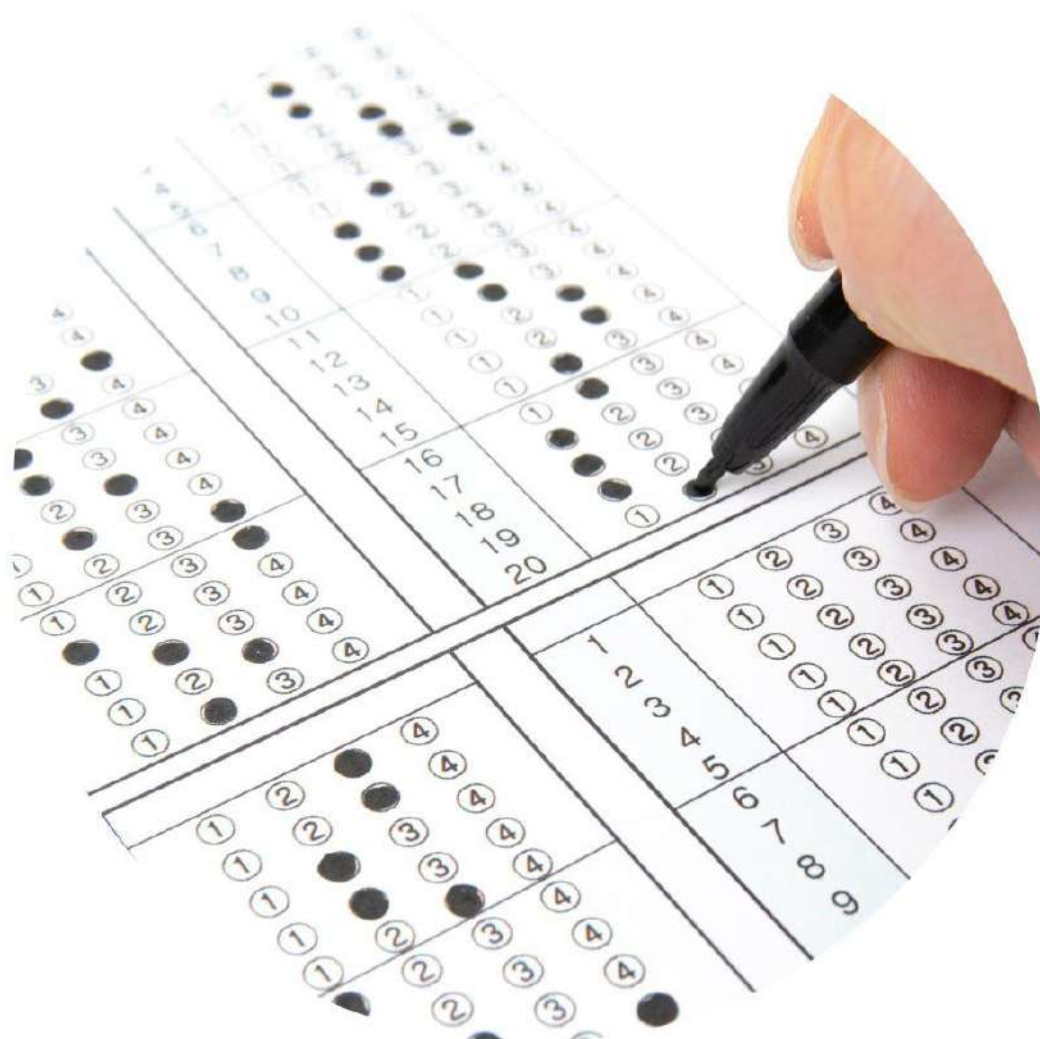




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# MONTHLY PRESTORMING

JANUARY  
2024

A compilation of Prelims MCQs with solutions  
from Current Affairs of the month



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## MONTHLY PRESTORMING

### JANUARY 2024

#### 02-01-2024

1) Consider the following statements with respect to Psychoanalysis

1. It is a method of treating mental disorders, shaped by psychoanalytic theory, which emphasizes unconscious mental processes.
2. It was coined by Sigmund Freud.
3. It was the first modern Western system of psychotherapy.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

2) Consider the following statements with respect to Financial Intelligence Unit India (FIU IND)

1. It is a national agency responsible for receiving and disseminating information relating to suspect financial transactions.
2. It is an independent body that reports directly to the Economic Intelligence Council (EIC) headed by the Prime Minister.
3. FINnet 2.0 Mission is an initiative of FIU IND to provide quality financial intelligence.

