

Prelims Refresher Programme: Day 53 (Test-18)

QUESTION 1:

With reference to Sunspots, which of the following is correct?

1. Sunspots are areas that appear dark on the surface of the Sun.
2. They appear dark because they are hotter than other parts of the Sun's surface.
3. In every solar cycle, the number of Sunspots remains constant.

Choose the correct option from the codes given below.

- (a) 1 Only
- (b) 1 and 2
- (c) 1 and 3
- (d) All of them.

Answer: a

Explanation

- Sunspots are areas **that appear dark** on the surface of the Sun, **Hence 1st statement is correct.**
- They **appear dark because they are cooler than other parts** of the Sun's surface. They are relatively **cool because they form at areas where magnetic fields are particularly strong.** These magnetic fields are so strong that they keep some of the heat within the Sun from reaching the surface. **So statement 2 is not correct.**
- **Sunspots increase and decrease through an average cycle of 11 years.** Dating back to 1749, we have experienced 23 full solar cycles where the number of sunspots have gone from a minimum, to a maximum and back to the next minimum, through approximate 11 year cycles. We are now well into the 24th cycle. **Hence statement 3 is also wrong.**

QUESTION 2:

Which of the following is the main objective of K.V. Kamath committee appointed by RBI?

- (a) Refinancing the debt in the agriculture sector.
- (b) One-time restructuring of corporate loans.
- (c) Minimising the circulation of printed notes and promoting digital transactions.
- (D) Accelerating Merger of Public sector banks.

Answer: (b)

Explanation

- The Reserve Bank of India (RBI) has set up a committee headed by K.V. Kamath on restructuring of loans impacted by the Covid-19 pandemic.
- **Objective:** The Committee is tasked to recommend parameters for one-time **restructuring of corporate loans. Hence, option A is correct.**
 - The Committee will formulate sector-specific resolution plans for all accounts with total loan exposure of ₹1,500 crore and above.
- **Deadline:** It will submit its recommendations to RBI in 30 days.
- **Background:** In the recent Monetary Policy report, RBI has allowed banks to restructure loans to reduce the rising stress on incomes and balance sheets of large corporates, Micro, Small and Medium Enterprises (MSMEs) as well as individuals.
- **Reasons:** A large number of firms that otherwise maintain a good track record are facing the challenge as their debt burden is becoming disproportionate, relative to their cash flow generation abilities.
- This can potentially impact their long-term viability and pose significant financial stability risks if it becomes widespread. It may also lead to an increase in Non-Performing Assets.

QUESTION 3:

Which of the following are the constituents of the Balance of Payments?

1. Merchandise Trade
2. Remittances
3. External Commercial Borrowing
4. Special Drawing Rights

Select the correct answer using the code given below:

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

Answer: (d)

Explanation

- **Balance of Payment (BoP)** of a country can be defined as a systematic statement of all economic transactions of a country with the rest of the world during a specific period usually one year.
- For preparing BoP accounts, economic transactions between a country and rest of the world are grouped under – Current account, Capital account and changes in Foreign Exchange.
 - **Current Account:** It shows export and import of visibles (also called merchandise or goods – represent trade balance) and invisibles (also called non-merchandise) like remittances.
 - **Capital Account:** It shows a capital expenditure and income for a country. External Commercial Borrowing (ECB), Foreign Direct Investment, Foreign Portfolio Investment, etc form a part of capital account.
 - **Changes in Foreign Exchange Reserves:** Movements in the reserves comprises changes in the foreign currency assets held by the Reserve Bank of India (RBI) and also in Special Drawing Rights (SDR) balances.
 - **Hence, option D is correct.**

QUESTION 4:

With reference to BlockChain Technology, consider the following statements:

1. Blockchain is a database of information that appears on multiple computers at the same time.
2. It provides tamper-evident record keeping, real-time transaction, transparency and auditability.

Which of the above statements is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 and 2

Answer: (c)

Explanation

- Blockchain is a system in which the database of recordings (a 'chain') appears on multiple computers at the same time even as it is updated with any new digital information ('a block'). **Hence, statement 1 is correct.**
- It offers a singular combination of permanent and tamper-evident record keeping, real-time transaction transparency and auditability. **Hence, statement 2 is correct.**
 - The initial and primary use of blockchain technology was for monitoring cryptocurrency (e.g. bitcoin) transactions. However, other usage and applications have emerged in the last few years. For example, the Election commission of India is considering use of blockchain technology in elections.

QUESTION 5:

In reference to World Biofuel day, which of the following is/are **NOT** correct?

1. It is observed on 10th of August every year.
2. The Ministry of New and Renewable Energy has started observing World Bio fuel Day since 2015.
3. Its theme for the year 2020 is “Biofuels towards Atmanirbhar Bharat”.

Choose the correct answer from the codes given below.

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

Answer: (b)

Explanation

- Every year 10th August is observed as World Bio-Fuel Day in a bid to create awareness about non fossil-fuels (Green Fuels). **Hence, statement 1 is correct.**
- The Ministry of Petroleum & Natural gas has started observing World Bio fuel Day since 2015. **Hence statement 2 is not correct.**
- Its theme for the year 2020 is “Biofuels towards Atmanirbhar Bharat”. **Hence, statement 3 is correct.**

QUESTION 6:

With reference to Papum Reserve Forest, consider the following statements:

1. Papum Reserve Forest is geographically located in Meghalaya.
2. It is a part of the Indo-Burma Biodiversity hotspot in India.

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

Answer: (b)

Explanation

- **Papum Reserve Forest** is geographically situated in the south west of East Kameng district in Arunachal Pradesh. **Hence, statement 1 is not correct.**
 - It is surrounded by Itanagar Wildlife Sanctuary to the east and Pakke Wildlife Sanctuary to the west.
 - It is covered by Subtropical Dry Evergreen and Semi-evergreen Forests, while the higher areas are under Subtropical Broadleaf Hill Forest cover.
 - It is a part of the Indo-Burma Biodiversity hotspot in India. **Hence, statement 2 is correct.**
 - Papum Reserve Forest forms part of the Eastern Himalayas Endemic Bird Area.
 - An Endemic Bird Area is an area of land identified by BirdLife International as being important for habitat-based bird conservation because it contains the habitats of restricted-range bird species.

QUESTION 7:

With reference to 'Transparent Taxation – Honoring The Honest' platform, consider the following statements:

1. It aims to eliminate the interface between the taxpayer and the income tax department.
2. It involves application of analytics and Artificial Intelligence.

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

Answer: (c)

Explanation

- Recently, the Prime Minister of India launched the '**Transparent Taxation – Honoring The Honest**' platform to honour the honest taxpayers of the country.
- **The Transparent Taxation Platform** aimed at bringing transparency in income tax systems and empowering taxpayers.
 - The main features of the platform are faceless assessment, faceless appeal and taxpayer charter.
 - It aims to eliminate the interface between the taxpayer and the income tax department. **Hence, statement 1 is correct.**
 - ◆ There will be no need for the taxpayer to visit the income tax office or the officer.
 - ◆ The selection of a taxpayer is possible through systems using analytics and Artificial Intelligence. **Hence, statement 2 is correct.**

QUESTION 8:

With reference to hornbills, consider the following statements:

1. It plays a key role in dispersing seeds of tropical trees.
2. It is listed as endangered in the IUCN Red list.

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

Answer: (a)

Explanation

- The **hornbills (Bucerotidae)** are a family of birds found in tropical and subtropical Africa and Asia.
- India is home to nine species of hornbills. The northeastern region has the highest diversity of hornbill species within India.
- The great hornbill is the state bird of Arunachal Pradesh and Kerala.
 - They are the cultural symbols of some ethnic communities in the northeast, specifically the Nyishi of Arunachal Pradesh.
 - They are referred to as '**forest engineers**' or '**farmers of forest**' for playing a key role in dispersing seeds of tropical trees and indicate the prosperity and balance of the forest they build nests in. **Hence, statement 1 is correct.**
- The Hornbill festival celebrated in Nagaland is named after the bird – Hornbill which is the most revered and admired bird for the Nagas.

- Currently, 26 out of the 62 species (40%) of hornbills are **Globally Threatened or Near Threatened with extinction**, with all other species listed as Least Concern, according to the International Union for Conservation of Nature (IUCN) Red List of Threatened Species.
 - The **great hornbill is evaluated as vulnerable**.
 - It is protected at the highest level under Schedule I of the Wildlife Protection Act, 1972. **Hence, statement 2 is not correct.**

QUESTION 9:

With reference to the 'Ceres', consider the following statements:

1. It is the only dwarf planet located in the inner solar system.
2. The Dawn mission was launched to study the Ceres.

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

Answer: (c)

Explanation

- Ceres is the only dwarf planet located in the inner solar system (includes planets Mercury, Venus, Earth and Mars). Scientists classified it as a dwarf planet in 2006. **Hence, statement 1 is correct.**
- It does not have any moon or rings.
- Dawn (2007-18) was a mission to two of the most massive bodies in the main asteroid belt – Vesta and Ceres. **Hence, statement 2 is correct.**

QUESTION 10:

With reference to Asian Elephants, consider the following statements

1. It is the Heritage Animal of India.
2. Its IUCN status is vulnerable.
3. MIKE programme aims to stop illegal killing of elephants

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) Neither 1 and 2

Answer: (c)

Explanation

- As the elephants, in India, have played a significant role in manual labor, war, royal iconography, and the tourism industry. Also, due to their cultural linkages with some of the major religions in India. The elephant has been declared as a national heritage animal of India in 2010. **Hence, statement 1 is correct.**
- There are two main species of elephants i.e **African Elephant (IUCN status: Vulnerable) and Asian Elephant (IUCN status: Endangered)**. **Hence, statement 2 is not correct.**
- The Monitoring the Illegal Killing of Elephants (MIKE) programme, launched in 2003, is an international collaboration that tracks trends in information related to the illegal killing of elephants from across Africa and Asia, to monitor effectiveness of field conservation efforts. **Hence, statement 3 is correct.**

QUESTION 11:

With reference to fly ash, consider the following statements:

1. It is a byproduct from burning of coal.
2. It is transported from the combustion chamber by exhaust gases.
3. It contains substantial amounts of silicon dioxide (SiO_2) and calcium oxide (CaO).

Which of the statements given above is/are correct?

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

Answer: (d)

Explanation

- Fly Ash is a byproduct from burning of coal in electric power generating plants. It is collected from the exhaust gases by electrostatic precipitators or bag filters. **Hence, statement 1 is correct.**
- It is called fly ash because it is transported from the combustion chamber by exhaust gases. **Hence, statement 2 is correct.**
- Fly ash includes substantial amounts of **silicon dioxide (SiO_2)**, aluminium oxide (Al_2O_3), ferric oxide (Fe_2O_3) and **calcium oxide (CaO)**. **Hence, statement 3 is correct.**

QUESTION 12:

With reference to deep web, consider the following statements:

1. The deep web is part of the dark net which includes all unindexed sites.
2. Personal email and online banking are included in the deep web.

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

Answer: (b)

Explanation

- Darknet refers to the hidden internet platform **used for narcotics sale, exchange of pornographic content and other illegal activities** by using the secret alleys of the onion router (Tor-a free and open-source software for enabling anonymous communication) to stay away from the surveillance of law enforcement agencies.
 - It is tough to crack because of its end-to-end encryption.
- The dark net is part of the deep web, which encompasses all unindexed sites that don't pop up when an Internet search is done. Hence, statement 1 is not correct.
- However, not all activities associated with the deep web are nefarious like darknet. In most cases, these pages are not searchable because they are password-protected and require authorization in order to access them.
 - **Personal email, online banking, and other similar sites are included under the umbrella of the deep web. Hence, statement 2 is correct.**

QUESTION 13:

Consider the following statements:

1. The Special Marriage Act, 1954 prescribes 18 years as the minimum age of consent for marriage for men.
2. India is yet to become a party to the Convention on the Elimination of All Forms of Discrimination against Women, 1979.

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

Answer: (d)

Explanation

- **The Special Marriage Act, 1954** prescribes 18 years and the **Prohibition of Child Marriage Act, 2006** prescribes 21 years as the minimum age of consent for marriage for women and men respectively. **Hence, statement 1 is not correct.**
- India is a state party to the Convention on the Elimination of All Forms of Discrimination against Women, 1979. **Hence, statement 2 is not correct.**
 - The Committee on the Elimination of Discrimination against Women (CEDAW), which monitors the implementation of the Convention, calls for the abolition of laws that assume women have a different physical or intellectual rate of growth than men.

QUESTION 14:

The 'Bunker convention' recently seen in the news is related with?

- (a) Protection of atmosphere from ozone depletion.
- (b) Conservation of biodiversity during natural hazards.
- (c) Law for humanitarian treatment in war.
- (d) Liability of damage caused by oil spills.

Answer: (d)

Explanation

- Under the International Convention on Civil Liability for Bunker Oil Pollution, 2001, the owners of vessels are responsible for damage caused by oil leaks.
- This convention, also known as **BUNKER convention**, came into force in 2008 and is administered by the International Maritime Organization (IMO).
- The Convention was adopted to ensure that adequate, prompt, and effective compensation is available to persons who suffer damage caused by spills of oil, when carried as fuel in ships' bunkers'.
- **Hence, option D is correct.**

QUESTION 15:

With reference to the traditional New Year Festivals and states in which they are celebrated, consider the following pairs:

1. Navreh-Gujarat
2. Sajibu Cheiraoba-Manipur
3. Losoong-Sikkim

Which of the pairs given above are correctly matched?

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

Answer: (b)

Explanation

Traditional New Year Festivals in India	
Name	Features
Navreh	It is the lunar New Year that is celebrated in Kashmir . It falls on the very first day of the Chaitra Navratras. Hence, the pair 1 is not correctly matched.
Sajibu Cheiraoba	It is celebrated by Meiteis (an ethnic group in Manipur) which is observed on the first day of Manipur lunar month Shajibu, which falls in the month of April every year. Hence, the pair 2 is correctly matched.
Losoong	Losoong also known as Namsoong is the Sikkimese New Year . It is usually the time when the farmers rejoice and celebrate their harvest. Hence, the pair 3 is correctly matched.

