

**Q. 1) Consider the following statements regarding the Wildlife (Protection) Amendment Act of 2022**

1. The number of schedules has been increased from four to six.
2. States can declare areas adjacent to national parks as a conservation reserves.
3. It entrusts the Chief Wildlife Warden to control and maintain all sanctuaries in a state.
4. It provides to voluntarily surrender any captive animals, without any compensation.

Which of the following statements is correct?

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

Q.1) Solution: (b)

**Explanation:**

- The Wildlife (Protection) Amendment Act of 2022 seeks to **conserve and protect wildlife** through better **management** of protected areas and **rationalise schedules** that list out species under the Wildlife (Protection) Act, of 1972.
- The number of schedules has been decreased from six in the Wildlife (Protection) Act, of 1972 to four.

<b>Schedule I</b>	Animal species that will enjoy the highest level of protection
<b>Schedule II</b>	Animal species that will be subject to a lesser degree of protection
<b>Schedule III</b>	Protected Plant species
<b>Schedule IV</b>	Specimens listed in the Appendices under CITES (scheduled specimens)

**Hence statement 1 is incorrect.**

- **States can declare areas adjacent** to National parks and Sanctuaries as **Conservation Reserve**, for protecting flora and fauna, and their habitat. **Hence statement 2 is correct.**
- It entrusts the Chief Wildlife Warden to control and maintain all sanctuaries in a state. The Chief Wildlife Warden is appointed by the state. **Hence statement 3 is correct.**
- For general violations (increases to Rs 1,00,000 from Rs25,000) and specially protected animals (increases to 25,000 from Rs 10,000).
- People possessing live specimens of scheduled animals must obtain a registration certificate from the Management Authority.
- It provides to voluntarily surrender any captive animals, without any compensation. **Hence statement 4 is correct.**

**Q. 2) Consider the following statements regarding the Indian Antarctic Act of 2022**

1. It will apply to any person, vessel, or aircraft that is part of an Indian expedition to Antarctica under a permit issued under the act.
2. The Ministry of Environment, Forest and Climate Change will establish a Committee on Antarctic Governance and Environmental Protection.
3. It prohibits nuclear explosion or disposal of radioactive wastes and the introduction of non-sterile soil in Antarctica.

Choose the correct code:

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

Q.2) Solution: (c)

**Explanation:**

- The Indian Antarctic Act of 2022 seeks to give effect to the Antarctic Treaty, the Convention on the Conservation of Antarctic Marine Living Resources, and the Protocol on Environmental Protection to the Antarctic Treaty.
- It also seeks to protect the Antarctic environment and regulate activities in the region.
- The provisions of the Bill will apply to any person, vessel, or aircraft that is part of an Indian expedition to Antarctica under a permit issued under the Bill. **Hence statement 1 is correct .**
- The Central Government will establish a Committee on Antarctic Governance and Environmental Protection. The Committee will be chaired by the Secretary of the Ministry of Earth Sciences.
- **Hence statement 2 is incorrect.**
- The functions of the Committee include:
  - ✓ granting permits for various activities,
  - ✓ implementing and ensuring compliance with relevant international laws for the protection of the Antarctic environment,
  - ✓ obtaining and reviewing relevant information provided by parties to the Treaty, Convention, and Protocol, and
  - ✓ negotiating fees/charges with other parties for activities in Antarctica.
- The permit will be required for various activities such as:
  - ✓ an Indian expedition to enter or remain in Antarctica,
  - ✓ a person to enter or remain in an Indian station in Antarctica,
  - ✓ a vessel or aircraft registered in India to enter or remain in Antarctica,
  - ✓ a person or vessel to drill, dredge or excavate for mineral resources, or collect samples of mineral resources,
  - ✓ activities that may harm native species, and
  - ✓ waste disposal by a person, vessel, or aircraft in Antarctica.

- Before a permit is granted by the Committee, the applicant has to carry out an environmental impact assessment of the proposed activities.
- Moreover, a permit must not be granted unless a waste management plan has been prepared for the expedition by the Committee.
- It prohibits nuclear explosion or disposal of radioactive wastes, the introduction of non-sterile soil, **and the** discharge of garbage, plastic, or other substance into the sea which is harmful to the marine environment in Antarctica. **Hence statement 3 is correct.**

**Q. 3) Consider the following statements regarding the Geo-heritage sites**

1. It refers to the geological features which are culturally significant offering insight into the earth's evolution.
2. In India it is declared by the Geological Survey of India (GSI)
3. The Siwalik Fossil Park in Himachal Pradesh is one of the Geo-heritage sites.

