

Q.1) Consider the following statements with respect Loss and Damage (L&D):

1. Under L&D, rich countries that have historical responsibility for climate change are asked to be liable to the developing countries.
2. Warsaw International Mechanism (WIM) acknowledges that "loss and damage" associated with the adverse effects of climate change.
3. Paris Agreement provides a basis for liability of industrialized countries towards developing countries under loss and damage framework.

Which of the following statement given above is/are correct?

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

Q.1) Solution (a)

Explanation

Statement 1: Under L&D, rich countries who have historical responsibility for climate change are asked to be liable to the developing countries who are already facing climate change impacts. **So statement 1 is correct.**

Statement 2: The Warsaw International Mechanism (WIM) on Loss and Damage came into being in 2013(COP 19). It acknowledges that "loss and damage associated with the adverse effects of climate change includes, and in some cases involves more than that which can be reduced by adaptation". **So statement 2 is correct.**

Statement 3: In Paris Agreement 2015 (COP 21), developed countries agreed to include loss and damage in the agreement, but only with an added clause that the specific article which relates to loss and damage "does not involve or provide a basis for any liability or compensation". **So statement 3 is incorrect.**

Q.2) Consider the following statements about "Montreal Protocol":

1. It is the multilateral environmental agreement that regulates the production and consumption of nearly 1000 ozone depleting substances (ODS).
2. It is till date only UN treaty that is ratified by all UN members.

Which of the above statements is/are incorrect?

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

Q.2) Solution (b)

Explanation

Statement 1: The Montreal Protocol on Substances that Deplete the Ozone Layer is a global agreement to protect the Earth's ozone layer by phasing out the chemicals that deplete it. This phase-out plan includes both the production and consumption of ozone-depleting substances. The landmark agreement was signed in 1987 and entered into force in 1989. **The Montreal Protocol targets 96 ozone depleting chemicals in thousands of applications across more than 240 industrial sectors. (So, statement 1 is incorrect)**

Statement 2: The Vienna Convention and the Montreal Protocol have each been ratified by 196 nations and the European Union, making them the first universally ratified treaties in United Nations history. Due to its widespread adoption and implementation, the Montreal Protocol has been hailed as an example of exceptional international cooperation, with Kofi Annan describing it as "perhaps the single most successful international agreement to date". **(Hence, statement 2 is correct)**

Do you know?

The most recent amendment, the Kigali Amendment, called for the phase-down of hydrofluorocarbons (HFCs) in 2016. These HFCs were used as replacements for a batch of ozone-depleting substances eliminated by the original Montreal Protocol. Although they do not deplete the ozone layer, they are known to be powerful greenhouse gases and, thus, contributors to climate change.

Q.3) Consider the following statements regarding "Climate Financing":

1. Global Environment Facility (GEF) was established under UNEP's Rio Earth Summit, 1992.
2. World Bank serves as Green Climate Fund (GCF)'s trustee.
3. Half of the adaption resources must be invested in the most climate vulnerable countries.

Which of the above statement is/are correct?

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

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

Q.3) Solution (b)

Explanation: World Bank acts as Global Environment Facility's trustee. Global Environmental Facility works under UNFCCC. **(Hence, Statement 2 is not correct)**

Green Climate Fund (GCF):

- It is the world's largest climate fund, mandated to support developing countries raise and realize their Nationally Determined Contributions (NDC) ambitions towards low-emissions, climate-resilient pathways.
- It was set up in 2010 as part of UNFCCC's financial mechanism.
- GCF aims to catalyze a flow of climate finance to invest in low-emission and climate-resilient development, driving a paradigm shift in the global response to climate change.

Global Environment Facility:

- GEF was established under the 1992 Rio Earth Summit.
- The World Bank serves as the GEF Trustee, administering the Fund.
- The GEF serves as a "financial mechanism" to five conventions:
 - Convention on Biological Diversity (CBD),
 - United Nations Framework Convention on Climate Change (UNFCCC),
 - Stockholm Convention on Persistent Organic Pollutants (POPs),
 - UN Convention to Combat Desertification (UNCCD), and
 - Minamata Convention on Mercury.
- GEF funds are available to developing countries and countries with economies in transition to meet the objectives of the international environmental conventions and agreements.

Q.4) Consider the following statements regarding Corporate Average Fuel Efficiency/Economy (CAFE):

1. It aims to improve fuel efficiency by lowering carbon oxide's emission.
2. The Regulation is applicable on Petrol and Diesel variant only.

Which of the above statement is/are correct?

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

Q.4) Solution (a)

Explanation:

Corporate Average Fuel Efficiency/Economy (CAFE) Regulation

- It aims at lowering fuel consumption (or improving fuel efficiency) of vehicles by lowering carbon dioxide (CO₂) emissions.
- Corporate Average refers to sales-volume weighted average for every auto manufacturer.
- The norms are applicable for petrol, diesel, LPG and CNG passenger vehicles. (So, statement 2 is incorrect)
- In India, CAFE regulations come into force into 2017, under which, average corporate CO₂ emission from vehicle must be less than 130 gm per km till 2022 and below 113 gm per km thereafter.
- CAFE norms require cars to be 30% or more fuel efficient from 2022 and 10% or more between 2017 and 2021.