QUESTION 16:

Consider the following statements:

1. The Unani system of medicine was introduced in India by the army of Alexander in 2th century BCE.
2. Sowa-Rigpa is a Tibetan system of medicine.

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

Answer: (b)

Explanation

Unani System of Medicine

- The Unani system originated in Greece and its foundation was laid by Hippocrates.
- However, the system owes its present form to the Arabs who not only saved much of the Greek literature by rendering it into Arabic but also enriched the medicine of their day with their own contributions.
- **It was introduced in India by the Arabs and Persians sometime around the eleventh century. Hence, statement 1 is not correct.**

Sowa-Rigpa

- **“Sowa-Rigpa” commonly known as Tibetan system of medicine** is one of the oldest, living and well documented medical traditions of the world. **Hence, statement 2 is correct.**
- It has originated from Tibet and is popularly practiced in India, Nepal, Bhutan, Mongolia and Russia. The majority of theory and practice of Sowa-Rigpa is similar to “Ayurveda”.
- Sowa-Rigpa is based on the principle that bodies of all the living beings and non living objects of the universe are composed of five Cosmo physical elements of Jung-wa-nga (Prithvi, Jal, Agni, Vayu and Akash).

QUESTION 17:

With reference to Electromagnetic Interference, consider the following statements:

1. It compromises the performance of electrical equipment by obstructing and degrading data
2. It can be attributed to radio and microwave frequencies in the electromagnetic spectrum.

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

Answer: (c)

Explanation

Electromagnetic Interference(EMI)

- EMI is an electromagnetic emission that **causes a disturbance in another piece of electrical equipment.**
- Any device that has an electronic circuit can be susceptible to EMI.
- **It compromises the performance of electrical equipment** by obstructing and degrading data, sometimes even losing data completely. **Hence, statement 1 is correct.**
- **EMI can be attributed to a wide span of the electromagnetic spectrum including radio and microwave frequencies. Hence, statement 2 is correct.**
- In 1933, the International Special Committee on Radio Interference (CISPR) was created to address emerging concerns over EMI.

QUESTION 18:

Consider the following statements regarding National Disaster Management Plan (NDMP):

1. It provides a framework and direction to the government agencies for all phases of the disaster management cycle.
2. The aim of the plan is to drastically lessen the damage caused during and in the aftermath of natural disasters only.
3. Through this plan India has aligned its strategy with the Sendai Framework for Disaster Risk Reduction 2015-2030.

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) 1, 2 and 3

Answer: (b)

Explanation

- **National Disaster Management Plan (NDMP)** provides a framework and direction to the government agencies for **all phases** of the disaster management cycle. **Hence, statement 1 is correct.**
- The primary aim of the plan is to make India disaster resilient and drastically lessen the damage caused during and in the **aftermath of disasters, natural and man-made. Hence, statement 2 is not correct.**
- The National Disaster Management Plan (NDMP) was first released in 2016. The plan was updated in 2016, 2018 and 2019.

- The NDMP 2019 incorporates Prime Minister's ten point agenda for Disaster Risk Reduction.
- With the National Disaster Management Plan (2016) **India has aligned** its National plan with the **Sendai Framework for Disaster Risk Reduction 2015-2030**, to which India is a signatory. **Hence, statement 3 is correct.**

QUESTION 19:

Consider the following statements with reference to 'Swadeshi Microprocessor Challenge':

1. The challenge seeks to invite innovators and startups to make indigenous microprocessors.
2. It has been announced by the NITI ayog under Atal Innovation Mission.

Which of the statements given above is/are not correct?

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

Answer: (d)

Explanation

- **'Swadeshi Microprocessor Challenge**-Innovate Solutions for Aatmanirbhar Bharat **seeks to invite innovators, startups and students to use (not make) microprocessors, developed by IIT Madras and C-DAC, to generate various technology products. Hence, statement 1 is not correct.**
 - IIT Madras and Center for Development of Advance Computing (C-DAC) have developed two microprocessors named **SHAKTI (32 bit) and VEGA (64 bit)** respectively using Open Source Architecture under the aegis of Microprocessor Development Programme of MeitY.
- The **Ministry of Electronics and Information Technology (MeitY)** has announced 'Swadeshi Microprocessor Challenge' to provide further impetus to the Start-up ecosystem, innovation and research in the country. **Hence, statement 2 is not correct.**

QUESTION 20:

With reference to Digital Quality of Life (DQL) Index 2020, consider the following statements:

1. The index is released by SurfShark.
2. Electronic security is one of the parameters of this index.
3. India ranks among the highest in the world in terms of Internet quality.

Which of the statements given above is/are correct?

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

Answer: (a)

Explanation

- Digital Quality of Life (DQL) Index is released by SurfShark, an online privacy solutions provider. **Hence, statement 1 is correct.**
- The index studies five fundamental pillars that define the digital quality of life namely, internet affordability, internet quality, electronic infrastructure, **electronic security** and electronic government. **Hence, statement 2 is correct.**
- It is global research on the quality of digital wellbeing in 85 countries. According to it, **India ranks among the lowest (57th position) in the world in terms of Internet quality. Hence, statement 3 is not correct.**

QUESTION 21:

With reference to 'Loya Jirga', consider the following statements:

1. It is a newly constituted legislative assembly of Afghanistan.
2. It is an official decision-making body in Afghanistan.

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

Answer: (d)

Explanation

- **Loya Jirga** is a **mass national gathering** that brings together representatives from the **various ethnic, religious, and tribal communities in Afghanistan**.
 - It is a highly respected **centuries-old consultative body** that has been convened at times of national crisis or to settle national issues. **Hence, statement 1 is not correct.**
 - The national legislature of Afghanistan is a bicameral body, comprising two chambers:
 - ◆ **Meshrano Jirga** (House of Elders) is an upper house.
 - ◆ **Wolesi Jirga** (House of the People) is a lower house.
- According to the Afghan Constitution, a **Loya Jirga** is considered the **highest expression of the Afghan people**. It is **not an official decision-making body** and its decisions are not legally binding. **Hence, statement 2 is not correct.**
- However, the Loya Jirga's decision is **seen as final, with the president and parliament** expected to respect the ruling.

QUESTION 22:

Which of the following statements is/ are correct regarding 'Anganwadi services'?

1. It is a central sector scheme implemented by the States.
2. It was launched to combat child hunger and malnutrition.
3. It was a part of the National Rural Health Mission (NRHM).

Select the correct answer using the code given below:

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

Answer: (c)

Explanation

- Anganwadi is a **centrally sponsored scheme** implemented by the States / UTs which serves as a rural child and maternal care centre in India.
 - **Centrally Sponsored Schemes** on the other hand are schemes that are implemented by state governments. However, the cost of these schemes is borne on a shared basis in the ratio of 50:50, 70:30, 75:25 or 90:10. **Hence, statement 1 is not correct.**

- Anganwadi centres provide a package of six services: **supplementary nutrition**, pre-school non-formal education, immunisation, health check-up, nutrition and health education, and referral services. **Hence, statement 2 is correct.**
 - In addition to **fighting malnutrition** and ill health, the programme is also intended to combat gender inequality by providing girls the same resources as boys.
 - The beneficiaries under the Anganwadi Services Scheme are identified on the basis of Aadhaar.
- It was started by the Government of India In 1975 as part of the **Integrated Child Development Services program** to combat child hunger and malnutrition. **Hence, statement 3 is not correct.**

QUESTION 23:

Consider the following statements regarding Eravikulam National Park:

1. It is located in the southern Western Ghats in the state of Tamil Nadu.
2. It includes the highest peak of southern India.

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

Answer: (b)

Explanation

- **Eravikulam National Park** is located in the High Ranges (Kannan Devan Hills) of the Southern Western Ghats in the Devikulam Taluk of Idukki District, **Kerala**. **Hence, statement 1 is not correct.**
- It spreads over an area of 97 square km and hosts South India's highest peak, **Anamudi (2695 m)**, in its southern area. **Hence, statement 2 is correct.**
- The Rajamalai region of the park stays open to the public for tourism.
- The park is in continuity with the neighboring Chinnar Wildlife Sanctuary, Anamudi Shola National Park, Pampadum Shola National Park, Kurinjimala Sanctuary and Anamalai Tiger Reserve.

QUESTION 24:

'Arakunomics economic model' recently in the news ensures profit in which of the following?

- (a) Agriculture
- (b) Stock Broking
- (c) Automobile trade
- (d) Cryptocurrencies

Answer: (a)

Explanation

- **Arakunomics** is a new integrated economic model that ensures **profits for farmers**, quality for consumers through **regenerative agriculture**. **Hence, option A is correct.**
- It is based on work with tribal farmers in Araku for nearly 20 years.
- This economic model is a tribute to the tribal farmers of Araku region for the world-class coffee produced and launched in Paris in 2017, as well as for the high carbon landscape transformation they did in over 955 villages, thereby planting 25 million trees.

QUESTION 25:

With reference to Tribal Cooperative Marketing Development Federation of India (TRIFED), consider the following statements:

1. It was registered under the Multi-State Cooperative Societies Act, 1984.
2. It undertakes the function retail marketing and development of Minor Forest Produce (MFP).

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

Answer: (c)

Explanation

- Tribal Cooperative Marketing Development Federation of India (TRIFED) came into existence in 1987 as the national nodal agency under the aegis of the Ministry of Tribal Affairs.
 - It was registered under the **Multi-State Cooperative Societies Act, 1984**. Hence, statement 1 is correct.
 - It started its operations in 1988 with its head office in New Delhi.
- **Objectives:** Socio-economic development of tribal people, promotion of economic welfare, empowerment of tribal people with knowledge, tools and information and their capacity building.
- It mainly undertakes two functions which are Minor Forest Produce (MFP) Development and Retail Marketing and Development. Hence, statement 2 is correct.

QUESTION 26:

Which of the following is/are not the members of the Gulf Cooperation Council?

1. Bahrain
2. Oman
3. Iran
4. Qatar

Select the correct answer using the code given below:

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

Answer: (a)

Explanation

- **Gulf Cooperation Council (GCC)** is a political and economic alliance of countries in the Arabian Peninsula.
- It was established in 1981 to foster socioeconomic, security, and cultural cooperation.
- Members: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates (UAE). Iran is not a member of GCC. Hence, option C is correct.
 - All these member countries of the GCC come under the Persian Gulf Region.



QUESTION 27:

Which of the following is/are correct regarding the office of Comptroller and Auditor General (CAG) of India?

1. It is a guardian of the public purse of both Centre and the state.
2. The expenses of the office of the CAG is decided by Parliament.
3. CAG has no control over the issue of money from the consolidated fund.

Select the correct answer using the code given below:

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

Answer: (b)

Explanation

Comptroller and Auditor General (CAG)

- **Article 148** provides for an independent office of the CAG. It is the **supreme audit institution of India**.
 - **Articles 149-151** (Duties & Powers, Form of Accounts of the Union and the States and Audit Reports), **Article 279** (calculation of net proceeds, etc.) and **Third Schedule** (Oath or Affirmation) and **Sixth Schedule** (Administration of Tribal Areas in the States of Assam, Meghalaya, Tripura and Mizoram).

- **Guardian of the public purse** and controls the entire **financial system** of the country at both the levels—the **Centre and the state**. Hence, **statement 1 is correct**.
- The **accountability of the executive (i.e. Council of Ministers)** to the Parliament in the sphere of **financial administration** is secured through audit reports of the CAG.
- The administrative expenses of the office of the CAG, including all salaries, allowances and pensions of persons serving in that office are **charged upon the Consolidated Fund of India (thus are not subject to the vote of Parliament)**. Hence, **statement 2 is not correct**.
- The Constitution of India visualises the CAG to be Comptroller as well as Auditor General. However, in practice, the CAG is **fulfilling the role of an Auditor-General only and not that of a Comptroller**.
 - In other words, the CAG **has no control over the issue of money from the consolidated fund** and many departments are authorised to draw money by issuing cheques without specific authority from the CAG, who is concerned only at the audit stage when the expenditure has already taken place. Hence, **statement 3 is correct**.

QUESTION 28:

With reference to Blue Bonds, consider the following statements:

1. China was the first country in the world to launch sovereign Blue Bonds.
2. It is issued to raise capital to finance Hydro-electric power projects in other countries.

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

Answer: (d)

Explanation

- **Seychelles** became the first country in the world to launch sovereign Blue Bonds. Hence, **statement 1 is not correct**.
- It is a debt instrument issued by governments, development banks etc to raise capital from investors to **finance marine and ocean-based projects**. Hence, **statement 2 is not correct**.
- It will help in expansion of marine protected areas, improved governance of priority fisheries and the development of the Seychelles' blue economy.
- The blue bond is inspired by the green bond concept.

QUESTION 29:

With reference to Quit India Movement, consider the following statements:

1. Failure of Cripps mission was the immediate cause for the launch of the movement.
2. The Hindu Mahasabha supported the movement with some conditions.

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

Answer: (a)

Explanation

Causes of Quit India Movement

- **The immediate cause for the movement was the failure of Cripps mission. Hence, statement 1 is correct.**
- The British assumption of unconditional support from India to British in World War II was not taken well by the Indian National Congress.

Support to Quit India Movement

- Muslim League, the Communist Party of India and the **Hindu Mahasabha did not support the movement**. The Indian bureaucracy also did not support the movement.
 - The League was not in favour of the British leaving India without partitioning the country first.
 - The Communist party supported the British since they were allied with the Soviet Union.
 - **The Hindu Mahasabha openly opposed the call for the Quit India Movement** and boycotted it officially under the apprehension that the movement would create internal disorder and will endanger internal security during the war. **Hence, statement 2 is not correct.**

QUESTION 30:

With reference to 'Sanjeevani', consider the following statements

1. It is a telemedicine service platform of the Ministry of Health & Family Welfare.
2. It is developed by the Centre for Development of Advanced Computing (C-DAC).

Which of the above statements is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 and 2

Answer: (c)

Explanation

- **'eSanjeevani' and 'eSanjeevaniOPD' are the two telemedicine service platforms of the Ministry of Health & Family Welfare. Hence, statement 1 is correct.**
 - According to the World Health Organisation (WHO), telemedicine is the delivery of health care services, by using Information Technology (IT) for diagnosis, treatment and prevention of disease and injuries, research and evaluation, etc.
- **'eSanjeevani' is developed by the Centre for Development of Advanced Computing (C-DAC) Mohali. Hence, statement 2 is correct.**
 - C-DAC is the premier R&D organization of the Ministry of Electronics and Information Technology (MeitY) for carrying out R&D in IT, Electronics and associated areas.