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:**

- Geo-heritage refers to the geological features which are inherently or culturally significant offering insight into earth's evolution or history to earth science or that can be utilized for education. **Hence statement 1 is correct.**
- The Geological Survey of India (GSI) is the parent body that is making efforts toward the identification and protection of geo-heritage sites/national geological monuments in the country.

- **GSI** was set up in 1851 primarily to find coal deposits for the Railways. Presently, GSI is an attached office to the Ministry of Mines.
- The main functions of the GSI relate to the creation and updation of national geoscientific information and mineral resource assessment.
- It is headquartered in Kolkata. **Hence statement 2 is correct.**
- There are **34 Geological Heritage Sites in India.**
- **The Siwalik Fossil Park in Himachal Pradesh is one of the Geo-heritage sites.**
- It displays a rich collection of vertebrate fossils recovered from the Siwalik rocks of the area of Plio-Pleistocene age (2.6 million to 11,700 years ago).
- The deposition of Siwalik sediments took place in the narrow linear depression, called the 'fore deep', which started developing in front of the Himalayas since the inception of its uplift in the middle Miocene (23 million years to 2.6 million years ago). **Hence statement 3 is correct.**

**Q. 4) Match the following**

Ramsar Sites	States
1. Chandra Taal	a) Goa
2. Hokera Wetland	b) Tripura
3. Nanda Lake	c) Himachal Pradesh
4. Rudrasagar Lake	d) Kerala
5. Sasthamkotta lake	e) Jammu & Kashmir

Choose the correct code:

- a) 1-b;2-e;3-a;4-c;5-d;
- b) 1-c;2-e;3-d;4-a;5-b;
- c) 1-c;2-e;3-a;4-b;5-d;
- d) 1-d;2-a;3-e;4-b;5-c;

Q.4) Solution: (c)

**Explanation:**

Ramsar Sites	States
Chandra Taal	Himachal Pradesh
Hokera Wetland	Jammu & Kashmir
Ropar Wetland	Punjab
Rudrasagar Lake	Tripura
Sasthamkotta lake	Kerala
Sirpur Wetland	Madhya Pradesh
Ranganathittu Bird Sanctuary	Karnataka
Nanda Lake	Goa
Satkosia Gorge	Odisha
Udhayamarthandapuram Bird Sanctuary	Tamil Nadu
Vedanthangal Bird Sanctuary	Tamil Nadu

Hence option c is correct.

**Q. 5) Consider the following statements regarding the Battery Waste Management Rules, 2022**

1. It has included portable batteries and automotive batteries but not electric vehicle batteries.
2. There is a centralized online portal for the exchange of Extended Producer Responsibility certificates between producers and recyclers.
3. It has made mandatory to recover minimum percentage of materials from waste batteries.

Choose the correct code:

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

Q.5) Solution: (b)

**Explanation:**

- The Ministry of Environment, Forest and Climate Change published the Battery Waste Management Rules, 2022 to ensure environmentally sound management of waste batteries and replace the Batteries (Management and Handling) Rules, 2001.
- It has included portable batteries, industrial batteries, electric vehicle batteries, and automotive batteries. **Hence statement 1 is incorrect.**
- **Producers (including importers)** of batteries are responsible for the collection and **recycling/refurbishment of waste** batteries and the use of recovered materials from waste into new batteries.
- Setting up new industries and entrepreneurship in the collection and recycling/refurbishment of waste batteries.
- There is a **centralized online portal** for the exchange of **Extended Producer Responsibility certificates** between producers and recyclers. **Hence statement 2 is correct.**
- The use of a certain amount of recycled materials for new batteries will reduce the dependency on new raw materials and save natural resources
- Online registration & reporting, auditing, and a committee to monitor and implement rules and to take measures required for removal of difficulties.
- Environmental compensation will be imposed for non-fulfillment of Extended Producer Responsibility targets, responsibilities, and obligations set out in the rules.
- The funds collected under environmental compensation shall be utilized in the collection and refurbishing or recycling of uncollected and non-recycled waste batteries.
- It has a **mandatory minimum percentage of recovery of materials from waste batteries.**

- It will bring new technologies and investment in the recycling and refurbishment industry and create new business opportunities. **Hence statement 3 is correct.**

**Q. 6) Consider the following statements regarding the Lifestyle for the Environment (LiFE) Movement**

1. It plans to create and nurture a global network of individuals, namely 'Pro-Planet People'(P3).
2. It was launched by the USA during the COP 26 of the United Nations Climate Change Framework Convention (UNFCCC).
3. It promotes an environmentally conscious lifestyle that focuses on 'mindful and deliberate utilisation'.