How many of the statements given above are **incorrect**?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

3) Consider the following statements with respect to Maharishi Valmiki

1. He is the original author of the story of Lord Ram and the first poet of Sanskrit language.
2. Maharishi Valmiki International Airport is located in the state of Uttar Pradesh.

3. Valmiki Jayanti is celebrated annually in the month of January.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

4) In the UN's Genocide Convention, the term 'Genocide' includes which of the following?

1. Killing members of a group.
2. Causing serious bodily or mental harm to members of a group.
3. Deliberately inflicting on the group conditions of life, calculated to bring about its physical destruction in whole or any part of it.
4. Imposing measures intended to prevent births within the group.
5. Forcibly transferring children of the group to another group.

Choose the correct codes

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

5) Project Kusha, sometimes seen in the news is related to which of the following?

- a. A Statue of Kusha, twin son of Lord Rama and Sita to be built at Ayodha temple.
- b. Inland Water-Ways Development Project at kushi nagar in Uttar Pradesh.
- c. India's indigenous air defence system.
- d. Mega project that focuses on improving the overall logistics in the country.

## Answers

1. c

### Psychoanalysis

The Delhi Police stated the 6 individuals accused in the Parliament breach incident underwent psychoanalysis.

- The term 'Psychoanalysis' was coined by the Viennese psychiatrist Sigmund Freud.
- He developed psychoanalysis as a treatment modality for people presenting with symptoms that other physicians were unable to treat.
- Psychoanalysis is a method of treating mental disorders, shaped by psychoanalytic theory, which emphasizes unconscious mental processes.
- Freud considered dreams to be forms of wish fulfilment and believed interpreting them to be central to psychoanalysis.
- Traditional psychoanalysis involves 4 to 6 sessions per week, and often lasts for years.

2. a

### Financial Intelligence Unit India (FIU IND)

The FIU IND issued show-cause notices to 9 offshore virtual digital asset service providers (VDA SPs) for operating illegally without complying with PMLA act, 2002.

- Financial Intelligence Unit India (FIU IND) is a **national agency** responsible for receiving, processing, analysing and disseminating information relating to suspect financial transactions.
- FIU-IND is an **independent body** that reports directly to the Economic Intelligence Council (EIC) headed by the **Finance Minister**.
- It is a **multi-disciplinary body** that was set up in **2004** with a sanctioned strength of 75 personnel.
- These 75 personnel are inducted from various organisations that include:
  - Central Board of Direct Taxes (CBDT),
  - Central Board of Excise and Customs (CBEC),
  - Reserve Bank of India (RBI), Securities Exchange Board of India (SEBI),
  - Department of Legal Affairs and Intelligence agencies.

- **Main function** – Receive cash/suspicious transaction reports, analyse them and disseminate valuable financial information to intelligence/enforcement agencies and regulatory authorities.
- Other functions include:
  - Collection of Information
  - Analysis of Information
  - Sharing of Information
  - Act as Central Repository
  - Coordination
  - Research and Analysis
- **FINnet 2.0 Mission** – Is an initiative of FIU IND to provide quality financial intelligence for safeguarding the financial system from the abuses of money laundering, terrorism financing and other economic offenses.
- **Virtual Digital Asset Service Providers (VDA SPs)** – A Virtual Asset Service Provider (VASP) is a business that performs one or more of the following actions:

- Exchange between virtual assets and fiat currencies
- Exchange between one or more forms of virtual assets
- Transfer of virtual assets

- VASPs use block-chain technology to facilitate the exchange, transfer, safekeeping, and administration of virtual assets.
- In March 2023, VDA SPs were brought into the ambit of Anti Money Laundering/Counter Financing of Terrorism (AML-CFT) framework under the provisions of the Prevention of Money Laundering Act (PML) Act 2002.

3. b

### Maharishi Valmiki

Ayodhya airport has been renamed as Maharishi Valmiki International Airport.