QUESTION 31:

The 'Depsang Plains', recently in the news due to Chinese aggression, is located in?

- (a) Arunachal Pradesh
- (b) Sikkim
- (c) Uttarakhand
- (d) Ladakh

Answer: (d)

Explanation

- The **Depsang Plains** along with Pangong Tso are the two major areas of concern in the ongoing standoff along the **Line of Actual Control (LAC) in eastern Ladakh**.
- Despite the strategic importance of the Depsang Plains, the series of military talks held so far have focussed on the standoff areas at Galwan, Gogra Hotsprings and Finger area of Pangong Tso. **Hence, option D is correct.**

QUESTION 32:

With reference to the 'Ring of Fire', consider the following statements:

1. It is characterized by active volcanoes and frequent earthquakes in Pacific Ocean.
2. The abundance of volcanoes in this region is due to the movement of tectonic plates.

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

Answer: (c)

Explanation

- The **Ring of Fire**, also referred to as the **Circum-Pacific Belt**, is a path along the Pacific Ocean **characterized by active volcanoes and frequent earthquakes. Hence, statement 1 is correct.**
 - It traces boundaries between several tectonic plates—including the Pacific, Cocos, Indian-Australian, Nazca, North American, and Philippine Plates.
 - 75% of Earth's volcanoes i.e. more than 450 volcanoes are located along the Ring of Fire. 90% of Earth's earthquakes occur along **its path**.
- The abundance of volcanoes and earthquakes along the Ring of Fire is caused by the amount of **movement of tectonic plates in the area.**
 - Along much of the Ring of Fire, plates overlap at **convergent boundaries** called **subduction zones**. That is, the plate that is underneath is pushed down, or subducted, by the plate above. As rock is subducted, it melts and becomes magma. The abundance of magma so near to Earth's surface **gives rise to conditions ripe for volcanic activity. Hence, statement 2 is correct.**

QUESTION 33:

With reference to the Hindu Succession (Amendment) Act 2005, which of the following is correct?

1. It does not apply to Buddhists, Sikhs and Jains.
2. It gives equal inheritance and coparcenary rights to the women.

Choose the correct answer from the codes given below.

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

Answer: (b)

Explanation

- The law **applies to everyone who is not a Muslim, Christian, Parsi or Jew** by religion. **Buddhists, Sikhs, Jains and followers of Arya Samaj, Brahmo Samaj are also considered Hindus** for the purposes of this law. **Hence, statement 1 is not correct.**

- Women were recognised as coparceners or joint legal heirs for partition arising from 2005. **Section 6 of the Act was amended in the year 2005 to make a daughter of a coparcener also a coparcener by birth** in her own right in the same manner as the son. The law also gave the daughter the same rights and liabilities in the coparcenary property as she would have had if she had been a son. **Hence, statement 2 is correct.**

QUESTION 34:

The 'Sputnik V' recently seen in the news is related to?

- (a) It is a nuclear weapon of Russia based on fusion technology.
- (b) It is the first manned mission on Mars launched by Roscosmos.
- (c) It is officially registered Covid-19 vaccine by Russia.
- (d) It is a dedicated satellite for the mapping of the southern pole of earth.

Answer: (c)

Explanation

- Russia became the first country to officially register a Covid-19 vaccine and declare it ready for use.
- The vaccine has been called **Sputnik V**, named after the **first artificial Earth satellite**, Sputnik-I launched by the Soviet Union. It is the first Covid-19 vaccine to be approved.
- The vaccine has been called Sputnik V, named after the first artificial Earth satellite, Sputnik-I launched by the Soviet Union. **Hence, option C is correct.**

QUESTION 35:

With reference to CollabCAD in Atal Tinkering Lab, consider the following statements:

1. It has been launched in collaboration with the National Informatics Centre.
2. It aims at teaching creating and modifying 3D designs.

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

Answer: (c)

Explanation

- Atal Innovation Mission, NITI Aayog and the National Informatics Centre (NIC) have jointly launched **CollabCAD in Atal Tinkering Labs** (or ATL schools) to provide students experience in creating and modifying 3D designs. **Hence, statement 1 is correct.**
- CollabCAD is a collaborative network enabled and desktop CAD (Computer-Aided Design) software system, which provides a total engineering solution from 2D drafting & detailing to 3D printing.
- **It is an initiative of National Informatics Centre** (Ministry of Electronics and Information Technology), New Delhi, **Bhabha Atomic Research Centre** (Department of Atomic Energy), Navi Mumbai and Vikram Sarabhai Space Centre (Department of Space, ISRO), Thiruvananthapuram.
- It provides a great platform to students of Atal Tinkering Labs (ATLs) across the country to create and modify 3D designs with free flow of creativity and imagination. **Hence, statement 2 is correct.**
- This software would also enable students to create data across the network and concurrently access the same design data for storage and visualization.

QUESTION 36:

The area known as 'West Bank' sometimes appeared in the news in the context of the events related to:

- (a) Melting glaciers in Arctic
- (b) Israel-Middle East conflict
- (c) Volcanic eruptions at the coast of Peru
- (d) Major sea port of India in the medieval era

Answer: (b)

Explanation

- **West Bank** (about one and a half times the size of Goa) is a landlocked territory in **West Asia**. It also contains a significant section of the western dead sea.
- It was captured by Jordan after the Arab-Israeli War (1948) but Israel snatched it back during the Six-Day War of 1967 and has occupied it ever since.
- At present, there are around 130 formal Israeli settlements along with 26 lakh Palestinians at West Bank. **Hence, option B is correct.**



QUESTION 37:

With reference the recent casting of seed bombs in Athagarh Forest Division, consider the following statements:

1. It aims to protect an endemic species of plant from getting extinct due to overgrazing.
2. This programme has been undertaken by the government of Rajasthan.

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

Answer: (d)

Explanation

- **Odisha's** Athagarh Forest Division has started casting seed balls (or bombs) inside different reserve forest areas to enrich food stock for wild elephants. This has been done to prevent man-elephant conflict. **Hence, statement 2 is not correct.**
- Villagers who bear the brunt of the elephant attacks have come forward to prepare the bamboo seed balls and scatter them in 38 reserve forests under the Athagarh Forest Division.
- The growth in bamboo plantations is expected to meet the needs of the elephants, which often stray out of the forests and raid human habitations. **Hence, statement 1 is not correct.**

QUESTION 38:

The 'Convention No. 182' recently seen in the news for universal ratification is related to?

- (a) Worst forms of child labour
- (b) Protection of the ozone layer
- (c) Protection of the natural heritage
- (d) Privileges and immunities of diplomats

Answer: A

Explanation

- International Labour Organization (ILO)'s **convention on Worst Forms of Child Labour also known as Convention No. 182** received universal ratification after the Kingdom of Tonga ratified the same.
 - The convention was adopted by ILO member states meeting in Geneva in 1999.
 - Convention No. 182 has received ratification from all the 187 members of ILO.
- It aims to protect children from the worst forms of child labour, which include slavery, prostitution, trafficking, deployment of children in armed conflict and other conditions that compromise their overall well-being.
- The eradication of child labour is part of the Sustainable Development Goal Target 8.7.
- The UN General Assembly has declared 2021 as the year for the elimination of child labour.
- Convention No. 182 is among the **eight core ILO Conventions** regarded as embodying the spirit of the 1998 declaration on fundamental principles and rights at work.
- **Hence, option A is correct.**

QUESTION 39:

With reference to the Provision of Urban Amenities to Rural Areas (PURA) scheme, which of the following is/are correct?

1. This scheme was envisioned by APJ Abdul Kalam for empowering and accelerating rural development.
2. It was replaced by Shyama Prasad Mukherji Rurban Mission (SPMRM) in 2016.

Choose the correct answer from the codes given below.

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

Answer: (c)

Explanation

- Provision of Urban Amenities to Rural Areas (PURA) was **mooted by the former President Dr. Abdul Kalam in January 2003** as a way of empowering and accelerating rural development.
 - The Ministry of Rural Development (MoRD) implemented the PURA scheme on a pilot basis in seven clusters for a period of three years (2004-05 to 2006-07). **Hence statement 1 is correct.**
- PURA 2.0 as a central sector scheme was launched in 2012 focussing on the development of potential growth centres such as census towns.
- It aims to provide livelihood opportunities and urban amenities to the rural population in order to improve their quality of life and bridge the urban-rural divide.
- The PURA framework has been devised as an empowerment-based model to achieve sustainability by providing the villages with the necessary Physical, Electronic, Knowledge and Economic Connectivity.
- In 2014-15, the government made no allocation to the PURA scheme and instead introduced the Rurban Mission with an initial allocation of ₹100 crore.
- The **Shyama Prasad Mukherji Rurban Mission (SPMRM)** scheme was **launched by the Ministry of Rural Development (MoRD) in 2016** to deliver integrated project based infrastructure in the rural areas, which will also include development of economic activities and skill development.
 - The aim of the Rurban Mission is to create 300 rural growth clusters across the country. **Hence statement 2 is correct.**

QUESTION 40:

With reference to the National Flag, which of the following statements are correct?

1. The tricolour as India's national flag was adopted by the Congress Committee in Karachi (1931).
2. The National Flag should be rectangular in shape with a length to width ratio of 2:3.
3. In the Constituent Assembly the Ad-hoc Committee on the National Flag was headed by Dr. Rajendra Prasad.

Select the correct answer using the code given below:

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

Answer: (a)

Explanation

- **The Congress Committee met in Karachi (1931) and adopted the tricolour** (that of Pingali Venkayya) as India's national flag. Red was replaced with saffron and the order of the colours was changed. **Hence, statement 1 is correct.**
- The Ashok Chakra with 24 spokes replaced the spinning wheel as the emblem on the flag. It is intended "to show that there is life in movement and death in stagnation".
 - The National Flag should be rectangular in shape with a length to width ratio of **3:2**. **Hence, statement 2 is not correct.**

- The Constituent Assembly adopted the motion of national flag on 22nd July 1947.
- One of the minor committees of the Constituent Assembly, **the Ad-hoc Committee on the National Flag was headed by Dr. Rajendra Prasad. Hence, statement 3 is correct.**

QUESTION 41:

With reference to biofuels, consider the following statements:

1. Second generation biofuels are produced from microorganisms.
2. Genetically engineered crops are used in third generation biofuels.

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

Answer: (d)

Explanation

■ First generation biofuels:

- These are made from food sources such as sugar, starch, vegetable oil, or animal fats using conventional technology.
- Common first-generation biofuels include Bioalcohols, Biodiesel, Vegetable oil, Bioethers, Biogas.

■ Second generation biofuels:

- These are produced from **non-food crops or portions of food crops that are not edible** and considered as wastes, e.g. stems, husks, wood chips, and fruit skins and peeling. **Hence, statement 1 is not correct.**
- Examples include cellulose ethanol, biodiesel.

■ Third generation biofuels:

- These **are produced from microorganisms** like algae. Example-Butanol. **Hence, statement 2 is not correct.**
- Micro-organisms like algae can be grown using land and water unsuitable for food production, therefore reducing the strain on already depleted water sources.

■ Fourth Generation Biofuels:

- In the production of these fuels, crops that are **genetically engineered** to take in high amounts of carbon are grown and harvested as biomass.
- The crops are then converted into fuel using second generation techniques.

QUESTION 42:

With reference to the National Solar Mission, consider the following statements:

1. It is one of the seven national missions outlined in India's National Action Plan on Climate Change.
2. It targets installing 175 GW grid-connected solar power plants by the year 2022.

Which of the statements given above is/are not correct?

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

Answer: (c)

Explanation

- Solar energy has taken a central place in India's National Action Plan on Climate Change with the **National Solar Mission** as one of the key Missions. National Solar Mission is **one of the Eight national missions outlined in the National Action Plan on Climate Change (NAPCC)**. Hence, **statement 1 is not correct.**
- Eight key missions are-
 - National Solar Mission
 - National Mission for Enhanced Energy Efficiency
 - National Mission on Sustainable Habitat
 - National Water Mission
 - National Mission for Sustaining the Himalayan Ecosystem
 - National Mission for A Green India
 - National Mission for Sustainable Agriculture
 - National Mission on Strategic Knowledge for Climate Change
- National Solar Mission (NSM) was launched on 11th January, 2010.
 - Its objective is to establish India as a global leader in solar energy by creating the policy conditions for solar technology diffusion across the country as quickly as possible.
- It targets installing **100 GW grid-connected solar power plants by the year 2022** (175 GW by 2022 is India's total renewable energy target). Hence, **statement 2 is not correct.**

QUESTION 43:

With reference to rejuvenation of river Ganga, which of the following is/are not correct?

1. Ganga Action Plan was the first River Action Plan that was taken to improve the river water quality.
2. The National River Conservation Plan is an extension to the Ganga Action Plan.

Select the correct answer using the code given below:

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

Answer: (d)

Explanation

- **Ganga Action Plan** was the first River Action Plan that was taken up by the Ministry of Environment, Forest and Climate Change in 1985. Hence, **statement 1 is correct.**
 - It was launched to **improve the water quality by the interception, diversion, and treatment of domestic sewage.**
- The **National River Conservation Plan** is an extension to the Ganga Action Plan. Hence, **statement 2 is correct.**
 - It aims at cleaning the Ganga river under Ganga Action Plan phase-2.

QUESTION 44:

'Bhadbhut project' recently seen in the news is located on which river?

- (a) Narmada
- (b) Godavari
- (c) Mahanadi
- (d) Kaveri

Answer: (a)

Explanation

- **Bhadbhut Project** is located across the **river Narmada**, 5 km from Bhadbhut village and 25 km from the mouth of the river, where it flows into the Gulf of Khambhat.
- The project is part of the larger Kalpasar Project, which entails construction of a 30-km dam across the Gulf of Khambhat between Bharuch and Bhavnagar districts.
 - Kalpasar Project aims to store Gujarat's 25% average annual surface water resources.
 - This reservoir will store about 8,000 million cubic metres (MCM) of surface water and will be one of the world's largest freshwater reservoirs in the sea.
 - It will stop most of the excess water flowing out of the Sardar Sarovar Dam from reaching the sea and will create a sweet water lake of 600 MCM on the river, solving the freshwater problems in Bharuch. **Hence, option A is correct.**

QUESTION 45:

With reference to Gothic Architecture, consider the following statements:

1. This architecture emerged from France and England.
2. Pointed arches with ribbed vaults is the unique feature of this architecture.
3. Victoria Memorial is an example of Indo-Gothic architecture.