Q.5) Consider the following pairs of Conventions and subject it deals with:

Convention : : Subject it deal with

1. Basel Convention : : Certain Hazardous Chemicals and Pesticides in International Trade
2. Rotterdam Convention : : Trans boundary Movements of Hazardous Waste and their Disposal
3. Stockholm Convention : : Persistent Organic Pollutants (POP)

Which of the above pairs are NOT correctly matched?

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

Q.5) Solution (a)

Explanation:

Conventions dealing with trans-boundary movement

- **Basel Convention on the Control of Trans boundary Movements of Hazardous Waste and their Disposal**

- It was adopted in 1989 and entered into force in 1992.
 - 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 on the Prior Informed Consent Procedure (PIC) for Certain Hazardous Chemicals and Pesticides in International Trade**
- It was adopted in September 1998 and entered into force in 2004.
 - It's jointly administered by the Food and Agriculture Organization (FAO) and UN Environment (UNEP).
 - It creates legally binding obligations for the implementation of the Prior Informed Consent (PIC) procedure.
 - It built on the voluntary PIC procedure, initiated by UNEP and FAO in 1989.
- **Stockholm Convention on Persistent Organic Pollutants (POP)**
- It was adopted in May 2001 and entered into force in 2004.
 - It's a global treaty to protect human health and the environment from chemicals (POP) that remain intact in the environment for long periods, become widely distributed geographically, accumulate in the fatty tissue of humans and wildlife, and have harmful impacts on human health or on the environment.

Q.6) Consider the following statements about Jal Jeevan Mission:

1. This mission has a component regarding grey water management.
2. Villages with less than 50% of SC/ST population have to provide 10% of capital cost incurred on the project.
3. It is centralised mission, where plans will be made at state level and then, that will be segregated at village level.

Which of the above statement is/are correct?

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

Q.6) Solution (a)

Explanation:

Statement 1:

Following works are to be taken up under Jal Jeevan Mission:

- In-village water supply infrastructure for tap water connection to every household
- Development of reliable drinking water sources and/or augmentation of existing sources
- Technological intervention for treatment to make water potable
- **Grey water (domestic non-faecal wastewater) management**
- Development of utilities, water quality laboratories, water quality testing & surveillance, R&D, knowledge centre, capacity building of communities, etc.

Statement 2: Community contribution: To bring in sense of ownership and pride, 5% capital cost contribution by community towards in-village water supply infrastructure in hilly, forested, and more than 50% SC/ ST dominant population villages, and 10% in the remaining villages is proposed.

Statement 3: Planning: Every village will have to prepare a village action plan (VAP) on three components: water source and its maintenance, water supply, and grey water management. Village plans will be aggregated at district level and thereafter at state level to formulate a state action plan. The state action plan will cover projects like regional grids, bulk water supply etc. for ensuring drinking water security in the state. **(Hence, Statement 3 is incorrect)**

Q.7) With reference to Ecological Flow, consider the following statements:

1. It is maximum flow of water needed to maintain ecology naturally.
2. ISRO through In-WRIS portal is designated authority to submit such data to National Mission for clean Ganga.

Choose correct option from below:

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

Q.7) Solution (d)

Explanation:

Ecological Flow (or E-Flow)

- E-flow or Environmental Flow refers to the **minimum flow of water considered necessary for protecting the structure and function** of an ecosystem and its dependent species.
- Rivers must not dry-up or have their physical regimes significantly altered in order to conserve the hydrological and ecological functions of their drainage networks.
- The ecological quality of rivers must be maintained by maintaining a minimum flow.
- The e-flow norms stipulate the volume of water that dams and barrages must release to allow the river to naturally clean itself and protect its aquatic biodiversity.
- **CWC is the designated authority to collect relevant data and submit reports on a quarterly basis to the NMCG.**

Q.8) The New Delhi Declaration is related to

- a) Desertification
- b) Disaster Management
- c) Terrorism
- d) Trans boundary pollution

Q.8) Solution (a)

Explanation:

The New Delhi Declaration:

It was declaration held in the United Nation Convention to Combat Desertification's 14th Conference of Parties.

Adoption of New Delhi Declaration in which parties expressed commitment for a range of issues, including gender and health, ecosystem restoration, taking action on climate change, private sector engagement, Peace Forest Initiative and recovery of five million hectares of degraded land in India by 2030, raising the land to be restored in India to 26 million hectares.

Q.9) Which of the following leads to increased Soil Organic Carbon?

1. Increased Temperature
2. Contained soil erosion
3. Elevated level of Soil moisture
4. Increased salinity and toxicity of soil

Choose the correct answer from the given options:

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

Q.9) Solution (c)

Explanation:

Soil organic carbon (SOC) is the carbon that remains in the soil after partial decomposition of any material produced by living organisms. It constitutes a key element of the global carbon cycle through atmosphere, vegetation, soil, rivers and the ocean.