- Maharishi Valmiki is also known as Adi Kavi, the first poet of Sanskrit language.
- He is the original author of the story of Lord Ram but presently Tulsidas's Ramcharitmanas is far more popular.
- A 16th century Bhakti poet, Tulsidas's version is composed in the vernacular Awadhi rather than scriptural Sanskrit.

- Valmiki's Ramayana is divided into 7 cantos or kandas, each telling a different part of Lord Ram's story.
- **Valmiki Jayanti** is celebrated to commemorate the birth anniversary of Maharishi Valmiki in **October**.

4. d

### UN's Genocide Convention

*South Africa filed a genocide case against Israel at International Court of Justice.*

- The Genocide Convention was the first human rights treaty adopted by the General Assembly of the United Nations on 9 December 1948.
- According to the Convention, genocide is a crime that can take place **both in time of war as well as in time of peace**.
- Article II of the UN's Genocide Convention defines the term '**Genocide**' that includes:
  1. Killing members of a group.
  2. Causing serious bodily or mental harm to members of a group.
  3. Deliberately inflicting on the group conditions of life, calculated to bring about its physical destruction in whole or any part of it.
  4. Imposing measures intended to prevent births within the group.
  5. Forcibly transferring children of the group to another group.
- The Genocide Convention has been ratified by 153 States (as of April 2022, with Zambia).
- Other 41 of the United Nations Member States have not yet ratified the convention and from these, 18 are from Africa, 17 from Asia and 6 from America.
- **India ratified the Geneva Convention in 1950.**
- **9 December** has been adopted by UN as the International Day of Commemoration and Dignity of the Victims of the Crime of Genocide and of the Prevention of this Crime.

5. c

### Project Kushi

- Project Kushi is the India's indigenous air defence system to develop Long-Range Surface-to-Air Missiles (LR-SAM).

- The project aims to equip India with a robust air defence missile system capable of detecting and neutralising incoming threats.
- The project is an initiative of the Defence Research and Development Organisation (DRDO).
- The project is jointly developed by DRDO and Israel Aerospace Industries, Israel's major aerospace and aviation manufacturers.
- **LR-SAM system** – Is capable of detecting and destroying incoming stealth fighters, aircraft, drones, cruise missiles and precision-guided munitions at ranges up to 350 km.
- It is a long-range surveillance and fire control radars would have different types of interceptor missiles designed to hit hostile targets at 150 km, 250 km, and 350 km ranges.
- It is also capable of reliable area air defence with a single-shot kill probability of not less than 80 percent for a single missile launch.
- The LR-SAM system will be also made capable of interacting with an integrated command and control system (IACCS).
- The IACCS is an automated air defence command and control centre that the Indian Air Force uses for controlling and monitoring air operations.

**03-01-2024**

1) Consider the following statements with respect to Square Kilometre Array Observatory (SKAO)

1. It is a single telescope installed in radio-quiet region of Argentina.
2. SKAO will observe and map galaxies at the edge of the observable universe.
3. India is not a part of this world's largest radio telescope project.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

2) Consider the following statements with respect to Red Corner Notices

1. They are issued for fugitives who are wanted either for prosecution or to serve a sentence.
2. In India, the Central Bureau of Investigation (CBI) is the officially designated agency to publish, maintain and update the Red Corner Notices.

Which of the above statement(s) is/are correct?

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

3) Consider the following statements:

**Statement-I:** The amount of carbon dioxide in the atmosphere of a planet can be used as an indication for habitable zones.

**Statement-II:** The decrease in carbon dioxide in the planet implies that some of it is being dissolved into an ocean or maybe even captured by a planet-scale biomass.

Select the correct answer using the codes given below:

- a. Both Statement-I and Statement-II are correct and Statement-II is the correct explanation for Statement-I
- b. Both Statement-I and Statement-II are correct and Statement-II is not the correct explanation for Statement-I
- c. Statement-I is correct but Statement-II is incorrect
- d. Statement-I is incorrect but Statement-II is correct

4) Consider the following statements with respect to Global Snow Leopard and Ecosystem Protection Programme (GSLEP)

1. It is an alliance between 12 snow leopard range countries, organizations and communities to protect the snow leopard and its mountain ecosystems.
2. It aims to achieve the goals of the Bletchley Declaration.
3. India is one among the 12 snow leopard range countries and a member of GSLEP.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

5) Salton Sea, sometimes seen in the news is located in which of the following country?