Choose the correct code:

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

Q.6) Solution: (c)

**Explanation:**

- The Lifestyle for the Environment (LiFE) Movement plans to create and nurture a global network of individuals, namely '**Pro-Planet People'(P3)**.
- P3 will have a shared commitment to adopt and promote environmentally friendly lifestyles.
- Through the P3 community, the mission seeks to create an ecosystem that will reinforce and enable environmentally friendly behaviours to be self-sustainable.
- It seeks to leverage the strength of social networks to influence social norms surrounding climate. **Hence statement 1 is correct.**



- It was launched by India during the COP 26 of the **United Nations Climate Change Framework Convention (UNFCCC)** in Glasgow in 2021. **Hence statement 2 is incorrect.**
- It **promotes an environmentally conscious lifestyle** that focuses on 'mindful and deliberate utilisation' instead of 'mindless and wasteful consumption'.
- With the launch of the Mission, the prevalent "use-and-dispose" economy governed by mindless and destructive consumption will be replaced by a circular economy, defined by conscious and deliberate consumption. **Hence statement 3 is correct.**

**Q. 7) Consider the following statements regarding various species-specific enforcement operations led by the Wildlife Crime Control Bureau (WCCB)**

1. Operation Save Kurma to tackle the illegal trade of live turtles and tortoises.
2. Operation Softgold to tackle the illegal trade in Shahtoosh Shawl.
3. Operation Freely to tackle the illegal trade of live birds.
4. Operation Wetmark to ensure the prohibition of the sale of meat of wild animals.

Choose the correct code:

- a) Only one statement is correct
- b) Two statements are correct
- c) Three statements are correct
- d) Four statements are correct

Q.7) Solution: (d)

**Explanation:**

- The Wildlife Crime Control Bureau (WCCB) is a statutory organization established by the Indian government under the Ministry of Environment, Forests, and Climate Change to combat organized wildlife crime.
- The Bureau's headquarters are in New Delhi, and it also maintains five regional offices in addition to ones in Kolkata, Mumbai, Chennai, and Jabalpur.

- **Various species-specific enforcement operations led by the Wildlife Crime Control Bureau (WCCB)**
- Operation Save Kurma to tackle the illegal trade of live turtles and tortoises. **Hence statement 1 is correct.**
- **Operation Softgold** to tackle the illegal trade in **Shahtoosh Shawl**. **Hence statement 2 is correct.**
- Operation Freely to tackle the illegal trade of live birds. **Hence statement 3 is correct.**
- **Operation Wetmark** to ensure the **prohibition of the sale of meat of wild animals**. **Hence statement 4 is correct.**
- Operation Birbil was launched to curb illegal trade in wild cats and wild bird species.
- Operation Wildnet aimed to draw the attention of the enforcement agencies within the country to focus their attention on the ever-increasing illegal wildlife trade over the internet using social media platforms.
- Operation Turtshield was taken up to tackle the illegal trade of live turtles.
- Operation Lesknow was launched to gain the attention of enforcement agencies toward the illegal wildlife trade in lesser-known species of wildlife.
- Operation Clean Art was launched to drag the attention of enforcement agencies toward the illegal wildlife trade in Mongoose hair brushes.

**Q. 8) Consider the following statements regarding the Forest (Conservation) Rules 2022**

1. It will allow private developers to clear forests without first seeking the permission of the forest dwellers.
2. It constitutes the Forest Advisory Committee (FAC) to approve diverting of forest land.

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:**

- The Forest (Conservation) Rules 2022 deal with the implementation of the **Forest Conservation Act (FCA), 1980**. They prescribe the **procedure to be followed for forest land** to be diverted for non-forestry uses such as road construction, highway development, railway lines, and mining.
- It will allow private developers to clear forests without first seeking the permission of the forest dwellers.
- It means that the Union government has the right to permit the clearance of a forest without informing its authentic residents.
- Residents won't have any claim over their forest area in case of any diversion to non-forestry activities.
- The rules make a provision for private parties to cultivate plantations and sell them as land to companies who need to meet compensatory forestation targets. **Hence statement 1 is correct.**
- The **Forest Conservation Act (FCA), 1980** constitutes the **Forest Advisory Committee (FAC)** to approve diverting forest land and not the forest conservation rules 2022.
- For forest land beyond **five hectares**, approval for diverting land must be given by the Central government to states. This is via a specially constituted committee, called the **Forest Advisory Committee (FAC)**.
- under the new rules that a project, once approved by the FAC, will then be passed on to the State authorities who will collect the compensatory fund and land, and process it for final approval.
- Previously consent of gram sabha, or the governing body in villages in the area, was required to give written consent to the diversion of the forest. **Hence statement 2 is incorrect.**

**Q. 9) Consider the following statements regarding the World Forestry Congress**

1. It is held every three years.
2. The Seoul Declaration was adopted at XV World Forestry Congress.
3. India hosted the first Congress in Asia.