Factors affecting soil carbon level

- **Temperature:** with increased temperature, decomposition takes place at faster rate, resulting into loss of nutrient and Soil Organic Matter. Decomposition normally occurs more rapidly in the tropics than in temperate areas.
- **Erosion of Surface soil** result into losses of SOC.
- **Soil Moisture and water saturation:** Increased levels of soil moisture result in greater biomass production, which provides more residues, and thus more potential food for soil biota.
- **Salinity and Acidity:** Salinity, toxicity and extremes in soil pH (acid or alkaline) result in poor biomass production and, thus in reduced additions of organic matter to the soil.

Q.10) Consider the following about Payment for ecosystem service:

1. In this model stakeholder are mandated to pay for the benefit derived from the ecosystem.
2. It is based on the "Polluter Pay Principle".
3. It is a sustainable medium of Payment service, where both conservator and beneficiary are in balance.

Which of the above statements are *incorrect*?

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

Q.10) Solution (a)

Explanation:

Payment for ecosystem service

It involves payments to the managers of natural resources in exchange for the provision of specified ecosystem services over-and-above what would otherwise be provided in the absence of payment.

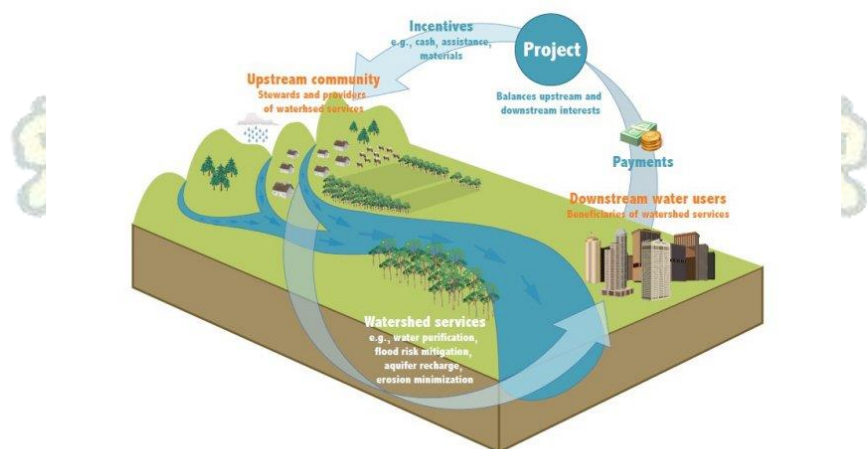
Stakeholders enter into PES agreements on a voluntary basis and are in no way obligated to do so.

The novelty of PES arises from its focus on the 'beneficiary pays principle', as opposed to the 'polluter pays principle'.

India's first PES agreement took place in Palampur Municipal Corporation, Himachal Pradesh.

Advantage of PES

- PES is highly flexible and there are numerous ways to structure schemes based on the specific context of its application including, for example, the focal ES and scale of application.
- PES schemes offer opportunities to create or support employment related to the delivery of ecosystem services.
- PES can highlight the value of ecosystem services, thereby modifying and potentially reversing incentives for resource users to over-exploit or convert them.
- So, its benefits make it sustainable for ecology as both beneficiary and manager of resources are in benefit.



Q.11) "Global Future" Project was initiated by:

- a) United Nations Environment Programme
- b) Intergovernmental Panel on Climate Change
- c) World Economic Forum
- d) World Wide Fund for Nature

Q.11) Solution (d)

Explanation:

'Global Future' is a project initiated by World Wide Fund for Nature, with partnership between the Global Trade Analysis Project (GTAP) and the Natural Capital Project.

Global Futures is a landmark study using cutting-edge modelling to explore the global economic impacts of natural capital depletion.

It warns of potential risks to the world's economic prosperity if we don't act urgently to halt nature loss.

The study uses new economic and environmental modelling to calculate the costs of nature's decline across 140 countries and all key industry sectors.

Taking six crucial ecosystem services that nature provides (including the supply of water for agriculture; supply of timber; marine fisheries; pollination of crops; protection from flooding, storm surges and erosion; and carbon storage to help protect us from climate change), the report analyses the future costs to world economies of failing to act on the destruction of our environment and biodiversity loss.

Q.12) Consider the following statement about International Energy Agency:

1. IEA is a G20 body for subject related to energy.
2. A country seeking membership of IEA should also be an OECD country.
3. India became its member in 2017.

Which of the above given statement are *incorrect*?

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

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

Q.12) Solution (b)

Explanation

International Energy Agency

- It is an autonomous intergovernmental organization established in the framework of Organization for Economic Cooperation and Development (OECD) in 1974 to help countries collectively respond to oil supply disruptions. **(So, statement 1 is incorrect)**
- It is headquartered in Paris.
- A candidate country to the IEA must be a member country of the OECD.
- The IEA family now represents about 75% of global energy consumption.
- Members: IEA is made up of 30 member countries and 8 association countries.
- India became an Associate Member in 2017. **(As India is not a full member, So statement 3 is incorrect)**
- Publications: World Energy Outlook, Global Energy & CO2 Status Report

Q.13) Consider the following statements regarding “Pradhan Mantri JI-VAN”:

1. Under it, all type of Bio ethanol projects is provided viability gap funding.
2. A central agency under Ministry of Agriculture will be the implementation agency.