- a. United States of America
- b. Russia
- c. Democratic Republic of the Congo (DRC)
- d. Australia

## Answers

1. a

### Square Kilometre Array Observatory (SKAO)

- The SKAO is a next-generation radio astronomy-driven Big Data facility that will revolutionise our understanding of the Universe and the laws of fundamental physics.
- The Square Kilometre Array Observatory (SKAO) is an **intergovernmental organization** that builds and operates radio telescopes.
- **Mission** – To build and operate cutting-edge radio telescopes to transform our understanding of the Universe and deliver benefits to society through global collaboration and innovation.
- The Square Kilometre Array (SKA) is an international project to build the **world's largest radio telescope**.
- The SKAO is *not a single telescope but an array of thousands of antennas*, to be installed in remote radio-quiet locations in **South Africa and Australia**.
- It will operate as one large unit meant to observe and study celestial phenomena.
- **Currently, the Five-hundred-meter Aperture Spherical Radio Telescope (FAST) is the world's largest single-unit radio telescope.**
- Countries have to sign, and ratify, the SKAO convention to formally become members.

- **Member nations** – Some of the countries taking part in building the SKA include the UK, Australia, South Africa, Canada, China, France, **India**, Italy and Germany.
- **India** – India, through the Pune-based National Centre for Radio Astrophysics (NCRA) and some other institutions, has been involved in the development of SKA since its inception in the 1990s.
- India's main contribution to the SKA is in the development, and operation, of the Telescope Manager element, the neural network or the software that will make the telescope work.
- **Giant Metrewave Radio Telescope (GMRT)** - Is the world's largest and most sensitive radio telescope operating within the 110-1,460 MegaHertz frequency range.

2. c

### Red Corner Notices

- INTERPOL Notices are international requests for cooperation or alerts allowing police in member countries to share critical crime-related information.
- Notices are issued at the request of a member country's INTERPOL National Central Bureau and are made available for all member countries to consult in our Notices database.
- **Red Corner Notices** – Are issued for fugitives wanted either for prosecution or to serve a sentence.
- Red Corner Notices is also known as Red Notice.
- A Red Notice is a request to law enforcement agencies worldwide to locate and provisionally arrest a person pending extradition, surrender or similar legal action.
- **Red Notices are published by INTERPOL** at the request of a member country, and must comply with INTERPOL's Constitution and Rules.
- It is based on an arrest warrant or court order issued by the judicial authorities in the requesting country.
- INTERPOL has designated a National Central Bureau in all its 195 member countries as a single point of contact between law enforcement agencies of that member and INTERPOL.
- In India, the **Central Bureau of Investigation (CBI)** is the officially

designated agency to publish, maintain and update the Red Corner Notices.

- **Yellow Notice** – Is a global police alert for a missing person.
- It is published for victims of parental abductions, criminal abductions (kidnappings) or unexplained disappearances.
- Police in one of our member countries request a Yellow Notice via their National Central Bureau and provide information on the case.

3. a

### Liquid Water on Exoplanets

*Recently scientists have developed a new method to detect water on exoplanets, which in turn could help look for distant habitable worlds.*

- The amount of carbon dioxide in the atmosphere of a planet and its neighbouring planet can be used as an indication for habitable zones.
- If a planet has reduced amounts of carbon dioxide in atmosphere when compared to neighbouring planets, that planet could have **liquid water on its surface**.
- The **decrease in carbon dioxide** implies that some of it is being dissolved into an ocean or maybe even captured by a planet-scale biomass.
- **One method of identifying whether a planet has liquid water is using glint, or how starlight reflects off water.**
- **CO<sub>2</sub>** - It is easy to measure the amount of carbon dioxide in a planet's atmosphere.
- This is because CO<sub>2</sub> is a strong absorber in the infrared, the same property causing the current rise in global temperatures here on Earth.
- By comparing the amount of CO<sub>2</sub> in different planets' atmospheres, we can use this new habitability signature to identify those planets with oceans, which make them more likely to be able to support life.