Which of the statements given above is/are correct?

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

Answer: (d)

Explanation

- Gothic Architecture is a European style of architecture popular in the 12th-16th century. This architecture has its **roots in France and England. Hence, statement 1 is correct.**
- **Gothic style** can vary according to location, age, and type of building, it is often characterized by 5 key **architectural elements**: large stained glass windows, **pointed arches**, **ribbed vaults**, flying buttresses, and ornate decoration. **Hence, statement 2 is correct.**
- The Britishers merged some Indian features of architecture to the Gothic architecture, which resulted in the Indo-Gothic style of architecture.
 - Examples of Indo-Gothic style of architecture: Madras High Court, **Victoria Memorial**, The Chhatrapati Shivaji Maharaj Terminus (previously Victoria Terminus) etc. **Hence, statement 3 is correct.**

QUESTION 46:

Consider the following statements regarding Contempt of court in India:

1. Criminal contempt is the wilful disobedience to any judgment, decree, direction, order, writ or other process of a court.
2. On finding guilty of Contempt of Court, the court can only impose the fines.

Which of the statements given above is/are not correct?

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

Answer: (c)

Explanation

- According to the **Contempt of Court Act of 1971**, contempt of court is of two types:
 - **Civil contempt:** It is the wilful disobedience to any judgment, decree, direction, order, writ or other process of a court or wilful breach of an undertaking given to a court.
 - **Criminal contempt:** It is the publication of any matter or the doing of any other act which scandalises or lowers the authority of any court, or interferes with the due course of any judicial proceeding, or obstructs the administration of justice in any other manner. **Hence, statement 1 is not correct.**
- The Contempt of Court Act of 1971 **punishes the guilty with imprisonment** that may extend to six months or fine of ₹ 2,000 or both. **Hence, statement 2 is not correct.**
- The act was amended in 2006 to include “truth and good faith” as a defence.
 - It was added that the court may impose punishments only if the act of the other person substantially interferes, or tends to interfere with the due course of justice.

QUESTION 47:

With reference to ‘Draft Code on Wages (Central) Rules, 2020’, consider the following statements:

1. The draft code introduces the concept of floor wage.
2. The minimum wages cannot be fixed by state governments below floor wage.

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

Answer: (c)

Explanation

- The **Code on Wages, 2020 introduces the concept of a floor wage**, which empowers the central government to fix floor wages taking into account the minimum living standards of workers. **Hence, statement 1 is correct.**
 - The floor wage is a baseline wage below which minimum wages cannot be fixed by state governments. **Hence, statement 2 is correct.**
 - The Wage Code permits the fixation of different floor level wages for different geographical areas. However, this has given rise to the fear of flight of capital from areas where the wage is higher to areas where the wage is lower.
 - There is also fear that it will lead to fixation of low wages by state governments in a bid to attract greater investments thus depressing the minimum wage.
- Also, the wage rules do not outline the exact criteria and methods for fixation of floor wage rates by the Central Government.

QUESTION 48:

With reference to National Recruitment Agency (NRA), consider the following statements:

1. The NRA will be a Society registered under the Societies Registration Act, 1860.
2. It will conduct the Common Eligibility Test (CET) for recruitment to all gazetted and non-gazetted posts in government and public sector banks

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

Answer: (a)

Explanation

- The Union Cabinet has decided to set up a **National Recruitment Agency (NRA)** to conduct a common preliminary examination for various recruitments in the central government.
- The NRA will conduct the Common Eligibility Test (CET) for recruitment to **non-gazetted posts** in government and public sector banks. **Hence, statement 2 is not correct.**
- Common Eligibility Test (CET) aims to replace multiple examinations conducted by different recruiting agencies for selection to government jobs advertised each year, with a single online test.
 - The Government also plans to provide outreach and awareness facilities to assist candidates in rural and far flung areas to familiarize them with the online examination system.
 - A 24x7 helpline will be set up for answering queries, complaints and queries.
- National Recruitment Agency will be a **Society** registered under the Societies Registration Act, 1860. **Hence, statement 1 is correct.**
- It will be headed by a Chairman of the rank of the Secretary to the Government of India. It will have representatives of the Ministry of Railways, Ministry of Finance/Department of Financial Services, the SSC, RRB & IBPS.

QUESTION 49:

Which of the following countries are not the members of the EastMed Gas Forum?

1. Israel
2. Italy
3. Hungary
4. Turkey

Select the correct answer using the code given below:

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

Answer: (c)

Explanation

- In 2019, Egypt, Cyprus, Greece, Israel, Italy, Jordan and Palestinian Authority signed the East Med Gas Forum (EMGF) foundation charter, creating a platform for East Mediterranean natural gas cooperation. Cairo will be the headquarters of the forum. **Turkey and Hungary** are not members of EMGF. **Hence, option C is correct.**

QUESTION 50:

With reference to Lingaraj temple, consider the following statements:

1. It is a UNESCO world heritage site.
2. The temple is dedicated to the sun god.

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

Answer: (d)

Explanation

- Recently, the Odisha government has decided to give a facelift to the 11th century Lingaraj Temple, akin to its pre-350-year structural status.
- This is a part of the Lingaraj Temple Heritage Development Project under Ekamra plan.
- Through Ekamra plan, it is expected that heritage redevelopment will enhance the attraction of Bhubaneswar as a tourist site and claim for a UNESCO heritage site will be stronger. **Hence, statement 1 is not correct.**
- Lingaraj Temple, built in 11th century AD, is dedicated to Lord Shiva and is considered as the largest temple of the city Bhubaneswar. **Hence, statement 2 is not correct.**
- It is believed to have been built by the Somvanshi King Yayati I.
- The main tower of this temple measures 180-feet in height.
- **It is built in red stone** and is a classic example of Kalinga style of architecture.

QUESTION 51:

Formalin is a colorless flammable chemical, which of the following are the uses of it?

1. To increase shelf life of fresh food.
2. To preserve bodies in mortuaries.

Select the correct answer using the code given below:

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

Answer: (c)

Explanation

- The International Agency for Research on Cancer (IARC) of WHO classifies formaldehyde as 'carcinogenic to humans', with sufficient evidence for causing nasopharyngeal cancer in humans.
- Formalin is a colourless strong-smelling chemical substance usually It is derived from formaldehyde gas dissolved in water.
- **Usage of Formalin are:**
 - In the industry of textiles (Fabrics), plastics, paper, paint,
 - In construction,
 - In pressed wood products,
 - In insulation materials as fungicide, germicide & disinfectant
 - As a preservative for bodies and organs in mortuaries to ensure the specimen doesn't decompose.
 - It can also increase shelf life of fresh food.
 - Formalin or formaldehyde is sprayed on the fish or injected into the fish or the fish is dipped into the solution. This helps keep the fish fresh for a longer time.
 - Recently, samples of fish species from two major fish markets in Kerala have tested positive for formalin, a cancer-inducing chemical used illegally to preserve fish.
 - Kerala government has been carrying out a storm of raids under its fish safety and hygiene campaign "Operation Sagar Rani".
 - Formalin causes irritation in the eyes, throat, skin, and stomach. In the long run, continued exposure causes harm to the kidneys, liver and can even cause cancers.

QUESTION 52:

Consider the following statements:

1. Doppler effect is a change in frequency due to relative motion between source and observer.
2. The Doppler effect is used by police to check over-speeding of vehicles.

Select the correct answer using the code given below:

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

Answer: (c)

Explanation

- Doppler Effect refers to the change in the wave frequency during the relative motion between a wave source and its observer. **Hence, statement 1 is correct.**
- It was discovered by Christian Johann Doppler who described it as the process of increase or decrease of starlight that depends on the relative movement of the star.

Application of Doppler effect

- The change in frequency caused by a moving object due to the Doppler effect is used to measure their velocities in diverse areas such as military, medical science, astrophysics, etc. It is also used by police to check over-speeding of vehicles. **Hence, statement 2 is correct.**

QUESTION 53:

Consider the following statements:

1. China's HL-2M Tokamak device works on the principle of nuclear fusion.
2. Nuclear fusion is used by nuclear reactors for electricity generation.

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

Answer: (a)

Explanation

China has come up with an artificial sun made of electrons and ions.

Artificial Sun

- HL-2M Tokamak device is used in it to replicate the nuclear fusion process that occurs naturally in the sun. **Hence, statement 1 is correct.**
- The artificial sun's plasma is mainly composed of electrons and ions, and the existing Tokamak devices have achieved an electron temperature of over 100 million degrees Celsius in its core plasma, and an ion temperature of 50 million degrees Celsius, and it is the ion that generates energy in the device.
- The nuclear reactors, used for electricity generation, use Nuclear Fission not Nuclear fusion. **Hence, statement 2 is NOT correct.**
- Both fission and fusion are nuclear processes by which atoms are altered to create energy. The nuclear fission releases heat energy by splitting atoms e.g. Uranium-238. In nuclear fusion, union of atomic nuclei to form heavier nuclei resulting in the release of enormous amounts of energy e.g. Hydrogen or Helium.

QUESTION 54:

With reference to SUPRA scheme, consider the following statements:

1. It comes under the Council of Scientific and Industrial Research.
2. It's objective is funding and exploration of new scientific and engineering breakthroughs with global impact.

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

Answer: (b)

Explanation

SUPRA Scheme

- The Science and Engineering Research Board (SERB) has proposed a new scheme, Scientific and Useful Profound Research Advancement (SUPRA). **Hence, statement 1 is NOT correct.**
- The objective of the scheme is funding and exploration of new scientific and engineering breakthroughs with global impact. **Hence, statement 2 is correct.**
- The scheme will fund disruptive ideas that can lead to new areas of study, new scientific concepts, new products and technologies.
- The focus is not on incremental or short-term advances in understanding, but new science or truly disruptive technologies.
- The scheme is designed to attract high quality research proposals consisting of new hypotheses or challenge existing ones and provide 'out-of-box' solutions.
- **About Science and Engineering Research Board:** It was set up as a statutory body in 2009 under the Department of Science and Technology to promote and fund research in different scientific disciplines.

QUESTION 55:

With reference to GramNet, consider the following statements:

1. It comes under the National Broadband Mission.
2. It is an initiative of the Ministry of Science and technology.
3. Under this, the government aims to provide 1 Gbps connectivity to all Gram Panchayats of India by 2020.

Which of the statements given above is/are correct?

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

Answer: (c)

Explanation

- The Government has reiterated its commitment to provide Wi-Fi in all the villages through GramNet with connectivity between 10 Mbps to 100 Mbps speed. It is an initiative of the Ministry of Communication. **Hence, statement 2 and 3 are NOT correct.**

- GramNet is a part of National Broadband Mission (Rashtriya Broadband Abhiyan) to secure universal broadband access. **Hence, statement 1 is correct.**
- Apart from this, there are other initiatives being taken under the same. Few being:
- **BharatNet** – Providing 1 Gbps to Gram Panchayats upgradeable to 10 Gbps.
- **NagarNet** – Establishing 1 Million public Wi-Fi Hotspots in urban areas
- **JanWiFi** – Establishing 2 Million Wi-Fi Hotspots in rural areas

QUESTION 56:

With reference to Gas Hydrates, consider the following statements:

1. They usually contain methane or carbon dioxide.
2. They have the potential to fulfil energy security needs of the nation.
3. Hydrocarbon Exploration Licensing Policy (HELP) encourages their exploration.

Which of the statements given above are correct?

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

Answer: (d)

Explanation

- Clathrate hydrates or Gas hydrates are solid cages of water containing small non-polar molecules like carbon dioxide and methane. **Hence, statement 1 is correct**
- Clathrate hydrates are formed when a gas such as methane gets trapped in well-defined cages of water molecules forming crystalline solids.
- On earth, they are found on the ocean floor or the permafrost region of the earth.

Uses of Clathrate Hydrates

- Hydrates are considered as the future sources of fuel.
- They could be a potentially safe, efficient method for storing and transporting gases.

Significance

- **Carbon Sequestration:** Trapping carbon dioxide in hydrates can be a way to reduce global warming
- **Sustainable Energy source:** Development of technology to harvest Gas Hydrates can ensure energy security of the nation. Hence, statement 2 is correct.
- Hydrocarbon Exploration Licensing Policy (HELP)
- The government has launched the Hydrocarbon Exploration Licensing Policy (HELP) replacing the old policy of National Exploration and Licensing Policy (NELP).
- Four main facets of HELP are:
 - Uniform license for exploration and production of all forms of hydrocarbon,
 - An open acreage policy,
 - Easy to administer the revenue sharing model and
 - Marketing and pricing freedom for the crude oil and natural gas produced.
- The uniform license will enable the contractor to explore conventional as well as unconventional oil and gas resources including coal bed methane, shale gas/oil, tight gas, and gas hydrates. **Hence, statement 3 is correct.**

QUESTION 57:

Consider the following pairs:

Type of Acid	Found In
1. Acetic Acid	– Vinegar
2. Oxalic acid	– Fats
3. Carbonic acid	– Soda Water
4. Tartaric Acid	– Grapes

Which of the pairs given above are correct?

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

Answer: (c)

Explanation

Some Naturally Occurring Acids:

Natural Source	Acid
Acetic Acid	Sugar, Vinegar
Oxalic Acid	Tomato, Wood Sorrel
Carbonic Acid	Soda water aerated drinks
Tartaric Acid	Grapes, Tamarind
Citric Acid	Lemons or oranges
Lactic Acid	Sour Milk
Butyric Acid	Rancid Butter
Maleic Acid	Apples
Stearic Acid	Fats

Hence, option (c) is correct.

QUESTION 58:

With reference to Multidimensional Poverty Index, consider the following statements:

- 1. It uses health, education as well as standard of living as indicators.
- 2. As per the Index, around half the population of the world is multidimensionally poor.