Which of the given statements is/are correct?

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

Q.13) Solution (d)

Explanation:

Pradhan Mantri JI-VAN (Jaiv Indhan Vatavaran Anukool fasal awashesh Nivaran) Yojana

- It has been launched for providing financial support to Integrated Bioethanol Projects using lignocellulose biomass and other renewable feedstock

- Under this Yojana, 12 Commercial Scale and 10 demonstration scale **Second Generation (2G) ethanol Projects** will be provided a Viability Gap Funding (VGF) support in two phases in the period from 2018-19 to 2023-24. (So, statement 1 is incorrect)
- Centre for High Technology (CHT), a technical body under the aegis of Ministry of Petroleum and Natural Gas, will be the implementation Agency for the scheme. (So, statement 2 is incorrect)

Q.14) Consider the following statements about energy efficiency in India:

1. Energy Conservation Building Code (ECBC), 2017 has been developed by TERI.
2. UNNATEE is a draft national energy efficiency policy of Bureau of Energy Efficiency (BEE).
3. Star Labelling is compulsory in Microwave Ovens.

Choose correct option from below:

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

Q.14) Solution (b)

Explanation:

Statement 1: Energy Conservation Building Code (ECBC), 2017:

- The code is **given by Bureau of Energy Efficiency (BEE), Ministry of Power**. (So, statement 1 is incorrect)
- The purpose of the Code is to provide minimum requirements for the energy-efficient design and construction of buildings.
- It is applicable to buildings or building complexes that have a connected load of 100 kW or greater and are intended to be used for commercial purposes.
- Buildings intended for private residential purposes only are not covered by the Code.

Statement 2: Unlocking NATIONAL Energy Efficiency potential (UNNATEE):

- Bureau of Energy Efficiency (BEE) has developed a national strategy document for accelerating energy efficiency in India.
- The strategy document titled UNNATEE (Unlocking NATIONAL Energy Efficiency potential) describes a plain framework and implementation strategy to establish a clear linkage between energy supply-demand scenarios and energy efficiency opportunities.

- The document offers a comprehensive roadmap to address India's environmental and climate change mitigation action through energy efficiency measures.
- The document has now been released for larger public consultation and seeking comments/ valuable inputs from all the stakeholders.

Statement 3: Ministry of Power, Government of India expanded Standards & Labelling (Star Rating) program for Energy Efficient for Appliances to cover the Microwave Ovens and Washing Machines. The Star Labelling Programs has been formulated by Bureau of Energy Efficiency. The program will now include these two appliances for grant of Star Rating in terms of their energy performance. From 31st December 2020, star labelling will be mandatory. (So, statement 3 is correct)

Q.15) Consider the following statements about "Charging infrastructure for Electric Vehicles":

1. Only a licensee contractor can set up public charging infrastructure.
2. In first phase, only city above 40 lakh population and associated expressway and pathway will be covered.
3. Charging infrastructure will have open access for electricity from any electricity company.

Which of the statements given above is/are correct?

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

Q.15) Solution (c)

Explanation:

Ministry of Power has issued a policy on charging infrastructure and has issued a notification clarifying that charging electric vehicles will be a service, not a sale of electricity

Highlights of Charging Infrastructure Guidelines

- **Objective:** To enable faster adoption of EVs in India, promote an affordable tariff system for EV owners and operators of charging stations, generate employment and income opportunities for small business owners and support the creation of EV charging infrastructure.
- **Procedure for setting:** No license will be required for setting set up a public charging station. (Hence, statement 1 is incorrect)

- **Location of Public Charging Station:** Charging station must cater to slow as well as fast-charging requirements
- **Implementation:** Phase I (1-3 years) will cover all mega cities with population above forty lakhs, and the associated expressways and highways. Phase II (3-5 years) will cover state and UT capitals.
- **Access to Electricity:** Charging station has been allowed to source electricity from any power generation company through open access.

Q.16) Consider the following statement regarding India 2000 norms (Bharat Stage):

1. BS norms are set up by Bureau of Energy Efficiency (BEE) under Ministry of Power.
2. Carbon Oxide, Carbon Mono-oxide, NO_x and Particulate matter are covered under it.
3. BS IV will reduce the Particulate Matter's level down by 80% from BS IV level.

Which of the above statement is/are incorrect?

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

Q.16) Solution (c)

Explanation:

Statement 1: Bharat Stage Norms are the standards set up by Central Pollution Control Board (CPCB) to regulate the output of air pollutants from internal combustion engines and spark-ignition engine equipment, including motor vehicles. (So, statement 1 is incorrect)

Statement 2: The exhaust gases now covered under the norms are: Carbon monoxide, Hydrocarbons, oxides of nitrogen (NO_x) and Particulate matter. Carbon di-oxide are not covered under it. (So, statement 2 is incorrect)

Statement 3: BS IV will reduce emission of major pollutant by high margin. In case of Nitrogen, 70% and 25% in case of diesel and petrol engine respectively. In case of Particulate Matter, reduction in limit is by 80%. Similarly reduction in sulphur oxide will be 5 times lower.