4. b

### Global Snow Leopard and Ecosystem Protection Programme (GSLEP)

- GSLEP is an alliance of 12 snow leopard range countries, multi-lateral institutions, NGOs, scientists and local communities.

- It seeks to address high-mountain development issues using the conservation of the charismatic and endangered snow leopard as a flagship.
- The **Bishkek Declaration** is a 2013 pledge by 12 countries to ensure the well-being of snow leopards and the people who live among them.
- **Secure 20 by 2020** is an initiative of GSLEP that identified and aims to secure at least 20 snow leopard landscapes across the cat's range by 2020.
- The **12 snow leopard range countries** are Afghanistan, Bhutan, China, **India**, Kazakhstan, **Kyrgyzstan (Kyrgyz Republic)**, Mongolia, Nepal, Pakistan, Russia, Tajikistan and Uzbekistan.
- **Bletchley Declaration** aims to enhance global collaboration on Artificial Intelligence (AI) safety.

- Inhabited islands of Lakshadweep (Union Territory).
- Particularly Vulnerable Tribal Groups (PVTGs) in Madhya Pradesh.
- Newly named Indian research stations in Arctic region.
- Cattle breeds in Gujarat.

- 2) Consider the following statements with respect to Access, Watch and Reserve (AWaRe)
- It is a tool for monitoring antibiotic consumption that was developed by the National Centre for Disease Control (NCDC).
  - It defines the targets and monitors the effects of stewardship policies that aim to optimize antibiotic use and curb antimicrobial resistance.



Which of the above statement(s) is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

3) Consider the following statements with respect to Immoral Traffic (Prevention) Act, 1956

- The act aims to prevent 'the commercialisation of vices' and the 'trafficking of females'.
- A customer in a brothel cannot be charged under this Act.

Which of the statements given above is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

4) Consider the following statements with respect to Indian Science Congress

- It is the largest gathering of scientists and students of science in India.
- The first meeting of the Congress was held in 1914.

5. a

### Salton Sea

Recently World's largest reserve of Rare Earth Element, Lithium was discovered Beneath Salton Sea, California of USA.

- Salton Sea is a saline lake in the lower Colorado Desert, southern California of **United States of America**.
- In **rare-earth elements (REEs)**, lithium stands out because of its usefulness and potential value.
- Recently World's largest reserve of Rare Earth Element, Lithium was discovered Beneath Salton Sea.
- To know about lithium reserve [click here](#).

04-01-2024

1) The terms "Amini and Kalpeni" sometimes seen in the news are related to which of the following?



3. The principal organiser of the event is Department of Science and Technology (DST).

How many of the statements given above are correct?

- a. Only one  
b. Only two  
c. All Three  
d. None of the above

5) Consider the following statements with respect to Tsunami

1. It is a harbour wave that are caused by earthquakes or volcanic eruptions under the ocean.  
2. All earthquakes or volcanic eruptions does not result in tsunamis.  
3. The Indian Tsunami Early Warning Centre (ITEWC) works under the aegis of National Disaster Management Authority (NDMA).

How many of the statements given above are **incorrect**?

- a. Only one  
b. Only two  
c. All Three  
d. None of the above

## Answers

1. a

### Agatti, Amini and Kalpeni

The Kochi-Lakshadweep islands submarine optical fiber connection was recently inaugurated by Prime Minister, Narendra Modi that connects eleven Lakshadweep Islands including Agatti, Amini and Kalpeni.

- The **tiniest Union Territory of India, Lakshadweep** is an archipelago consisting of 12 atolls, 3 reefs and 5 submerged banks.
- The **inhabited islands** are Kavaratti, Agatti, Amini, Kadmat, Kiltan, Chetlat, Bitra, Andrott, Kalpeni and Minicoy.
- More than 93% of the population who are indigenous, are Muslims and majority of them belong to the Shafi School of the Sunni Sect.