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

Answer: (a)

Explanation

Global Multidimensional Poverty Index-2019 (MPI), released by the United Nation Development Programme (UNDP).

MPI uses three dimensions and ten indicators which are:

- **Education:** Years of schooling and child enrollment (1/6 weightage each, total 2/6);
- **Health:** Child mortality and nutrition (1/6 weightage each, total 2/6);
- **Standard of living:** Electricity, flooring, drinking water, sanitation, cooking fuel and assets (1/18 weightage each, total 2/6). Hence, statement 1 is correct.

Key Findings

- As per Index 1.3 billion people in the world are still multidimensionally poor. **Hence, statement 2 is NOT correct.**
- Level of Inequality and poverty is very high in Sub-Saharan Africa and South Asia.
- Bangladesh, Cambodia, Democratic Republic of Congo, Ethiopia, Haiti, India, Nigeria, Pakistan, Peru and Vietnam (10 selected countries have a combined population of around 2 billion people) have shown significant progress towards achieving Sustainable Development Goal 1 i.e ending poverty in all its forms, everywhere.
- One in every three children (under the age of 10) and every second child below the age of 18 years is multidimensionally poor in the world.
- One adult in six is multidimensionally poor compared with one child in three, hence children are more prone to multidimensional poverty than adults.
- Multidimensionally poor children are concentrated more in Sub-Saharan Africa and South Asia.
- In African countries such as Burkina Faso, Chad, Ethiopia, Niger and South Sudan 90% or more children (under the age of 10) are multidimensionally poor.

Indian Scenario

- India lifted 271 million people out of poverty between 2006 and 2016, (reduced from 0.283 in 2005-06 to 0.123 in 2015-16) due to strong improvements in areas such as assets, cooking fuel, sanitation and nutrition.
- Among 10 selected countries India (and Cambodia) reduced their MPI values the fastest and they did not leave the poorest groups behind.

QUESTION 59:

With reference to Women Scientists Scheme, consider the following statements:

1. This scheme is regulated by the Ministry of Woman and Child development.
2. The KIRAN scheme has been introduced for those women who wish to return to mainstream science and work as scientists.

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

Answer: (b)

Explanation

- The Department of Science and Technology (DST) launched 'Women Scientists Scheme' (WOS). **Hence. Statement 1 is NOT correct.**
- KIRAN (Knowledge Involvement in Research Advancement through Nurturing), the Women Scientist Scheme has been introduced by the Department of Science and Technology to desirous women scientists who wish to return to mainstream science and work as bench level scientists.
- This scheme allows women scientists to pursue research in frontier areas of science and technology. **Hence. Statement 2 is correct.**

Three categories of scholarships are available. They are as follows:

- Scholarship for Research in Basic/Applied Science (WOS-A)
- Scholarship for Research in S&T – based Societal Programs (WOS-B)
- Internship for the Self-Employment (WOS-C)

QUESTION 60:

In which of the following physiological processes, excess water escapes in the form of droplets from plants?

- (a) Transpiration
- (b) Guttation
- (c) Secretion
- (d) Excretion

Answer: (b)

Explanation

- When evaporation is low, and excess water collects in the form of droplets around special openings of veins near the tip of grass blades, and leaves of many herbaceous parts. Such water loss in its liquid phase is known as guttation. **Hence, option (b) is correct.**
- Terrestrial plants take up huge amounts of water daily but most of it is lost to the air through evaporation from the leaves, i.e., transpiration.

QUESTION 61:

Consider the following statements:

1. Photoelectric effect does not follow the law of conservation of energy.
2. The photoelectric emission is an instantaneous process.

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

Answer: (b)

Explanation

- The photoelectric effect is the phenomenon of emission of electrons by materials when illuminated by light of suitable frequency. Certain materials respond to ultraviolet light while others are sensitive even to the visible light.
- The photoelectric effect involves the conversion of light energy into electrical energy. It follows the law of conservation of energy. The photoelectric emission is an instantaneous process and possesses certain special features. **Hence, statement 1 is NOT correct and statement 2 is correct.**
- Photoelectric current depends on (i) the intensity of incident light, (ii) the potential difference applied between the two electrodes, and (iii) the nature of the emitter material.

QUESTION 62:

With reference to states of Matter, consider the following statements:

1. Boyle's Law gives temperature and volume relationship.
2. Charles' Law gives pressure and volume relationship.
3. Gay Lussac's Law gives pressure and temperature relationship.

Which of the statements given above are NOT correct?

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

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

Answer: (a)

Explanation

Boyle's Law (Pressure – Volume Relationship):

- At constant temperature, the pressure of a fixed amount (i.e., number of moles n) of gas varies inversely with its volume. This is known as Boyle's law.
- It means that at constant temperature, the product of pressure and volume of a fixed amount of gas is constant. **Hence, statement 1 is NOT correct.**

Charles' Law (Temperature – Volume Relationship):

- It states that pressure remaining constant, the volume of a fixed mass of a gas is directly proportional to its absolute temperature.
- Each line of the volume vs temperature graph is called isobar. **Hence, statement 2 is NOT correct.**

Gay Lussac's Law (Pressure-Temperature Relationship):

- It states that at constant volume, the pressure of a fixed amount of a gas varies directly with the temperature.
- Each line of its graph is called isochore. **Hence, statement 3 is correct.**

QUESTION 63:

With reference to 'Free Space Optics (FSO) technology', consider the following statements:

1. It provides an alternative to optical fibre cable networks.
2. It requires free air spectrum to transmit data.
3. FSO networks can provide better speed than broadband.

Which of the statements given above are correct?

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

Answer: (c)

Explanation

- Free Space Optics (FSO) technology: It is an optical communication technology in which data is transmitted by propagation of light in free space allowing optical connectivity. There is no requirement of the optical fibre cable. Working of FSO is similar to OFC (optical fibre cable) networks but the only difference is that the optical beams are sent through free air instead of OFC cores that are glass fibre. **Hence, statement 1 is correct.**
- FSO system consists of optical transceivers at both ends to provide full duplex (bidirectional) capability. FSO is a LOS (line of sight) technology, where data, voice, and video communication is achieved with maximum 10 Gbps of data rate by full duplex (bidirectional) connectivity. It does not require any air spectrum to work. **Hence, statement 2 is NOT correct, while 3 is correct.**

QUESTION 64:

Consider the following statements:

1. ISRO's Hyperspectral Imaging Satellite (HysIS) will study the earth's surface in the visible, near infrared and shortwave infrared regions of the electromagnetic spectrum.
2. HysIS is orbiting Earth in a sun-synchronous polar orbit.

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

Answer: (c)

Explanation

- The Indian Space Research Organisation's (ISRO) Polar Satellite Launch Vehicle (PSLV-C43) launched Hyperspectral Imaging Satellite (HysIS) into the sun-synchronous polar orbit. **Hence, statement 2 is correct.**
- HysIS is an earth observation satellite built around ISRO's Mini Satellite-2 (IMS-2) bus weighing about 380kg. The mission life of the satellite is five years.
- The primary goal of HysIS is to study the earth's surface in both the visible, near infrared and shortwave infrared regions of the electromagnetic spectrum. **Hence, statement 1 is correct.**
- Data from the satellite will be used for a wide range of applications including agriculture, forestry, soil/ geological environments, coastal zones and inland waters,

QUESTION 65:

Recently seen in news, "Apsara-Upgraded" is:

- (a) Research nuclear reactor
- (b) Supercomputer
- (c) Earth-observation satellite
- (d) Missile defense system

Answer: (a)

Explanation

APSARA U Reactor

"Apsara-Upgraded" is a swimming pool type research reactor which began its operation at Bhabha Atomic Research Centre (BARC), Trombay in September 2018. **Hence, option (a) is correct.** Indigenously made, it uses plate type dispersion fuel elements made of Low Enriched Uranium (LEU).

Significance of Reactor

The reactor will increase indigenous production of radioisotopes for medical applications. It will be used for research in nuclear physics, material science and radiation shielding.

QUESTION 66:

Consider the following pairs:

1. Article 371 – Special provisions for Gujarat and Maharashtra
2. Article 371 D – Special provisions for Manipur
3. Article 371 G – Special provisions for Mizoram
4. Article 371 C – Special Provisions for Andhra Pradesh

Which of the pairs given above are correctly matched?

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

Answer: (a)

Explanation

- Articles 370 and 371 were part of the Constitution at the time of its commencement on January 26, 1950. Articles 371A to 371J were incorporated subsequently.
- Articles 371, 371A, 371B, 371C, 371D, 371E, 371F, 371G, 371H, and 371J define special provisions with regard to different states.
- Article 371-Maharashtra and Gujarat: Governor has “special responsibility” to establish “separate development boards” for “Vidarbha, Marathwada, and the rest of Maharashtra”, and Saurashtra and Kutch in Gujarat; ensure “equitable allocation of funds for developmental expenditure over the said areas”, and “equitable arrangement providing adequate facilities for technical education and vocational training, and adequate opportunities for employment” under the state government. **Hence, pair 1 is correct.**
- Article 371C (27th Amendment Act, 1971) – Manipur: The President may provide for the constitution of a committee of elected members from the Hill areas in the Assembly, and entrust “special responsibility” to the Governor to ensure its proper functioning. **Hence, pair 4 is NOT correct.**
- Article 371D (32nd Amendment Act, 1973; substituted by The Andhra Pradesh Reorganisation Act–2014) Andhra Pradesh and Telangana: President must ensure “equitable opportunities and facilities” in “public employment and education to people from different parts of the state”. **Hence, pair 2 is NOT correct.**
- Article 371G of the Constitution states that the Parliament cannot decide on the matters of the religious and social practices of the Mizos, civil and criminal law of the land, land ownership transfer, and customary law procedure without the consent of the Assembly. **Hence, pair 3 is correct.**

QUESTION 67:

Recently, the Reserve Bank of India (RBI) decided to transfer a surplus of ₹1.76 lakh crore to the Government of India’s exchequer on the recommendation of which committee?

- (a) Bimal Jalan Committee
- (b) Deepak Mohanty Committee
- (c) Bhandari Committee
- (d) C. Rangarajan Committee

Answer: (a)

Explanation

- Bimal Jalan panel that was set up to review the economic capital framework of the Reserve Bank of India (RBI) has decided to recommend transfer of surplus reserves to the government in a staggered manner over three-five years based on a predetermined formula.
- The transfer of surplus capital may help the government meet its fiscal deficit target.
- The committee has recommended a transfer of surplus from the RBI to the government in a phased manner in accordance with the existing practice.
- The Jalan committee has given a range of 5.5-6.5% of RBI’s balance sheet for Contingent Risk Buffer (CRB).
- Adhering to the recommendations, the RBI has decided to set the CRB level at 5.5% of the balance sheet, while transferring the remaining excess reserves worth ₹52,637 crore to the government.
- If CRB is below the lower bound of requirement, risk provisioning will be made to the extent necessary and only the residual net income (if any) will be transferred to the government.
- However keeping CRB at a lower range of 5.5%, will reduce RBI’s space to manoeuvre monetary policy.
- Deepak Mohanty Committee: Management of data and information in the RBI.
- Bhandari Committee: Reconstruction of the (Regional Rural Banks) RRBs.
- C. Rangarajan Committee: Estimating the poverty scale of the country.

QUESTION 68:

With reference to Jal Jeevan Mission, consider the following statements:

1. This mission is being run by the Department of Drinking Water and Sanitation.
2. The mission aims to ensure piped water supply to all urban households by 2024.
3. It is a Centrally Sponsored scheme.

Which of the statements given above is/are correct?

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

Answer: (a)

Explanation

- The Jal Jeevan Mission, under the Department of Drinking Water and Sanitation, aims to focus on integrated demand and supply side management of water at the local level, including creation of local infrastructure for source sustainability like rainwater harvesting, groundwater recharge and management of household wastewater for reuse in agriculture. **Hence, statement 1 is correct.**
- A new Ministry namely Jal Shakti Mantralaya has been Constituted by integrating the Ministry of Water Resources, River Development and Ganga Reservation and Ministry of Drinking Water and Sanitation, which will look at the management of our water resources and water supply in an integrated and holistic manner, and will work with States to ensure Har Ghar Jal – (piped water supply) to all rural households by 2024 under the Jal Jeevan Mission. **Hence, statement 2 is NOT correct.**
- It is a centrally sponsored scheme. Both centre and states will work towards achieving Jal Jeevan Mission's objectives. **Hence, statement 3 is correct.**

QUESTION 69:

With reference to Composite Water Management Index (CWMI) 2.0, consider the following statements:

1. This index has been developed by NITI Aayog in association with the Ministry of Jal Shakti and Ministry of Rural Development.
2. The state of Gujarat secured rank-1 in 2017-18 in the CWMI 2.0.

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

Answer: (c)

Explanation

- NITI Aayog in association with Ministry of Jal Shakti and Ministry of Rural Development released Composite Water Management Index 2.0 (CWMI). **Hence, statement 1 is correct.**
- NITI Aayog first launched and conceptualized the Composite Water Management Index in 2018 as a tool to instil a sense of cooperative and competitive federalism among the states.
- The states are ranked across nine themes and cover 25 states and two union territories.
- Gujarat continues to hold on to its rank 1 in the reference year (2017-18), followed by Andhra Pradesh, Madhya Pradesh, Goa, Karnataka and Tamil Nadu. **Hence, statement 2 is correct.**

- Among North-Eastern and the Himalayan States, Himachal Pradesh has been awarded rank 1 in 2017-18 followed by Uttarakhand, Tripura and Assam.
- For the first time, Union Territories have submitted their data and Puducherry has been declared the top performer.
- 80% of the states have shown improvement in their water management scores over the last three years.

QUESTION 70:

Consider the following statements regarding Development Banks:

1. Development Banks are the banks which provide short-term credits and yield low rates of return.
2. Government may also provide support to the Development Banks by providing tax incentives.