Choose the correct code:

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

Q.9) Solution: (b)

**Explanation:**

- The World Forestry Congress **provides a forum for inclusive discussion** on the key challenges and way forward for the forestry sector.
- It is held every six years. **Hence statement 1 is incorrect.**
- The **Seoul Declaration** was adopted at **XV World Forestry Congress 2022.**
- **It was signed by 141 participant countries.**
- **It was** hosted by the Republic of Korea and co-organized with FAO and was the second congress held in Asia.
- The theme for 2022 was “Building a Green, Healthy, and Resilient”.
- It urges that **responsibility for forests should be shared and integrated across institutions**, sectors, and stakeholders.
- It reports investment in forest and landscape restoration globally needs to triple by 2030 to meet internationally agreed commitments and targets on restoring degraded land. **Hence statement 2 is correct.**
- Indonesia hosted the **first Congress in Asia in 1978. Hence statement 3 is incorrect.**

**Q. 10) Consider the following statements regarding the Stockholm Convention**

1. It is a global treaty to protect human health and the environment from persistent organic pollutants (POPs).
2. The Global Environmental Facility (GEF) provides financial assistance to the convention.

3. Recently, it listed chlorpyrifos as a persistent organic pollutant (POPs).

Choose the correct code:

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

Q.10) Solution: (a)

**Explanation:**

- The Stockholm Convention is a global treaty to protect human health and the environment from persistent organic pollutants (POPs).
- It focuses on eliminating or reducing releases of POPs. It sets up a system for tackling additional chemicals identified as unacceptably hazardous.
- Over 152 countries ratified the Convention and it entered into force in 2004. **Hence statement 1 is correct.**
- The Global Environmental Facility (GEF) provides financial assistance to the convention. **Hence statement 2 is correct.**
- Recently, the United Nations Environment Programme (UNEP)'s proposal to list chlorpyrifos as POP was resisted by India. However, chlorpyrifos got nominated as a persistent organic pollutant. **However it is still not included in POPs**
- The convention currently regulates 31 chemicals as POPs under three annexes named Annex A (Elimination), Annex B (Restriction), and Annex C (Unintentional production).
- Chlorpyrifos was registered under the Insecticide Act of 1968 since 1977 and Anupam Verma Committee recommended its review for continued use in 2015.
- Chlorpyrifos was approved for agricultural use in 2021, which includes its use as a pesticide against pests affecting Bengal gram, rice, and cotton. It was approved for 18 crops in India.
- China and India are among the largest producers of chlorpyrifos. **Hence statement 3 is incorrect.**

**Q. 11) Consider the following statements regarding the Globally Important Agricultural Heritage Systems (GIAHS)**

1. They focus on agricultural practices that provide livelihoods in rural areas by combining biodiversity and tradition.
2. It is led by the United Nations Environment Programme.
3. India does not have any recognised Globally Important Agricultural Heritage Systems (GIAHS) yet.

Choose the incorrect code:

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

Q.11) Solution: (b)

**Explanation:**

Here the question is asking to choose 'incorrect' statements.

- The Globally Important Agricultural Heritage Systems (GIAHS) focus on agricultural practices that provide livelihoods in rural areas by combining biodiversity and tradition.
- They are home to communities that have complex links to their surroundings.
- These dynamic locations are resilient ecosystems with exceptional agrobiodiversity, traditional knowledge, priceless cultures, and landscapes that are sustainably maintained by farmers, herders, fishermen, and forest dwellers in ways that support their livelihoods and food security. **Hence statement 1 is correct.**
- Over 60 sites have been recognized by the Food and Agriculture Organization of the United Nations through the Globally Important Agricultural Heritage Systems Programme. **Hence statement 2 is incorrect.**
- Koraput Traditional Agriculture (Odisha), Below Sea Level Farming System in Kuttanad (Kerala), and Pampore Saffron Heritage (Jammu & Kashmir) are recognised as GIAHS in India. **Hence statement 3 is incorrect.**

**Q. 12) Consider the following statements regarding the Ambition on Melting Ice (AMI) Group**

1. It aims to ensure impacts of cryosphere loss are understood by everyone throughout the world.
2. Chile, India, Peru, and the Czech Republic are among their founding members.
3. It was launched at the COP 27 of the United Nations Framework Convention on Climate Change (UNFCCC).