Q.17) Which of the following is not a component of KUSUM?

- a) Decentralised ground/ stilt mounted grid connected solar power plants.

- b) Off-grid solar pumps
- c) Solarisation of grid connected electric pumps
- d) Roof-top solar plants

Q.17) Solution (d)

Explanation:

About KUSUM Scheme

- The scheme aims to provide energy security along with financial and water security to farmers.
- It would encourage farmers to generate solar power in their farms and use the clean energy to replace their diesel water pumps.
- It targets to add decentralised solar power capacity of 25,750 megawatt by 2022.

The approved scheme comprises three components

1. Component A: setting up of 10,000 megawatt of decentralised ground/ stilt mounted grid connected solar or other renewable energy based power plants.
2. Component B: Off-grid solar pumps
3. Component C: Solarization of grid connected electric pumps

Q.18) Consider the following statements regarding "Hindu Kush Himalaya Assessment":

1. It is released by Intergovernmental Panel on Climate Change (IPCC).
2. Eastern Himalaya glaciers have tended to shrink slower than glaciers in the central or western Himalaya.
3. In contrast to the Himalayan glaciers, on average, glacier areas in the Karakoram have not changed significantly.

Which of the above statement are *incorrect*?

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

Q.18) Solution (a)

Explanation:

About Climate Change Performance Index (CCPI)

- International Centre for Integrated Mountain Development's (ICIMOD) has released "Hindu Kush Himalaya Assessment. **(Hence, Statement 1 is not correct)**
- According to it more than one-third of the glaciers in the region could retreat by 2100, even if the global temperature rise is capped at 1.5°C
- Since 1970s, nearly 15% of the glaciers in the HKH have disappeared. Eastern Himalaya glaciers have tended to shrink faster than glaciers in the central or western Himalaya. **(Hence, Statement 2 is incorrect)**
- In contrast to the Himalayan glaciers, on average, glacier areas in the Karakoram have not changed significantly. Given the context of glacier retreat throughout the rest of the extended HKH region, this behaviour has been designated the 'Karakoram anomaly'. **(Hence, statement 3 is correct)**

Q.19) Consider following statements regarding "Sea Level Rise":

1. Sea level rise along Indian coast is not uniform.
2. Glaciers are largest contributor to sea level rise, next to Thermal Expansion.

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.19) Solution (a)

Explanation:

Sea Level Rise

It is caused primarily by two factors related to global warming:

1. The added water from melting ice sheets; and glaciers
2. The expansion of seawater as it warms.

Contribution of different factor in sea level rise: according to a study of 2004-15 sea level rises, following are the contribution of different factor

- Thermal Expansion: 34%
- Glaciers: 23%

- Greenland and Ice sheets: 25%
- Antarctic Ice sheets: 10%
- Land Waters: 7%
- Water, vapour and others: 1% (So, statement 2 is incorrect)

India's Vulnerability:

- According to a new study published in Nature Climate Change, the sea-level is rising at an average rate of 1.6-1.7 mm per year along the Indian coast, but it is not uniform.
- It varies from 5mm in Sunderbans to less than a 1 mm per year in some of the areas in the west coast. Sunderbans are most vulnerable, not only because it's low-lying, but also because the land is also sinking.

Q.20) Decarbonising Transport in India project has been launched by:

- a) Ministry of Road Transport and Highways
- b) Ministry of Environment, Forest and Climate Change
- c) Ministry of Heavy Industries and Public Enterprises
- d) NITI Aayog

Q.20) Solution (d)

Explanation:

NITI Aayog in collaboration with International Transport Forum (ITF) has jointly launched the Decarbonising Transport in India project.

Need of Decarbonising Transport

- Transport emits around 23% of the energy related CO₂ that feeds global warming. Without immediate action, its share could reach 40% by 2030 and 60% by 2050.

Decarbonisation means reducing greenhouse gas (GHG) emissions produced as a result of transport. It includes

- Emissions released directly during transport
- Emissions due to related activities - for example emissions from the production of electricity used to power a given mode.
- Emissions resulting from the manufacture and/or disposal/recycling of products and vehicles.

The project is carried out in the wider context of the International Transport Forums' (ITF) Decarbonising Transport Initiative (DTI).

Q.21) Consider the following statements with respect to appointment of Chief justice of India.

1. There is no specific provision in the Constitution for appointing the Chief Justice.
2. Seniority at the apex court is determined by age.

Which of the following statement given above is/are correct?