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

Answer: (b)

Explanation

- Development banks are financial institutions that provide long-term credit for capital-intensive investments spread over a long period and yielding low rates of return, such as urban infrastructure, mining and heavy industry, irrigation systems etc. **Hence, statement 1 is NOT correct.**
- Such banks often lend at low and stable rates of interest to promote long-term investments with considerable social benefits.
- Development banks are also known as **term-lending institutions** or development finance institutions.
- To lend for long term, development banks require correspondingly long-term sources of finance, usually obtained by issuing long-dated securities in capital markets, subscribed by long-term savings institutions such as pension and life insurance funds and post office deposits.
- Considering the social benefits of such investments, and uncertainties associated with them, development banks are often supported by governments or international institutions.
- Such support can be in the form of tax incentives and administrative mandates for private sector banks and financial institutions to invest in securities issued by development banks. **Hence, statement 2 is correct.**

QUESTION 71:

Rashtriya Arogya Nidhi (RAN) set up by the Central Government is aimed to:

- (a) To provide free treatment for all types of diseases which require more than 1 day of hospitalisation under Pradhan Mantri Jan Arogya Yojana.
- (b) To provide financial assistance to BPL patients, who are suffering from critical life-threatening diseases.
- (c) To provide healthcare service to people suffering from epidemics like malaria, chikungunya, etc.
- (d) None of these

Answer: (b)

Explanation

The Rashtriya Arogya Nidhi (RAN) was set up to provide financial assistance to patients, living below poverty line and who are suffering from major life-threatening diseases, to receive medical treatment at

any of the super specialty Hospitals/Institutes or other Government hospitals. The financial assistance to such patients is released in the form of 'one-time grant', which is released to the Medical Superintendent of the Hospital in which the treatment has been/is being received. **Hence, option (b) is correct.**

QUESTION 72:

Consider the following statement with reference to SARAL – 'State Rooftop Solar Attractiveness Index':

1. It has been designed by NITI Aayog.
2. The state of Tamil Nadu has topped the index.
3. The index captures not only the policy framework but also consumer experience.

Which of the statements given above is/are correct?

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

Answer: (c)

Explanation

- Recently, the government has launched the State Rooftop Solar Attractiveness Index–SARAL to incentivise rooftop solar by creating healthy competition among the States.
- SARAL has been designed collaboratively by the Ministry of New and Renewable Energy (MNRE), Shakti Sustainable Energy Foundation (SSEF), Associated Chambers of Commerce and Industry of India (ASSOCHAM) and Ernst & Young (EY). **Hence, statement 1 is NOT correct.**
- SARAL currently captures five key aspects –
 - robustness of policy framework
 - implementation environment
 - investment climate
 - consumer experience
 - business ecosystem **Hence, statement 3 is correct.**
- The State of Karnataka has been placed at the first rank in the Index followed by Telangana, Gujarat and Andhra Pradesh. **Hence, statement 2 is NOT correct.**

QUESTION 73:

Which of the following statements are correct?

1. The International Development Association (IDA) provides loans and grants to poor countries.
2. Multilateral Investment Guarantee Agency (MIGA) seeks to encourage foreign direct investment in developing nations.
3. The International Bank for Reconstruction and Development (IBRD) provides financial assistance to middle-income and creditworthy low-income countries.

Select 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 of the above

Answer: (d)

Explanation

- The International Bank for Reconstruction and Development (IBRD) is a global development cooperative owned by 189 member countries. As the largest development bank in the world, it supports the World Bank Group's Mission by providing loans, guarantees, risk management products, and advisory services to middle-income and credit worthy low-income countries, as well as by coordinating responses to regional and global challenges. **Hence, statement 3 is correct.**
- International Development Association (IDA)– IDA provides loans and grants to poor countries. **Hence, statement 1 is correct.**
- Multilateral Investment Guarantee Agency (MIGA)– MIGA seeks to encourage foreign direct investment in developing nations. **Hence, statement 2 is correct.**

QUESTION 74:

Regarding the Mekong–Ganga Cooperation (MGC), consider the following statements:

1. Its members include all the Bay of Bengal surrounding countries.
2. It reaffirms India's Act East Policy.
3. The 10th MGC Ministerial Meeting was held in Singapore.

Which of the statements given above is/are correct?

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

Answer: (b)

Explanation

- Mekong-Ganga Cooperation is an initiative by six countries – India and five ASEAN countries, namely, Cambodia, Laos, Myanmar, Thailand and Vietnam for cooperation in tourism, culture, education, as well as transport and communications. **Hence, statement 1 is NOT correct.**
- It was launched in 2000 at Vientiane, Laos. Both the Ganga and the Mekong are civilizational rivers, and the MGC initiative aims to facilitate closer contacts among the people inhabiting these two major river basins.
- Recently, the 10th Mekong-Ganga Cooperation Ministerial Meeting was held in Bangkok, Thailand. **Hence, statement 3 is NOT correct.**
- The significance of MGC for India are:
 - Reaffirmation of India's Act East Policy by effectively integrating with the region.
 - Development of North East Region if trade and industry flourish in the entire region overland trade via Myanmar to many MGC countries.
 - Boost to cultural and commercial cooperation.
 - Balancing China's assertiveness in the region. **Hence, statement 2 is correct.**

QUESTION 75:

With reference to National Essential Diagnostics List (NEDL), consider the following statements:

1. NEDL is finalised by the Indian Council of Medical Research.
2. The NEDL covers all the medical devices and in-vitro diagnostic devices (IVD).
3. India has become the first country in the world to compile NEDL.

Which of the statements given above are correct?

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

- (c) 1 and 3 only
(d) All of the above

Answer: (d)

Explanation

- India has got its first National Essential Diagnostics List (NEDL), finalised by the Indian Council of Medical Research (ICMR). **Hence, statement 1 is correct.**
- It aims to bridge the current regulatory system's gap that does not cover all the medical devices and in-vitro diagnostic devices (IVD). **Hence, statement 2 is correct.**
- With this, India has become the first country in the world to compile such a list that would provide guidance to the government for deciding the kind of diagnostic tests that different healthcare facilities in villages and remote areas require. **Hence, statement 3 is correct.**

QUESTION 76:

With reference to the Leader of Opposition, consider the following statements:

1. Where there are two or more parties having the same numerical strength, Chairman of the Council of States or the Speaker of the House of the People refers the matter of selecting Leader of Opposition to the President.
2. The party in opposition to the Government having the greatest numerical strength is eligible for the post of Leader of Opposition.

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

Answer: (b)

Explanation

Leader of Opposition

'Leader of the Opposition', in relation to either House of Parliament, means that a member of the Council of States or the House of the People, as the case may be, who is, for the time being, the Leader in that House of the party in opposition to the Government having the greatest numerical strength and recognised as such by the Chairman of the Council of States or the Speaker of the House of the People, as the case may be. **Hence, statement 2 is correct.**

Where there are two or more parties in opposition to the Government, in the Council of States or in the House of the People having the same numerical strength, the Chairman of the Council of States or the Speaker of the House of the People, as the case may be, shall, having regard to the status of the parties, recognise any one of the Leaders of such parties as the Leader of the Opposition and such recognition shall be final and conclusive. **Hence, statement 1 is NOT correct.**

- The salary and allowances of leaders of opposition in parliament act, 1977 provides for the salary and allowances of Leaders of Opposition in Parliament.
- Having a Leader of the Opposition is critical to the checks and balances in a Parliamentary democracy and brings bipartisanship and neutrality to the institutions of accountability and transparency.
- Not having a Leader of the Opposition (LoP) in the Lok Sabha is not unusual to Indian Parliament. The first LoP was designated only in 1969 and there was no such post in the fifth (1971-77), seventh (1980-84) and eighth (1984-89) Lok Sabha.
- In the case where speaker denied Leader of the House post to the Congress party, 120 and 121(1) (c) of the 'Directions by the Speaker of Lok Sabha' issued in 1956 were sought to claim that 'the

Speaker is not obliged to recognise any member of the largest Opposition party in the Lok Sabha as Leader of Opposition in case the said party does not have the strength equal to 1/10th of the quorum required for a sitting of the House.'

QUESTION 77:

Orders of the Indian government under the Foreigners Tribunals have been enacted under which of the following Act?

1. The Foreigners Act, 1946
2. The Citizenship Act, 1955
3. The Citizenship Act, 2019

Select the correct answer using the code given below:

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

Answer: (b)

Explanation

- The Foreigners (Tribunals) Order, 1964 was issued by the Central Government under Section 3 of The Foreigners Act, 1946. It is applicable to the whole country. **Hence, option (b) is correct.**
- Major amendments in the Foreigners (Tribunals) Order, 1964 were undertaken in 2013. The last amendment was issued in May, 2019. All these orders are applicable to the whole country and are not specific to any state.
- The May 2019 amendment only lays down the modalities for the Tribunals to decide on appeals made by persons not satisfied with the outcome of claims and objections filed against the NRC. This is the recent amendment.
 - This amendment Order also provides for reference by District Magistrate to the Tribunal for its opinion as to whether the Appellant is a "foreigner" or not within the meaning of the Foreigners Act, 1946.
- Since the Foreigners Tribunals under this order have been established only in Assam and in no other state of the country, this amendment in effect is going to be relevant only to Assam at present.
- Judges/Advocates have been appointed as the members of FT under the Foreigners Tribunal Act, 1941 and Foreigners Tribunal Order 1964. as per the guidelines issued by the government from time to time.

QUESTION 78:

Which of the following statements are correct with reference to The State Disaster Response Fund (SDRF)?

1. The Central Government contributes 75% of SDRF allocation for general category States/ UTs.
2. Cold waves and pest attacks are covered as disasters under SDRF.
3. A State Government may use up to 10 percent of the funds available under the SDRF for providing immediate relief to the victims of local natural disasters.

Select the correct answer using the code given below:

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

Answer: (d)

Explanation

- The State Disaster Response Fund (SDRF), constituted under Section 48 (1) (a) of the Disaster Management Act, 2005, is the primary fund available with State Governments for responses to notified disasters. The Central Government contributes 75% of SDRF allocation for general category States/UTs and 90% for special category States/UTs (NE States, Sikkim, Uttarakhand, Himachal Pradesh, Jammu and Kashmir). **Hence, statement 1 is correct.**
- The annual Central contribution is released in two equal installments as per the recommendation of the Finance Commission. SDRF shall be used only for meeting the expenditure for providing immediate relief to the victims.
- **Disaster (s) covered under SDRF:** Cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloudburst, pest attack, frost and cold waves. Hence, statement 2 is correct.
- **Local Disaster:** A State Government may use up to 10 percent of the funds available under the SDRF for providing immediate relief to the victims of natural disasters that they consider to be 'disasters' within the local context in the State and which are not included in the notified list of disasters of the Ministry of Home Affairs subject to the condition that the State Government has listed the State specific natural disasters and notified clear and transparent norms and guidelines for such disasters with the approval of the State Authority, i.e., the State Executive Authority (SEC). **Hence, statement 3 is correct.**

QUESTION 79:

Regarding the Financial Stability and Development Council (FSDC), consider the following statements:

1. Chairman of the Securities and Exchange Board of India is a member of FSDC.
2. Governor of the Reserve Bank of India is the chairperson of FSDC.

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

Answer: (a)

Explanation

The Financial Stability and Development Council (FSDC)

- The Council is chaired by the Union Finance Minister. **Hence, statement 2 is NOT correct.**
- Its members are Governor, Reserve Bank of India; Finance Secretary and/or Secretary, Department of Economic Affairs; Secretary, Department of Financial Services; Chief Economic Adviser, Ministry of Finance; Chairman, Securities and Exchange Board of India; Chairman, Insurance Regulatory and Development Authority and Chairman, Pension Fund Regulatory and Development Authority. **Hence, statement 1 is correct.**
- The Council deals, inter-alia, with issues relating to financial stability, financial sector development, inter-regulatory coordination, financial literacy, financial inclusion and macro prudential supervision of the economy, including the functioning of large financial conglomerates.
- No funds are separately allocated to the Council for undertaking its activities.

QUESTION 80:

Regarding the Kelp Forests, consider the following statements:

1. Kelp Forests are underwater ecosystems formed in shallow water by the dense growth of several different species known as kelps.

2. Kelp forests are only found in the coastal areas.
3. Kelp are not plants, but rather extremely large brown algae.

Which of the statements 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

Answer: (d)

Explanation

- Kelp Forests are underwater ecosystems formed in shallow water by the dense growth of several different species known as kelps. **Hence, statement 1 is correct.**
- Kelp thrives in cold, nutrient-rich waters. Because kelp attaches to the seafloor and eventually grows to the water's surface and relies on sunlight to generate food and energy, Kelp forests are always coastal and require shallow, relatively clear water. **Hence, statement 2 is correct.**
- Generally speaking, kelps live further from the tropics than coral reefs, mangrove forests, and warm-water seagrass beds, so kelp forests do not overlap with those systems.
- Kelp are not plants, but rather extremely large brown algae, and many different species of kelp make up kelp forests. **Hence, statement 3 is correct.**
- Kelp forests comprise one of the ocean's most diverse ecosystems. Many fish species use kelp forests as nurseries for their young, while seabirds and marine mammals like sea lions, sea otters and even gray whales use them as shelter from predators and storms.
- Destructive fishing practices, coastal pollution, and accidental damage caused by boat entanglement are known to negatively affect kelp forests.
- Area based management (e.g., designation of marine protected areas) is known to be an effective way to protect kelp forests from excessive use or harm by people.

QUESTION 81:

Consider the following statements:

1. Dead zones are the areas of the oceans around the world that are found to be depleted of oxygen.
2. Dead zones can also occur naturally.

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

Answer: (c)

Explanation

- "Dead zones" are deadly: Few or no organisms can survive in their oxygen-depleted, or hypoxic, waters. **Hence, statement 1 is correct.**
- Often encompassing large swaths of ocean (and even lakes and ponds), dead zones become oceanic deserts, devoid of the usual aquatic biodiversity.
- Hypoxic zones or dead zones can occur naturally, but many more are caused by agricultural practices across the world—a big problem for wildlife and for people. **Hence, statement 2 is correct.**
- The largest dead zone in the world lies in the Arabian Sea, covering almost the entire 63,700-square mile Gulf of Oman.

- The second largest sits in the Gulf of Mexico in the United States, averaging almost 6,000 square miles in size.
- Excess nutrients spark an algal explosion, giving rise to a dead zone.
- Dead zones appear annually, May through September, in the Gulf of Mexico, after tons of nutrients from fertilizer use and sewage in the Mississippi watershed wash downstream into the Gulf.
- Although nutrient run-off is the primary factor affecting the size of a dead zone, other factors like wind direction and strength influence how much oxygen reaches the bottom layers of the water column.