Choose the correct code:

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

Q.12) Solution: (c)

**Explanation:**

- The Ambition on Melting Ice (AMI) Group aims to ensure impacts of cryosphere loss are understood by political leaders and the public, not only within the mountain and polar regions but throughout the planet.
- Cryosphere encompasses all the parts of the Earth system where water is in solid form, including ice sheets, ice shelves, glaciers, snow cover, permafrost (frozen ground), sea ice, and river and lake ice. **Hence statement 1 is correct.**
- Its founding members are Chile, Iceland, Peru, Czech Republic, Nepal, Finland, Senegal, Kyrgyz Republic, Samoa, Georgia, Switzerland, New Zealand, Monaco, Vanuatu, Sweden, Tanzania, Liberia, Norway, and Mexico.
- India is not its founding member. **Hence statement 2 is incorrect.**
- It was launched at the COP 27 of the United Nations Framework Convention on Climate Change (UNFCCC). It was held in Sharm El-Sheikh. **Hence statement 3 is correct.**

**Q. 13) Consider the following statements regarding the Mangrove Alliance for Climate**

1. It is an intergovernmental alliance that works voluntarily.
2. It is an intergovernmental alliance that works voluntarily as there are no real checks and balances to hold members accountable.
3. India is a member of this alliance.

Choose the correct code:

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

Q.13) Solution: (d)

**Explanation:**

- The Mangrove Alliance for Climate seeks to educate and spread awareness worldwide on the role of mangroves in curbing global warming and its potential as a solution for climate change.
- It is an **intergovernmental alliance that works voluntarily** which means that there are no real checks and balances to hold members accountable.
- Instead, the parties will decide their commitments and deadlines regarding the planting and restoring mangroves.
- The members will also share expertise and support each other in researching, managing, and protecting coastal areas. **Hence statement 1 is correct.**
- It was launched by **the UAE and Indonesia** during the **COP27 climate summit** in Sharm El Sheikh, Egypt. **Hence statement 2 is correct.**
- It includes UAE, Indonesia, India, Sri Lanka, Australia, Japan, and Spain.
- India is a member of this alliance. **Hence statement 3 is correct.**



**Q. 14) Consider the following statements regarding the Global Environment Facility**

1. Initially, it was established by the World Bank to provide funding to protect the global environment.
2. It is headquartered in Geneva, Switzerland.
3. It serves as a financial mechanism only for Convention on Biological Diversity (CBD).

Choose the correct code:

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

Q.14) Solution: (a)

**Explanation:**

- The Global Environment Facility is a financial mechanism established as per Article 11 of the UNFCCC for convention implementation that will operate under the supervision and accountability of the UNFCCC COP.
- The World Bank established the Global Environment Facility (GEF) in 1991 in collaboration with the United Nations Development Programme (UNDP) and the United Nations Environment Programme (UNEP) to provide funding to protect the global environment.
- At the Rio Earth Summit in 1992, the GEF was restructured and separated from the World Bank system to become a permanent, separate institution.
- However, since 1994, the World Bank has served as a Trustee of the GEF Trust Fund and has provided administrative services. **Hence statement 1 is correct.**
- It is headquartered in Washington, DC, USA. **Hence statement 2 is incorrect.**
- The GEF provides funding to developing countries to help them meet the goals of international environmental treaties.
- Five conventions rely on the GEF as a "financial mechanism":
  - Convention on Biological Diversity (CBD)

- UN Framework Convention on Climate Change (UNFCCC)
- The United Nations Convention to Combat Desertification (UNCCD)
- Stockholm Convention on Persistent Organic Pollutants (POPs)
- Minamata Mercury Convention. **Hence statement 3 is incorrect.**

**Q. 15) Consider the following statements regarding the India Cooling Action Plan (ICAP)**

1. It was launched by the Ministry of Environment, Forests, and Climate Change.
2. It seeks to reduce cooling demand across sectors by 40% by 2037-38.
3. It seeks to reduce cooling energy requirements by 25% to 40% by 2037-38.

Choose the correct code:

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

Q.15) Solution: (c)

**Explanation:**

- The India Cooling Action Plan (ICAP) provides a **20-year perspective and outlines actions** needed to provide access to sustainable cooling.
- It was launched by the **Ministry of Environment, Forests, and Climate Change** in March 2019. **Hence statement 1 is correct.**
- It seeks to **reduce refrigerant demand** by 25% to 30% by 2037-38.
- It seeks to reduce cooling demand across sectors by 20% to 25% by 2037-38. **Hence statement 2 is incorrect.**
- It seeks to recognise cooling and related areas as a thrust area of research under the National Science and Technology Programme

- It seeks to **reduce cooling energy requirements** by 25% to 40% by 2037-38. **Hence statement 3 is correct.**

**Q. 16) Consider the following statements regarding the Montreal Protocol**

1. It is an agreement to stop the production of substances causing ozone depletion.
2. It is the only UN treaty ever that has been ratified by all UN Member States.
3. India is not a member of this protocol.