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

Q.21) Solution (a)

Appointment of CJI

- **Article 124:** Manner of appointing judges to the SC.
- CJI should be the senior most judge of the SC.
- Law Minister has to seek recommendation of the outgoing CJI for appointment of new CJI at an appropriate time.
- **Article 124(2):** Consultation with other Judges to be made In case of doubt about the fitness of the senior-most Judge to hold office of CJI.
- Law Minister then puts up recommendation to Prime Minister (PM) who will advise the President on appointment.
- But there is no specific provision in the Constitution for appointing the Chief Justice.
- Seniority at the apex court is determined not by age, but by the date a judge was appointed to the SC.
- If two judges are elevated to the Supreme Court on the same day, (1) the one who was sworn in first as a judge would trump another; (2) if both were sworn in as judges on the same day, the one with more years of high court service would 'win' in the seniority stakes; (3) an appointment from the bench would 'trump' in seniority an appointee from the bar.

Q.22) Main objective of the recently launched Co-WIN App has been to -

- a) To handle minute details for India's Covid-19 immunization programme.
- b) To co-ordinate the vaccine manufacturing programme in India.
- c) To help the start-ups and MSMEs destroyed due to Covid-19.
- d) To create the database of civil society and NGOs working for Covid-19 relief.

Q.22) Solution (a)

Explanation

COVID Vaccine Intelligence Network (CoWIN)

Ministry of Electronics and Information Technology (MeitY) has announced the launching of "CoWIN", a Grand Challenge for strengthening the COVID Vaccine Intelligence Network (CoWIN) system, a digitalised platform to be used to effectively roll out and scale up the mechanism for COVID Vaccine Distribution System, nationally.

About the App

- Co-WIN, a cloud-based IT platform, is supposed to handle minute details for India's Covid-19 immunisation programme, including registering beneficiaries, allocating vaccination centres, sending text messages with name of their vaccinator to beneficiaries and live monitoring of vials in cold storage.

Q.23) Innovators growth platform has been related to:

- a) Reserve Bank of India
- b) SIDBI (Small Industries Development Bank of India)
- c) Security and exchange board of India.
- d) Ministry of corporate affairs

Q.23) Solution (c)

Securities and Exchange Board of India launched 'Innovators Growth Platform.

Erstwhile known as 'Institutional Trading Platform' for listing of issuers which are in intensive use of technology, information technology, intellectual property, data analytics, bio-technology or nano-technology to provide products, services or business platforms with substantial value addition.

It is a platform on stock exchanges where start-ups can list and trade on their shares.

It is a platform where listing norms such as IPO norms, pre-issue capital etc are eased for startup.

Q.24) Consider the following statement with respect to National bank for financing Infrastructure and development.

1. NBFID will have both financial as well as developmental objectives.
2. Initially, central government will own 100% shares which may subsequently be reduced

up to 26%.

3. NBFID may borrow money from: Central government, RBI, scheduled commercial banks, mutual funds, and multilateral institutions like World Bank and Asian Development Bank.

Which of the following statement given above is/are correct?

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

Q.24) Solution (d)

Explanation

NBFID- National bank for financing Infrastructure and development

- It will be set up as a corporate body with authorized share capital of one lakh crore rupees.
- Initially, central government will own 100% shares which may subsequently be reduced up to 26%.

Financial objective

- To lend, invest, or attract investments for infrastructure projects located entirely or partly in India.

Developmental objectives

- Extending loans and advances for infrastructure projects, > Attracting investment from private sector. > Facilitating foreign participation in infrastructure projects.
- Facilitating dispute resolution and providing consultancy services in Infrastructure financing.

NBFID may borrow money from:

- Central government, RBI, scheduled commercial banks, mutual funds, and multilateral institutions like World Bank and Asian Development Bank.

Management of NBFID

- NBFID will be governed by a Board of Directors. Chairperson appointed by the central government in consultation with RBI A body constituted by central government will recommend candidates for post of Managing Director and Deputy Managing Directors

Support from central government

- Central government will provide grants worth Rs 5,000 crore. Also, guarantee at a concessional rate of up to 0.1% for borrowing from multilateral institutions, sovereign wealth funds etc. will be provided.

Q.25) The scheme DSIR-PRISM has been related with.

- a) To promote and support science-based deep-tech startups & ventures across India.
- b) Development of effective medicine to fight Covid-19 by department of scientific and Industrial research.
- c) To revive the economy by focusing on labour intensive sectors.
- d) To organize the hackathon to find solution for the oxygen deficiency.

Q.25) Solution (a)

About DSIR-PRISM Scheme

It is an initiative of the Department of Scientific and Industrial Research (DSIR).

It is aimed at transforming an individual innovator into a successful technopreneur by promoting, supporting, and funding implementable and commercially viable innovations created for the society.

Under the initiative, an innovator of Indian nationality i.e. student, professional and common citizen, is provided technical, strategic, and financial assistance for idea development, prototype development and pilot scaling, and patenting.

The innovation movement by DSIR-PRISM making synergy with three National Initiatives like Unnat Bharat Abhiyan, Smart India Hackathon and Rural Technology Action Group (RuTAG) is unique.

Q.26) consider the following statements with respect to objectives of the Mission NISAR.