QUESTION 82:

Which of the following is related to the Bonn Challenge?

- (a) Restoration of deforested lands
- (b) Green technology
- (c) Mangrove protection
- (d) Protecting endangered species

Answer: (a)

Explanation

- The Bonn Challenge is a global effort to bring 150 million hectares of the world's degraded and deforested lands into restoration by 2020 and 350 million hectares by 2030. **Hence, option (a) is correct.**
- It was launched by the International Union for Conservation of Nature (IUCN), which acts as its Secretariat, and the Government of Germany in 2011.
- Underlying the Bonn Challenge is the forest landscape restoration (FLR) approach, which aims to restore ecological integrity at the same time as improving human well-being through multifunctional landscapes.
- The Bonn Challenge is not a new global commitment but rather a practical means of realizing many existing international commitments, including the CBD Aichi Target 15, the UNFCCC REDD+ goal, and the Rio+20 land degradation neutrality goal.
- It is an implementation vehicle for national priorities such as water and food security and rural development while contributing to the achievement of international climate change, biodiversity and land degradation commitments.

QUESTION 83:

Regarding the trading programme to combat particulate air pollution, consider the following statements:

1. Gujarat has launched India's first trading programme to combat particulate air pollution.
2. The Emission Trading Scheme (ETS) under the programme has been developed by the United Nations.

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

Answer: (a)

Explanation

- Gujarat has launched India's first trading programme to combat particulate air pollution. **Hence, statement 1 is correct.**

- Launched on World Environment Day, the programme is a market-based system where the government sets a cap on emissions and allows industries to buy and sell permits to stay below the cap.
- Being initiated in Surat by the Gujarat Pollution Control Board (GPCB), the emission trading scheme (ETS) was designed with the help of a team of researchers from the Energy Policy Institute at the University of Chicago (EPIC), the Economic Growth Center at Yale University and others from The Abdul Latif Jameel Poverty Action Lab (J-PAL). **Hence, statement 2 is NOT correct.**
 - Under the cap and trade system, the regulator first defines the total mass of pollution that can be put into the air over a defined period by all factories put together.
 - After this, a set of permits is created, each of which allows a certain amount of pollution, and the total is equal to the cap.
 - These permits are the quantity that is bought and sold. Each factory is allocated a share of these permits (this could be equal or based on size or some other rule).
 - The reason for trading is that in a cap and trade market, the regulator will measure pollution over a period of time and industries must own enough permits to cover their total emissions.
- Globally, cap-and-trade systems have been used to reduce other forms of pollution, such as programmes that have successfully reduced sulphur dioxide (SO₂) and nitrogen oxides (NO_x) in the United States. But the Gujarat programme is the first in the world to regulate particulate air pollution.

QUESTION 84:

With reference to DRDO's ABHYAS, which of the following statements is correct?

- (a) It is High speed expendable Aerial Target.
- (b) It is an anti submarine torpedo.
- (c) It is a light combat aircraft.
- (d) It is a stealth drone.

Answer: (a)

Explanation

- Defence Research and Development Organisation (DRDO) successfully flight tested ABHYAS – High-speed Expendable Aerial Target (HEAT) from Interim Test Range, Chandipur in Odisha. The flight test was tracked by various RADARS & Electro Optic Systems and proved its performance in fully autonomous waypoint navigation mode. **Hence, option (a) is correct.**
- The configuration of ABHYAS is designed on an in-line small gas turbine engine and uses indigenously developed MEMS based navigation system for its navigation and guidance. The performance of the system was as per simulations carried out and demonstrated the capability of ABHYAS to meet the mission requirement for a cost effective HEAT.

QUESTION 85:

With reference to Parliamentary Privileges, consider the following statements:

1. It is also extended to those persons who are entitled to speak and take part in the proceedings of a House of Parliament or any of its committees.
2. It does not extend to the President who is an integral part of the Parliament.

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

Answer: (c)

Explanation

Parliamentary Privileges:

- Parliamentary privileges are special rights, immunities and exemptions enjoyed by the two Houses of Parliament, their committees and their members. The Constitution also extends the parliamentary privileges to those persons who are entitled to speak and take part in the
- proceedings of a House of Parliament or any of its committees. These include the Attorney General of India and Union ministers. **Hence, statement 1 is correct.**
- The parliamentary privileges do not extend to the President who is also an integral part of the Parliament. Article 361 of the Constitution provides for privileges for the President. **Hence, statement 2 is correct.**
- Article 105 of the Constitution expressly mentions two privileges, that is, freedom of speech in Parliament and right of publication of its proceedings. Apart from the privileges as specified in the Constitution, the Code of Civil Procedure, 1908, provides for freedom from arrest and detention of members under civil process during the continuance of the meeting of the House or a committee thereof and forty days before its commencement and forty days after its conclusion. It needs to be noted that the Parliament, till now, has not made any special law to exhaustively codify all the privileges.

Why In News?

- The breach of privilege motion was recently moved against a private Hindi news channel and its Editor for reporting that members' first speech in the Lok Sabha was plagiarised. Plagiarism is a practice of taking someone else's work or ideas and passing them off as one's own.
- Parliamentary privileges are certain rights and immunities enjoyed by members of Parliament, individually and collectively, so that they can effectively discharge their functions. The Constitution (Article 105) mentions two privileges, i.e. freedom of speech in Parliament and right of publication of its proceedings.
- Rule No 222 in Chapter 20 of the Lok Sabha Rule Book and correspondingly Rule 187 in Chapter 16 of the Rajya Sabha rulebook governs privilege. The Speaker of Lok Sabha and Rajya Sabha Chairperson is the first level of scrutiny of a privilege motion.
 - The Speaker/Chairperson can decide on the privilege motion himself or herself or refer it to the privileges committee of Parliament.
 - If the Speaker/Chairperson gives consent under respective rules, the member concerned is given an opportunity to make a short statement.

Privilege Committee:

- **Lok Sabha:** The Speaker nominates a committee of privileges consisting of 15 members as per respective party strengths.
- **Rajya Sabha:** The deputy chairperson heads the committee of privileges, that consists of 10 members.

QUESTION 86:

Which of the following dimensions have been considered for benchmarking the countries in the recently released Global Gender Gap Index 2020?

1. Economic Participation and Opportunity.
2. Educational Attainment.
3. Health and Survival.
4. Political Empowerment.

Select the correct answer using the code given below:

- (a) 1, 2 and 3 only
(b) 1, 2 and 4 only

(c) 1, 3 and 4 only

(d) 1, 2, 3 and 4

Answer: (d)

Explanation

- India has been ranked 112th among 153 countries in the annual Global Gender Gap Index for 2020, published by the World Economic Forum (WEF).
- The WEF published its first gender gap index in 2006.
- The Global Gender Gap Index benchmarks 153 countries on their progress towards gender parity in four dimensions:
 - Economic Participation and Opportunity.
 - Educational Attainment.
 - Health and Survival.
 - Political Empowerment. **Hence, option (d) is correct.**
- Over the Index, the highest possible score is 1 (equality) and the lowest possible score is 0 (inequality).

India-Specific Findings:

- India has slipped to the 112th spot from its 108th position in the last edition. India was ranked relatively higher at 98th place in the 2006 Report.
- India has been ranked below countries like China (106th), Sri Lanka (102nd), Nepal (101st), Brazil (92nd), Indonesia (85th) and Bangladesh (50th).
- Performance on Four Indicators: India has improved to 18th place on political empowerment but it has slipped to 150th on health and survival, to 149th in terms of economic participation and opportunity and to 112th place for educational attainment.
- Among the 153 countries studied, India is the only country where the economic gender gap (0.354) is larger than the political gender gap (0.411). India is among the countries with very low women representation on company boards (13.8%), while it was even worse in China (9.7%).
- On health and survival, four large countries – Pakistan, India, Vietnam and China – fare badly with millions of women there not getting the same access to health as men.

QUESTION 87:

With reference to Dnyanganga Wildlife Sanctuary, consider the following statements:

1. It is situated in Maharashtra.
2. It is a part of the Melghat Tiger Reserve.
3. It is located near the Dnyanganga River which is a tributary of the Tapti River.

Which of the statements given above are correct?

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

Answer: (d)

Explanation

Dnyanganga Wildlife Sanctuary:

- The Dnyanganga Sanctuary is situated in the Buldhana district of Maharashtra.
- It is a part of the Melghat Tiger Reserve in Maharashtra.
- It is located near the Dnyanganga River which is a tributary of the Tapti River. **Hence, option (d) is correct.**

- Recently a tiger travelled 1300 km distance between Maharashtra and Telangana passing through Dnyanganga Wildlife Sanctuary and Tipeswar Tiger Reserve in Maharashtra.

QUESTION 88:

Consider the following statements regarding Ekal School Abhiyaan:

1. It is operational in India, Nepal and Bhutan.
2. Under it one teacher schools are set up.
3. Its mission is to provide education, digital literacy, Skill development, health awareness, learning modern and productive agricultural practices and rural entrepreneurship.

Which of the statements given above are correct?

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

Answer: (b)

Explanation

Ekal School Abhiyaan

- Ekal Vidyalaya is a movement involved in integrated & holistic development of rural & tribal India and Nepal only. **Hence, statement 1 is NOT correct.**
- The main activity undertaken in this movement is to run one-teacher schools (known as Ekal Vidyalayas) all over India, in the remotest rural & tribal villages to take the education to every child. **Hence, statement 2 is correct.**
- The overriding philosophy of Ekal Vidyalaya Movement is to take a holistic approach of social and economic development to Tribal & Rural India and Nepal.
- With the participation of numerous trusts and non-profit organizations, this movement has become the largest grassroots level non-governmental education & development movement that operates in the remote villages of India and Nepal.

MISSION:

- Holistic development of villages through empowerment of tribal (vanvasi) and rural communities in India with basic education, digital literacy, Skill development, health awareness, learning modern and productive agricultural practices and rural entrepreneurship. **Hence, statement 3 is correct.**

QUESTION 89:

With reference to Rail Wire, consider the following statements:

1. RailWire is a retail Broadband initiative of RailTel.
2. It is funded by the Universal Service Obligation Fund.

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

Answer: (c)

Explanation

- Railways has successfully completed the work of providing free public Wi-Fi at 5500 stations across the country.

- RailWire is a retail Broadband initiative of RailTel and is one of the largest Wi-Fi networks in the world. **Hence, statement 1 is correct.**
- Indian Railways mandated RailTel, a Miniratna Public Sector Undertaking (PSU) under the Ministry of Railways, to provide free high-speed Wi-Fi at the Railway stations for digital inclusion.
- It envisages extending broadband and application services to the public.
- RailTel is working to establish bringing fast and free Wi-Fi at all stations (except the halt stations) within a year.
- It was started in January 2016 from Mumbai Central station.
- RailTel has partnered with Google, Tata Trust, Power Grid Corporation of India Limited (PGCIL) for the project and also got funding from Universal Service Obligation Fund (Department of Telecommunications). **Hence, statement 2 is correct.**

QUESTION 90:

With reference to Papikonda National Park, consider the following statements:

1. This national park is on both sides of the river Godavari in the northern Eastern Ghats.
2. It's dominant area is covered with evergreen forest.

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

Answer: (a)

Explanation

Papikonda National Park:

- Papikonda National Park (PNP), with a dominant area covered with moist deciduous forest, and includes animal species such as tigers, mouse deer, gaur etc. **Hence, statement 2 is NOT correct.**
- The 1,012.86 sq km national park is on both sides of the river Godavari in the northern Eastern Ghats. **Hence, statement 1 is correct.**
- It has historically experienced varying levels of protection, beginning as a reserved forest in 1882, a wildlife sanctuary in 1978, and as a national park from 2008.
- Recently, it has become home for the leopard cat (*Prionailurus bengalensis*) in the Eastern Ghats.
- The Forest Department and experts from Kerala and northeastern States will begin the maiden survey of butterfly species in the Papikonda National Park (PNP).

QUESTION 91:

Operation Clean Art is related to:

- (a) It is an operation to crackdown on the smuggling of mongoose hair.
- (b) It is to provide biodegradable products to use in paintings.
- (c) It is an operation to crackdown on the smuggling of turtles.
- (d) It is for the beautification of all cities across India through street art.

Answer: (a)

Explanation

Operation Clean Art:

- The first pan India operation to crackdown on the smuggling of mongoose hair; raids carried out in U.P, Rajasthan, Maharashtra and Kerala.

- Brushes made of mongoose hair are preferred because they are superior and hold colour better.
- Mongoose is listed in Schedule II Part 2 of the Wildlife Protection Act, 1972 and any smuggling or possession of its body part is a non-bailable offence.
- IUCN Red List status-Least Concerned.
- All six species are listed on CITES Appendix III with a zero quota for commercial trade.

There are six species of mongoose found in India –

1. Indian grey mongoose
2. Small Indian mongoose
3. Ruddy mongoose
4. Crab-eating mongoose
5. Stripe-necked mongoose
6. Brown mongoose.

Among all Indian grey mongoose is the most commonly found species and also the most hunted and mostly recovered [in the raids] grey mongoose [hair]. **Hence, option (a) is correct.**

QUESTION 92:

Recently a cross border gas pipeline named “Power of Siberia” has been inaugurated among which of the following countries?

- (a) Russia and China
- (b) Kazakhstan, Mongolia and Russia
- (c) Finland and Russia
- (d) Russia, Kazakhstan and China

Answer: (a)

Explanation

Power of Siberia:

- Recently, China and Russia have inaugurated a cross border gas pipeline named “Power of Siberia”.
- It is the first cross-border gas pipeline between Russia and China. **Hence, option (a) is correct.**
- Under this pipeline project, Russia will deliver 1 trillion cubic meters of natural gas to China over the next 30 years.
- The pipeline will pass through the deltas of the Yangtze and Amur rivers of China.
- The new pipeline is an emblem of closer energy integration in Eurasia, with Russia and China as the key partners.

QUESTION 93:

Which of the following are the aims of ‘YuWaah’ scheme recently launched by the United Nations Children’s Fund?