Choose the correct code:

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

Q.16) Solution: (d)

**Explanation:**

- The **Montreal Protocol** is an **agreement to stop the production of substances causing ozone depletion.**
- It was adopted on 16 September 1987.
- It has led to the phase-out of 99% of ozone-depleting chemicals in refrigerators, air-conditioners, and many other products. **Hence statement 1 is correct.**
- It is the **only UN treaty ever that has been ratified by all UN Member States. Hence statement 2 is correct.**
- India is a party to the Montreal Protocol since June 1992. **Hence statement 3 is incorrect.**

**Q. 17) Consider the following statements regarding the AWARe Initiative**

1. It is an initiative of the United Nations Framework Convention on Climate Change.
2. It will have an Africa-first focus, especially on drought-ravaged populations in the Horn of Africa.
3. It focuses on cooperation and interlinkages between water and climate action.

Choose the correct code:

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

Q.17) Solution: (b)

**Explanation:**

- The AWARe Initiative will catalyze inclusive cooperation to address water as a key to climate change adaptation and resilience including partnerships for early warning systems and early action.
- It is an initiative of the African Union (AU), Water and Climate Coalition Leaders, the World Meteorological Organization (WMO), and the African Ministers' Council on Water (AMCOW). **Hence statement 1 is incorrect.**
- It will have an Africa-first focus, especially on drought-ravaged populations in the Horn of Africa. **Hence statement 2 is correct.**
- It focuses on decreasing water losses worldwide and improving water supply, proposing and supporting implementing policies for cooperative water-related adaptation action, and cooperation and interlinkages between water and climate action. **Hence statement 3 is correct.**

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

1. Clean Energy Ministerial is a high-level global forum to promote clean energy technology.
2. The Global Clean Energy Action Forum was hosted for the first time by the US.

Choose the correct code:

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

Q.18) Solution: (c)

**Explanation:**

- **Clean Energy Ministerial** is a high-level global forum to promote clean energy technology, share lessons learned and best practices, and encourage the transition to a global clean energy economy.
- It was established in December 2009 at the UN's Framework Convention on Climate Change conference of parties in Copenhagen. **Hence statement 1 is correct.**
- The **Global Clean Energy Action Forum** was hosted for the first time by the US.
- It is a joint convening of the 13th Clean Energy Ministerial (CEM 13) and the 7th Mission Innovation Ministerial (MI-7), in September 2022.
- The theme for CEM13/MI-7 is Rapid Innovation and Deployment.
- This means accelerating the pace and scale of innovation through collaboration and shared strategies for the deployment of clean energy technologies.
- Mission Innovation (MI) is a **global initiative catalysing a decade of action and investment** in research, development, and demonstration to make clean energy affordable, attractive, and accessible for all. **Hence statement 2 is correct.**

**Q.19) Consider the following statements regarding the Global Alliance for Industry Decarbonisation**

1. It provides a platform for industries to exchange ideas toward net zero carbon emission.
2. The World Bank is the organisational agency for this alliance.

Choose the correct code:

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

Q.19) Solution: (a)

**Explanation:**

- The Global Alliance for Industry Decarbonisation provides a platform for industries to exchange ideas toward net zero carbon emission.
- It aims to accelerate net-zero ambitions and decarbonisation of industrial value chains in pursuit of the 2015 Paris Agreement climate goals.
- It was formed under the Bali Declaration adopted during IRENA's Investment Forum on Energy Transitions held in Bali, Indonesia.
- It will strengthen dialogue and coordinate action by industrial stakeholders from across the public and private sectors. **Hence statement 1 is correct.**
- The International Renewable Energy Agency (IRENA) is the organisational agency for this alliance.
- It will be co-chaired by Siemens Energy, which was a major driver for its creation.
- Its founding members includes IRENA, Siemens Energy Enel Green Power, TAQA Arabia, Eni, Technip Energies, EDF Renewables, JSW (India), Tata Steel (India), Sable Chemicals, Tatanga Energy, Roland Berger, Repsol, Equinor and TAQA. **Hence statement 2 is incorrect.**

**Q. 20) Consider the following statements regarding the Convention on Biological Diversity (CBD)**

1. It is a legally binding treaty to conserve biodiversity.
2. Its secretariat is based in Montreal, Canada.
3. Cartagena Protocol on Biosafety is one of its supplementary agreements.