- 1. Tracking subtle changes in the Earth's surface,
- 2. Spotting warning signs of imminent volcanic eruptions,
- 3. Helping to monitor groundwater supplies, and
- 4. Tracking the rate at which ice sheets are melting.

Which of the following statement given above is/are correct?

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

Q.26) Solution (d)

Explanation

NASA and ISRO are collaborating on developing a satellite called NISAR, which will detect

movements of the planet's surface as small as 0.4 inches over areas about half the size of a tennis court.

What is NISAR?

It's an SUV-sized satellite that is being jointly developed by the space agencies of the US and India. The partnership agreement was signed between NASA and ISRO in September 2014, according to which NASA will provide one of the radars for the satellite, a high-rate communication subsystem for science data, GPS receivers and a payload data subsystem. ISRO, on the other hand, will provide the spacecraft bus, the second type of radar (called the S-band radar), the launch vehicle and associated launch services.

Q.27) Consider the following statements with respect to Climate data service portal.

1. It has been developed by IPCC for better targeting the climatic pattern.
2. It has user-friendly platforms for climate data management and supply to the users.

Which of the statements given above is/are correct?

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

Q.27) Solution (b)

Explanation

The Climate Data Service Portal serves as a integrated platform to render weather and climate services of India Meteorological Department, Ministry of Earth Sciences.

This central hub, functions as a repository to acquire and disseminate the climate data of the Indian sub-continent region. This is enabled by automatic ingestion and first level quality control management in addition to monitoring, messaging / mailing response and acceptance. A dual communication facility and a secondary level quality control and quality assured procedures are ensured prior to permanent archival.

Incorporating rapid advancements in data technology and applications, this portal serves to skill the future workforce on new-age resources to ensure inclusive economic growth and social development through climate services.

Q.28) 'Tribal TB Initiative has been the initiative of

- a) Ministry of tribal affairs.
- b) Ministry of social justice and empowerment
- c) Ministry of health and family welfare
- d) The Ministry of Development of North Eastern Region.

Q.28) Solution (c)

Explanation

Union Health Minister launched the "Tribal TB Initiative" as a step towards achieving 'TB Mukta Bharat' by 2025.

About the Initiative:

The Health Minister stated that India has over 104 million tribal population lives in India, across 705 tribes, accounting for 8.6 % of the country's population.

Around 177 tribal districts were identified as high-priority districts where poor living conditions, physical remoteness, malnutrition and lack of awareness contribute to the vulnerability of the tribal population to TB.

The activities of the joint plan will initially focus on 161 districts across 18 identified States. The activities include deploying improved vulnerability mapping techniques and organization of sensitization and capacity-building workshops for volunteers.

There would also be periodic TB active case finding drives and provision of TB Preventive Therapy (IPT) to the identified vulnerable population and develop long-term mechanisms for vulnerability reduction.

He also mentioned that the linkage of the NIKSHAY Portal of MoHFW and Swasthya Portal of the M/o Tribal Affairs will boost data compilation on Tuberculosis and pave way for efficient and convergent actions.

Q.29) The Heart of Asia summit has been related to:

- a) Summit of the nations to draw the plan for development of Afghanistan Post US-withdrawal.
- b) To develop the cultural relation and people to people contact among the Asian nations.
- c) To focus on harnessing the oil based opportunities in west Asia.
- d) It is a platform for sincere and results-oriented regional cooperation by placing Afghanistan at its center.

Q.29) Solution (d)

Explanation

About The Heart of Asia-Istanbul Process (HoA-IP):

- It was founded in November, 2011 in Istanbul, Turkey.

- It provides a **platform for sincere and results-oriented regional cooperation by placing Afghanistan at its center**, in recognition of the fact that a secure and stable Afghanistan is vital to the prosperity of the Heart of Asia region.
- This platform was established to **address the shared challenges and interests of Afghanistan and its neighbors and regional partners**.
- The Heart of Asia comprises 15 participating countries, 17 supporting countries, and 12 supporting regional and international organizations.
- **India is a participating country.**
- Since its inception the process has become a cardinal element in regional cooperation and has created a **platform for Afghanistan's near and extended neighbors, international supporters and organizations to engage in constructive dialogue** and to **address the existing and emerging regional challenges** through regional cooperation with Afghanistan at its core.

Q.30) consider the following statement with respect to Consumer Protection (E-Commerce) Rules, 2020:

1. The Consumer Protection (E-commerce) Rules, 2020 are Advisories and are not mandatory.
2. The Consumer Protection (E-commerce) Rules, 2020 are notified under the new Consumer Protection Act, 2019.

Which of the following statement given above is/are correct?

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

Q.30) Solution (b)

Explanation

The Consumer Protection (E-commerce) Rules, 2020 are Mandatory and are not Advisory.

Salient features of the rules:

- It aims to protect the rights of consumer by establishing authorities for timely and effective administration and settlement of consumers' disputes.
- The rules will be applicable to all electronic retailers registered in India or abroad but offering goods and services to Indian consumers.
- The violation of the rules will attract penal action under the Consumer Protection Act, 2019.