1. To modernize secondary education and training to build the skills young people need for productive lives and work.
2. Increasing and improving the number of quality work opportunities available to youth.
3. Imparting soft skills to enhance innovation in the automobile sector only.

Select the correct answer using the code given below:

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

Answer: (c)

Explanation

- The United Nations Children’s Fund (UNICEF) launched the ‘YuWaah’ Generation Unlimited in India on November 1, 2019.
- Generation Unlimited (GenU), called YuWaah in India, is a global multi-sector and multi-stakeholder alliance created to meet the need of expanded education, skill development and employment opportunities for young people aged 10-24. And not specifically promotes innovation in the automobile sector. **Hence, statement 3 is NOT correct.**
- It brings together partners from government, multilateral organizations, civil society, the private sector and young people from around the world.
- The target age group of YuWaah includes adolescent girls and boys and its key mission is to promote access to foundational, transferable and 21st century skills for youth inside and outside formal education systems.
- YuWaah intends to create platforms to guide youth to market opportunities (career guidance, mentorship, internships, apprenticeships) and facilitate the integration of career guidance in school education.
- GenU aims to:
 - Modernize secondary education and training to build the skills young people need for productive lives and work. **Hence, statement 1 is correct.**
 - Increase and improve the number of quality work opportunities available to youth. **Hence, statement 2 is correct.**
 - Foster entrepreneurship as a mindset and a livelihood.
 - for young people.
 - Collaborate with youth as problem-solvers and engage.
 - citizens to help create the world they want.
- GenU is also an effective way to operationalize the vision and priorities of the UN Youth Strategy—in particular, youth engagement, participation and advocacy; supporting young people’s greater access to quality education and skills development; and economic empowerment through decent jobs.

QUESTION 94:

Recently Torrefaction has been tested in India. In which of the following this technology has its application?

- (a) Water conservation
- (b) Reducing Air Pollution
- (c) Safe disposal of hazardous e-wastes
- (d) Preventing Eutrophication

Answer: (b)

Explanation

Torrefaction:

- The pollution from stubble burning in winter is a major factor for the sharp decline in air quality in Delhi. To overcome this issue, India is testing Swedish technology – torrefaction that can convert rice stubble into ‘bio-coal’.
- The government has funded a pilot project at the National Agri-Food Biotechnology Institute in Mohali (Punjab) with a Swedish company to evaluate the feasibility of the technology.
- Torrefaction is a thermal process to convert biomass into a coal-like material, which has better fuel characteristics than the original biomass.
- The process involves heating up straw, grass, sawmill residue and wood biomass to 250 degrees celsius – 350 degrees celsius.

- This changes the elements of the biomass into 'coal-like' pellets. These pellets can be used for combustion along with coal for industrial applications like steel and cement production.

Advantages:

- The project has a capacity of converting 150-200 kilograms of paddy straw to bio-coal every hour and reduces CO₂ emissions by 95%. **Hence, option (b) is correct.**
- Torrefied biomass is more brittle, making grinding easier and less energy-intensive.
- Compared to fresh biomass, storage of the torrefied material can be substantially simplified since biological degradation and water uptake is minimized.
- The torrefied pellets are ideal for coal replacement because it has lower shipping and transport costs, lower sulfur and ash content (compared with coal), etc.

Bio-coal:

- Bio-coal, also commonly referred to as synthetic coal, is created through the torrefaction of biomass.
- The bio-coal has similar characteristics to traditional fossil-based coal, and thus a viable option to reduce greenhouse gas emissions.

QUESTION 95:

With reference to National Broadband Mission, consider the following statements:

1. This mission has been launched by the Ministry of Communications.
2. It aims to enhance optical fibre connectivity to 50 lakh kilometres from the current 22 lakh kilometres

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

Answer: (c)

Explanation

National Broadband Mission:

- The Ministry of Communications has launched 'National Broadband Mission' that will facilitate universal and equitable access to broadband services across the country, especially in rural and remote areas. **Hence, statement 1 is correct.**
- The Mission is part of the National Digital Communications Policy, 2018.
- Some salient features of broadband mission are:
 - Taking optical fibre connectivity to 50 lakh kilometres from the current 22 lakh kilometres. **Hence, statement 2 is correct.**
 - Deploying 10 lakh mobile towers from the present 5.65 lakh sites in next 3-4 years
- Its aim is to connect 600,000 villages across India at an estimated outlay of ₹7 lakh crore including a 10% contribution from the state reserve over a period of next 3-4 years.
- The national broadband mission is a transformative program to connect all villages,
- The national mission aims to empower those living in India's rural and remote regions with digital connectivity on the back of the ongoing BharatNet initiative that aims to connect 250,000 gram panchayats or village blocks with optic fibre network.
- Through BharatNet, broadband services have reached as many as 142,000 village blocks, and the national broadband mission aims to offer broadband for all by 2022 including remotely-located hospitals, schools and post offices.
- Investment from stakeholders of ₹7 Lakh Crore including ₹70,000 crore from Universal Service Obligation Fund (USOF).

QUESTION 96:

With reference to Global Refugee Forum, consider the following statements:

1. It is guided by the Global Compact on Refugees.
2. The first ever meeting of the global refugee forum was held in Geneva, Switzerland.

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

Answer: (c)

Explanation

Global Refugee Forum:

- The first Global Refugee Forum comes at the end of a tumultuous decade in which the number of refugees has risen to over 25 million people worldwide.
- It is guided by the Global Compact on Refugees. **Hence, statement 1 is correct.**
- It is an opportunity to translate the principle of international responsibility-sharing into concrete action.
- The first-ever Global Refugee Forum concluded in Geneva with more than 770 pledges of support, covering areas such as protection, employment, and education, for refugees and the communities which have taken them in. **Hence, statement 2 is correct.**
- For the UN High Commissioner for Refugees, the Forum revealed a “decisive shift” towards long-term action to assist the more than 25.9 million people worldwide who have fled their homelands due to conflict, persecution or violence.
- The Forum is a key element of the Global Compact on Refugees. It calls for Global Refugee Forums to be held every four years.
- The substantial commitments they made included school places for refugee children, new government policies, resettlement, clean energy, infrastructure and better support for host communities and countries.
- The private sector accounted for the widest range of commitments, with strong support for providing job opportunities for refugees, according to UNHCR.
- Business groups pledged \$250 million, while at least 15,000 jobs will be made available to refugees as will some 125,000 hours per year of free legal aid.

QUESTION 97:

With reference to Kaleshwaram lift irrigation project, consider the following statements

1. It is aimed to make Karnataka drought proof by harnessing the flood waters.
2. This project starts at the confluence point of Pranahita River and Godavari River.

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

Answer: (b)

Explanation

- The Kaleshwaram lift irrigation project is aimed to make Telangana (and NOT Karnataka) drought proof by harnessing the flood waters of the Godavari. The project is an under-construction multi-purpose irrigation project on the Godavari River in Kaleshwaram, Bhoopalpally, Telangana. **Hence, statement 1 is NOT correct.**
- The project starts at the confluence point of Pranahita River and Godavari River. Pranahita river is a confluence of various other smaller tributaries like Wardha, Penganga and Wainganga Rivers. **Hence, statement 2 is correct.**
- The Godavari is India's second longest river after the Ganga. Its source is in Trimbakeshwar, Maharashtra. It flows east for 1,465 kilometres, draining the states of Maharashtra, Telangana, Andhra Pradesh, Chhattisgarh, Odisha, and Karnataka, ultimately emptying into the Bay of Bengal through its extensive network of tributaries.
- The major tributaries of the river are classified as the left bank tributaries which include the Purna, Pranahita, Indravati and Sabari river and the right bank tributaries are Pravara, Manjira, Manair. Waters of the Godavari will be tapped by reverse pumping and storage, thereby facilitating agriculture on over 38 lakh acres, helping rejuvenate thousands of tanks, providing water for industries, and supplying drinking water to Hyderabad and Secunderabad by creating a series of storage tanks and a network of pipelines.
- Barrages have been constructed at Medigadda, Annaram, and Sundilla, from which water will be moved to fill Yellampalli and Sriram Sagar Projects. The Kaleshwaram project will support Mission Kakatiya and Mission Bhagiratha schemes designed to provide drinking water to many villages and improve the capacities of tanks.
- Mission Kakatiya: It is a flagship programme launched by the Government of Telangana which aims at rejuvenation of water tanks and other water storage structures to provide assistance and help to the small and marginal farmers of the state.
- Mission Bhagiratha: It is a project for safe drinking water for every village and city household in Telangana State. It aims to provide piped water to 2.32 crore people in 20 lakh households in urban and 60 lakhs in rural areas of Telangana. The ambitious project will supply clean drinking water to all households in the state through water sourced from River Godavari and River Krishna.

QUESTION 98:

With reference to JAGA mission, consider the following statements:

1. Recently this mission has won the 'World Habitat Award'.
2. It has been undertaken by the Telangana government to convert the slums into livable habitat.

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

Answer: (a)

Explanation

- Recently, Odisha has won the 'World Habitat Award' for its ambitious initiative-Jaga Mission. It aims at transforming the slums into livable habitat with all necessary civic infrastructure and services at par with the better off areas within the same urban local body and to continuously improve the standard of the infrastructure and services and access to livelihood opportunities. **Hence, statement 1 is correct.**

- World Habitat Award: This award is given by World Habitat, in partnership with the United Nations Habitat Assembly every year, in recognition of innovative, outstanding, and revolutionary ideas, projects, and programmes from across the world in the field of housing.
- United Nations Habitat or United Nations Human Settlements Programme: It is the United Nations agency for human settlements. It is mandated by the UN General Assembly to promote socially and environmentally sustainable towns and cities with the goal of providing adequate shelter for all.
- It was established in 1978 as an outcome of the first UN Conference on Human Settlements and Sustainable Urban Development (Habitat I) held in Vancouver, Canada, in 1976. UN-Habitat is headquartered at the United Nations Office at Nairobi, Kenya.
- World Habitat: It is an international not-for-profit organisation/foundation established in the United Kingdom. It works internationally to help bring the best housing to the people who need it the most.

Jaga Mission:

- Odisha Liveable Habitat Mission (OLHM)-JAGA is a society under the Housing & Urban Development Department, Government of Odisha (not Telangana). **Hence, statement 2 is NOT correct.**
- The slum land titling mission is being executed in collaboration with Tata Trusts and Norman Foster Foundation.
- The Odisha government rolled out this first of its kind project on May 7, 2018.
- This mission was also awarded the 'India Geospatial Excellence Award' for technological innovation in transforming the lives of urban poor.

India Geospatial Excellence Award:

- This award is given by GeoSmart India which is an interactive platform that demonstrates the collective and shared vision of the Indian geospatial community and is the most prominent stakeholder event of the Indian geospatial ecosystem.

QUESTION 99:

With reference to Atal Bhujal Yojana, consider the following statements:

1. Atal Jal is a World Bank-funded scheme which aims to improve groundwater management.
2. This scheme is implemented all over India.
3. It is being implemented by the Ministry of Jal Shakti.

Which of the statements given above are correct?

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

Answer: (c)

Explanation

Atal Bhujal Yojana:

- India accounts for 16 per cent of the world's population living in less than 2.5 percent of the global area, and has just 4 percent of the global water resources.
- Atal Jal is a World Bank-funded, central scheme aimed at improving groundwater management. **Hence, statement 1 is correct.**
- According to 'Water and Related Statistics 2019', a report published by
- The CWC, the annual replenishable groundwater resources in India (2017) are 432 BCM, out of which 393 BCM is the annual "extractable" groundwater availability.

- The current annual groundwater extraction is 249 BCM, the largest user being the irrigation sector. This is why the government has called for alternatives to water-intensive crops such as paddy and sugarcane.
- The Atal Bhujal Yojana will be implemented in seven states – Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan and UP over five years from 2020-21 to 2024-25. **Hence, statement 2 is NOT correct.**
- The Atal Bhujal Yojana (ABHY) is a centrally sponsored scheme worth ₹6,000 crore for sustainable management of groundwater with community participation.
- It envisages people participation through the formation of 'Water User Associations', water budgeting, preparation & implementation of Gram Panchayat-wise water security plans, etc.
- It is being implemented by the Ministry of Jal Shakti (earlier known as Ministry of Water Resources, River Development and Ganga Rejuvenation). **Hence, statement 3 is correct.**
- The scheme is being funded by the Government of India and the World Bank on a 50:50 basis.

QUESTION 100:

Consider the following statements regarding Good Governance Index:

1. It has been launched by the Ministry of Personnel, Public Grievances & Pensions.
2. Himachal Pradesh ranked first and Arunachal Pradesh is the worst performer in North-East and Hill States.

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

Answer: (c)

Explanation

Good Governance Index:

- The Good Governance Index (GGI) has been launched by the Ministry of Personnel, Public Grievances & Pensions to determine the status of governance in the country. **Hence, statement 1 is correct.**
- It assesses the impact of various interventions taken up by the State Government and UTs.

Objectives of Good Governance Index:

- Provide quantifiable data to compare the State of
 - Governance in the States and UTs.
 - Enable States and UTs to formulate and implement suitable strategies for improving governance.
 - Shift to result-oriented approaches and administration.
- The GGI takes into consideration the following ten sectors:
 - Agriculture and Allied Sectors,
 - Commerce & Industries,
 - Human Resource Development,
 - Public Health,
 - Public Infrastructure & Utilities,
 - Economic Governance,
 - Social Welfare & Development,
 - Judicial & Public Security,
 - Environment
 - Citizen-Centric Governance



The States and UTs are divided into three groups –

- Big States,
- North-East and Hill States
- Union Territories.

Findings of GGI:

- Big States: Tamil Nadu topped the index followed by Maharashtra, Karnataka, Chhattisgarh and Andhra Pradesh whereas Odisha, Bihar, Goa, Uttar Pradesh and Jharkhand are poor performers.
- North-East and Hill States: Himachal Pradesh ranked first, followed by Uttarakhand, Tripura, Mizoram and Sikkim. Jammu and Kashmir, Manipur, Meghalaya, Nagaland, and Arunachal Pradesh are the worst performers in this group. **Hence, statement 2 is correct.**
- Union Territories: Puducherry is the best-governed UT followed by Chandigarh and Delhi. Lakshadweep is the worst performing UT.