Choose the correct code:

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

Q.20) Solution: (d)

**Explanation:**

- The Convention on Biological Diversity (CBD) is a legally binding treaty to conserve biodiversity that has been in force since 1993 and has been ratified by 196 nations.
- It sets out guidelines for countries to protect biodiversity, ensure sustainable use, and promote fair and equitable benefit sharing. **Hence statement 1 is correct.**
- Its **secretariat is based in Montreal, Canada. Hence statement 2 is correct.**
- **Cartagena Protocol on Biosafety is one of its supplementary agreements.**
- **It was** adopted in 2000. It came into force on 11th September 2003.
- The Protocol seeks to protect biological diversity from the potential risks posed by living modified organisms resulting from modern biotechnology. **Hence statement 3 is correct.**

**Q.21) With reference to 'Customs, Excise and Service Tax Appellate Tribunal', consider the following statements**

1. CESTAT is a quasi-judicial body constituted under the Administrative Tribunals Act
2. It has the power to grant compensation owing to unlawful action of revenue authorities

3. The Tribunal also has appellate jurisdiction in Anti-Dumping matters

Choose the correct answer using the code given below

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

Q.21) Solution (b)

**Explanation:**

- The Customs, Excise and Service Tax Appellate Tribunal (CESTAT) is an **Indian quasi-judicial body** that hears appeals against orders and decisions passed under the Customs Act, 1962 and Central Excise Act, 1944 as amended from time to time. It was constituted as Customs, Excise and Gold (Control) Appellate Tribunal (CEGAT) **under section 129 of Customs Act, 1962. Hence statement 1 is not correct.**
- CESTAT functions with the following limitations as it **CAN NOT** – 1)grant compensation owing to unlawful action of revenue authorities2)review its own order as any quasijudicial authority cannot review its own order -3) exercise powers beyond statute as it is a creature of statute only. It cannot issue writs or grant relief which ought to be granted by high court. **Hence statement 2 is not correct.**
- The Tribunal also has **appellate jurisdiction in Anti-Dumping matters** and the Special Bench headed by the President, CESTAT, **hears appeals against the orders passed by the Designated Authority in the Ministry of Commerce. Hence statement 3 is correct.**

Source: [CLICK HERE](#)

Q.22) Consider the following statements with respect to 'CAR T-cell therapy'

1. CAR T cells can be either derived from T cells in a patient's own blood (autologous) or from another healthy donor
2. The Engineered T cells allows doctors to control the persistence or activity of the T cells in the patient's body

Select the correct statement(s)

- a) 1 only



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

Q.22) Solution (c)

**Explanation:**

- CAR T cells can be **either derived from T cells in a patient's own blood (autologous) or derived from the T cells of another healthy donor (allogeneic)**. Once isolated from a person, these T cells are genetically engineered to express a specific CAR, which programs them to target an antigen that is present on the surface of tumors. **Hence statement 1 is correct.**
- Adding a **synthetic control mechanism to engineered T cells allows doctors to precisely control the persistence or activity of the T cells in the patient's body**, with the goal of reducing toxic side effects.
- Current methods for controlling CAR T cells include systemic immunosuppressive agents, e.g., corticosteroids. **Hence statement 2 is correct.**

Source: [CLICK HERE](#)

**Q.23) With reference to 'The Roadmap 2030', consider the following statements**

1. It provides a framework for India to scale up renewable energy usage to meet climate goals
2. It is formulated by NITI Aayog in association with Ministry of Environment, Forests and Climate change

Select the correct statement(s)

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

Q.23) Solution (d)

**Explanation:**

- It was launched in 2021, during the **India-U.K. virtual summit**. The roadmap heralds the commencement of an '**Enhanced Trade Partnership**' between India and the United Kingdom, with goals of doubling the value of UK-India trade by 2030 and expediting the first phase of prenegotiations for a future free trade deal. **Hence statement 1 is not correct.**
- It is **not related to environment**. It was jointly formulated by Indian and U.K. governments. **Hence statement 2 is not correct.**

Source: [CLICK HERE](#)

**Q.24) Consider the following statements with respect to 'Blue flag certification'**

1. It is an eco-label accorded by the Foundation for Environment Education (FEE)
2. Beaches outside mainland India were awarded this certification for the first time recently
3. Blue flag certification entitles the beach administration to grants from UNEP

Choose the correct answer using the code given below

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

Q.24) Solution (a)

**Explanation:**

- **Foundation for Environment Education in Denmark (FEE) accords the globally recognized eco-label - Blue Flag certification.** In order to qualify for this prestigious award, a series of stringent environmental, educational, safety related and access-related criteria must be met and maintained.
- The mission of Blue Flag is to promote sustainability in the tourism sector, through environmental education, environmental protection and other sustainable development practices. **Hence statement 1 is correct.**
- The **Indian beaches** in the blue list are Shivrajpur Gujarat, Ghoghla-Diu, Kasarkod and Padubidri Karnataka, Kappad-Kerala, Rushikonda- Andhra Pradesh, Golden-Odisha, Radhanagar- Andaman and Nicobar, Kovalam in Tamil Nadu and Eden in Puducherry

beaches. Radhanagar beach in Andamans was the first blue flag beach outside mainland India. **Hence statement 2 is not correct.**