- The e-commerce players will have to display the total price of goods and services offered for sale along with the break-up of other charges.
- They are also required to mention the 'expiry date' of goods offered for sale and the 'country of origin' of goods and services that are necessary for enabling the consumer to make an informed decision at the pre-purchase stage.
- It empower the central government to act against unfair trade practices in e-commerce and direct selling. They require e-tailers to facilitate easy returns, address customer grievances and prevent discriminating against merchants on their platforms.
- Marketplaces as well as sellers would be required to have grievance officers who have to respond in a time-bound manner.
- The new rules do not permit any inventory e-commerce entity to "falsely represent itself as a consumer and post reviews about goods and services or misrepresent the quality or the features of any goods and services".

Directions for the following questions:

Read the following passage and answer the questions that follow each passage. Your answer to these questions should be based on passage only.

Passage 1

The object underlying the rules of natural justice "is to prevent miscarriage of justice" and secure "fair play in action" As pointed out earlier the requirement about recording of reasons for its decision by an administrative authority exercising quasi-judicial functions achieves his object by excluding changes of arbitrariness and ensuring a degree of fairness in the process of decision making. Keeping in view the expanding horizon of the principle of natural justice, which governs exercise of power by administrative authorities the rules of natural justice are not embodied rules. The extent of their application depends upon the particularly statutory framework where under jurisdiction has been conferred on the administrative authority. with regard to the exercise of particular power by an administrative authority including exercise of judicial or quasi-judicial functions the legislature, while conferring the said power, may feel that it would not be in the larger public interest that the reasons for the order passed by the administrative authority be recorded in the order and be communicated to the aggrieved party and it may dispense with such a requirement

Q.31) "The rules of the natural justice are not embodies rules" means that these rules

- a) are left deliberately vague
- b) cannot be satisfactorily interpreted
- c) are flexible

d) cannot be visualised

Q.31) Solution (c)

The extent of their application depends upon the particularly statutory framework.....

This statement means that the rules are flexible.

Passage 2

Organized retail has fuelled new growth categories-like liquid hand wash, breakfast cereals and pet foods in the consumer goods industry, accounting for almost 50% of their sales, said data from market search firm Nielsen. The figures showed some of these new categories got more than 40% of their business from modern retail outlets. The data also suggests how products in these categories reach the neighbourhood kirana stores after they have established themselves in modern trade. While grocers continue to be an important channel, for the new and evolving categories we saw an increased presence of high-end products in modern trade. For example, premium products in laundry detergents, dishwashing, car air fresheners and surface care increased in availability through this format as these products are aimed at affluent consumers who are more likely to shop in supermarket/hypermarket outlets and who are willing to pay more for specialized products.

Q.32) The new growth category products

- a) account for less than 20% of sales in organized retail
- b) reach first the neighbourhood Kirana shop and then the modern retail outlets
- c) reach all the outlets almost at the same time
- d) first become popular in modern trade outlets before reaching Kirana shops

Q.32) Solution (d)

The data also suggests how products in these categories reach the neighbourhood kirana stores after they have established themselves in modern trade..

Hence option d is the correct answer.

Q.33) The following question is based on the five three digit numbers given below:

574 658 821 945 247

If one is added to the last digit of each of the numbers, in how many numbers thus formed will the last digit be a perfect square (1 is also be a perfect square)?

- a) One
- b) Two
- c) Three
- d) Four

Q.33) Solution (a)

After adding 1 to the last digit, the newly formed digits will be 5, 9, 2, 6, 8

From this we can conclude that only 9 is a perfect square.

Hence, only one such number is possible.

Q.34) What will come in place of the question mark (?) in the following number series?

6, 10, 37, 53, 178, ?

- a) 210
- b) 212
- c) 214
- d) 226

Q.34) Solution (c)

The given number series follows the pattern as below

First term + 2^2 , Second term + 3^3 , Third term + 4^2 , Fourth term + 5^3 , Fifth term + 6^2

Hence, the required number is $178 + 36 = 214$

Q.35) The following question consists of a question followed three statements labeled I, II and III. You have to decide whether the data given in the statement(s) is/are sufficient for answering the question. Read all the statements carefully and seek all the possible combinations which could be sufficient for answering the question. A single combination of statements with least number of statements which could be sufficient for answering the question would be your answer.

Among P, Q, R, S and T, Q is the second tallest and S is immediately taller than the shortest. Who among them is in the middle when they stand in the decreasing order of their heights?

- I. T is not the shortest.
- II. R is taller than S but shorter than Q.
- III. P ranks third in height above S when all are arranged in the order of height.

Choose the correct code

- a) Only I and II
- b) Either II only or I and III only
- c) Only II
- d) Only II and III

Q.35) Solution (b)

From the given statement, the descending order of heights is: $_$, Q, $_$, S, $_$.

From II, we have the order: $_$, Q, R, S, $_$. Thus, R is in the middle.

From III, we have the order: P, Q, $_$, S, $_$.

But, according to I, T is not the shortest. So, R is the shortest.

Thus, we have the order: P, Q, T, S, R. So, T is in the middle.

Hence, option b is correct.

