow. Your answer to these items should be based on the passages only

Passage 1

Physics is a pure science that seeks to understand the behavior of matter without regard to whether it will afford any practical benefit. Engineering is the correlative applied science in which physical theories are put to some specific use, such as building a bridge or a nuclear reactor. Engineers obviously rely heavily on the discoveries of physicists, but an engineer's knowledge of the world is not the same as the physicist's knowledge. In fact, an engineer's know-how will often depend on physical theories that, from the point of view of pure physics, are false. There are some reasons for this. First, theories that are false in the purest and strictest sense are still sometimes very good approximations to the true ones, and often have the added virtue of being much easier to work with. Second, sometimes the true theories apply only under highly idealized conditions which can only be created under controlled experimental situations. The engineer finds that in the real world, theories rejected by physicists yield more accurate predictions than the ones that they accept.

Q.30) Which one of the following is the most rational inference that can be drawn from the passage?

- a) The unique task of the engineer is to identify, understand, and interpret the design constraints to produce a successful result.
- b) The relationship between pure and applied science is strictly linear, with the pure science directing applied science, and never the other way round.
- c) Though engineering draws heavily from pure science, it contributes to knowledge, by incorporating the constraints and conditions in the real world.
- d) Engineering and physics fundamentally differ on matters like building a bridge or a nuclear reactor.

Q.30) Solution (c)

Explanation:

The main idea of the given paragraph is that while engineers rely heavily on discoveries of physicists, an engineer's know-how is shaped by conditions in the real world. Option c sums up this idea well.

Option a, ignores the key idea of the paragraph –the relationship between physics and engineering—and only talks of the "unique task of the engineer". So, option a is not a good summary of the paragraph.

Option b labels the relationship between pure and applied science as "strictly linear": this too, is clearly incorrect based on the contents of the given paragraph.

Option d is also incorrect, as it states that engineering and physics "fundamentally differ".