- The **advantages of the Blue Flag programme are many and varied**: from the primary objectives of environmental protection and education for sustainable development, to the financial rewards such accreditation brings in the form of more visitors looking for a higher level of environmental responsibility, the Blue Flag is a trusted symbol the world over. **There is no entitlement for grants from UNEP. Hence statement 3 is not correct.**

Source: [CLICK HERE](#)

**Q.25) 'Research Innovation Initiative Gathering (RIIG)' seen in news is associated with**

- a) G20
- b) BRICS
- c) NATO
- d) I2U2

Q.25) Solution (a)

**Explanation:**

**Research Innovation Initiative Gathering (RIIG) is associated with G20.** India highlighted that materials for sustainable energy, scientific challenges & opportunities to achieving a sustainable blue economy, biodiversity, and economy would be the major themes and topics of the Research Innovation Initiative Gathering (RIIG) during India's presidency starting from 1st December 2022.

Source: [CLICK HERE](#)

**Q.26) The length of a rectangular floor is more than its breadth by 200%. If Rs. 324 is required to paint the floor at the rate of Rs. 3 per sq m, then what would be the length of the floor?**

- a) 27 m
- b) 24 m
- c) 18 m
- d) 21 m

Q.26) Solution (c)

**Explanation:**

Let the length and the breadth of the floor be  $l$  m and  $b$  m respectively.

$$l = b + 200\% \text{ of } b = l + 2b = 3b$$

$$\text{Area of the floor} = 324/3 = 108 \text{ sq m}$$

$$l b = 108 \text{ i.e., } l * l/3 = 108$$

$$l^2 = 324 \Rightarrow l = 18.$$

**Q.27) The sector of a circle has radius of 21 cm and central angle 135°. Find its perimeter?**

- a) 91.5 cm
- b) 93.5 cm
- c) 94.5 cm
- d) 92.5 cm

Q.27) Solution (a)

**Explanation:**

Perimeter of the sector = length of the arc + 2(radius)

$$= (135/360 * 2 * 22/7 * 21) + 2(21)$$

$$= 49.5 + 42 = 91.5 \text{ cm}$$

**Q.28) A metallic sphere of radius 12 cm is melted and drawn into a wire, whose radius of cross section is 16cm. What is the length of the wire?**

- a) 45 cm
- b) 18 cm
- c) 9 cm
- d) 20 cm

Q.28) Solution (c)

**Explanation:**

Volume of the wire (in Cylindrical shape) is equal to the volume of the sphere.

$$\pi(16)^2 * h = (4/3)\pi (12)^3$$

$$\Rightarrow h = 9 \text{ cm}$$

**Q.29) The radius of a wheel is 22.4 cm. What is the distance covered by the wheel in making 500 resolutions.**

- a) 252 m
- b) 704 m
- c) 352 m
- d) 808 m

Q.29) Solution (b)

**Explanation:**

In one resolution, the distance covered by the wheel is its own circumference.

Distance covered in 500 resolutions.

$$= 500 * 2 * \frac{22}{7} * 22.4$$

$$= 70400 \text{ cm}$$

$$= 704 \text{ m}$$

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

#### Passage 1

Two years ago, the state legislature significantly increased the fines for distracted driving offenses in an attempt to reduce traffic accidents. The legislature also made such offenses more severe with regard to possible driver license suspensions, and publicized the new penalties on highway

signs and television commercials. Yet recent studies show that since the changes, the number of tickets for distracted driving has actually increased state-wide.

**Q.30) Which one of the following, if true, most helps to resolve the apparent discrepancy in the passage above?**

- a) Car manufacturers have recently added some safety features, such as additional lights or audible signals, to warn drivers who are veering out of traffic lanes.
- b) Some drivers in the state are still unaware of the changes to the distracted driving laws.
- c) The increase in distracted driving tickets within the state is a statistically significant increase.
- d) The state has experienced a significant population boom over the past two years.

Q.30) Solution (d)

**Explanation:**

The correct answer choice resolves the discrepancy by explaining that an overall population increase could increase the total number of tickets despite the deterring effects of the legislative change. Note that it is the total number of tickets, not the average tickets per person that has increased.

The only other answer choice that comes close to explaining the discrepancy is that some drivers are unaware of the changes. However, this answer choice is weak, as it only applies to “some” drivers; more importantly, it does not explain why the total number of tickets has increased rather than stayed the same. The other answer choices are not useful in explaining the discrepancy.