- **Kochi-Lakshadweep islands submarine optical fibre connection (KLI-SOFC) Project** – It covers a wide range of sectors including technology, energy, water resources, healthcare and education.
- The project submarine cable connectivity from Mainland (Kochi) to 11 Lakshadweep Islands, that includes:
  - Kavaratti, Agatti, Amini, Kadmat, Chetlet, Kalpeni, Minicoy, Androth, Kiltan, Bangaram and Bitra.
- It will lead to an increase in internet speed unlocking new possibilities & opportunities.
- The project is funded by Universal Services Obligation Fund (USOF), Department of Telecommunication.
- Bharat Sanchar Nigam Limited (BSNL) was the Project Executing Agency and the work was awarded to M/s NEC Corporation India Pvt Ltd through Global Open Tendering process.

2. b

### Access, Watch and Reserve (AWaRe)

*It was recently found that using AWaRe, in India only 38% of the prescriptions were for antibiotics belonging to the Access group.*

- Access, Watch and Reserve (AWaRe) is a classification tool for monitoring antibiotic consumption that was developed by **World Health Organization** in 2017.
- The tool defines the targets and monitors the effects of stewardship policies that aim to optimize antibiotic use and curb antimicrobial resistance.
- This classification is a helpful tool for assessing the results of stewardship policies that seek to maximize antibiotic use and reduce antimicrobial resistance.
- Antibiotics are categorized into 3 groups to emphasize the significance of their appropriate use while also taking into account the impact of various antibiotics.
- The 3 groups are: Access, Watch, and Reserve.
- The **National Centre for Disease Control (NCDC)** is the nodal agency for India's national programme on AMR containment, of which one of the key components is the surveillance of antibiotic usage.

3. a

### Immoral Traffic (Prevention) Act, 1956

The Kerala High Court ruled recently ruled that a customer in a brothel can be charged under the Immoral Traffic (Prevention) Act, 1956.

- The Immoral Traffic (Prevention) Act, 1956 aims to prevent the commercialisation of vices and the trafficking of females.
- **Section 2** of the act defines a brothel to include any house, room, or place, or any portion of any house, room or place, which is used for purposes of sexual exploitation or abuse.
- The term **prostitution** is defined as the sexual exploitation or abuse of persons, for commercial purposes.
- **Section 5** penalises anyone who procures or attempts to procure a person, with or without their consent, for prostitution purposes.
- It also punishes those inducing persons to go from any place, for prostitution purposes, to become inmates of or frequent, a brothel.
- *Causing or inducing persons to engage in prostitution is punishable* with rigorous imprisonment for 3–7 years, along with an Rs 2,000 fine.
- If such an offence is committed against a person's will or a child, the maximum sentence can be extended to 14 years or life sentence.
- *The term procure is not defined in the Act.*
- In its recent judgment, the Kerala High Court ruling has expanded the meaning of the term procure in Section 5 of the ITP Act.
- It has expanded by adding that a customer will be held liable in addition to pimps/brothel-keepers who hire persons for prostitution.
- **Cases related to the act** – *Mathew vs the State of Kerala*, in this case the Kerala high court ruled that a customer caught in a brothel can be prosecuted under the ITP Act.
- In *Goenka Sajan Kumar vs The State of AP (2014)* and *Sri Sanaula vs State of Karnataka (2017)* the respective high courts have ruled against prosecuting brothel customers under sections 3-7 of the ITP Act.

4. b

### Indian Science Congress

The Indian science congress which was scheduled to start on 3 January has been postponed.

- Indian Science Congress is a permanent annual fixture in the calendar of the participant group for more than a century.
- With the exception of the two years following the outbreak of the Covid-19 pandemic, the Indian Science Congress has been held every year since 1914.
- The first meeting of the Congress was held from January 15-17, **1914** at the premises of the Asiatic Society, Calcutta.
- **Department of Science and Technology** is the main **funding agency** of the event.
- The **principal organiser** of the event is the **Indian Science Congress Association (ISCA)**, a registered society in Kolkata.
- **Indian Science Congress Association (ISCA)** – Was started by the initiates of British Chemists namely J. L. Simonsen and P.S. MacMahon.
- The Association was formed with the following objectives:
  1. To advance and promote the cause of science in India
  2. To hold an annual Congress at a suitable place in Indi
  3. To publish proceedings, journals and transactions
  4. To popularise science

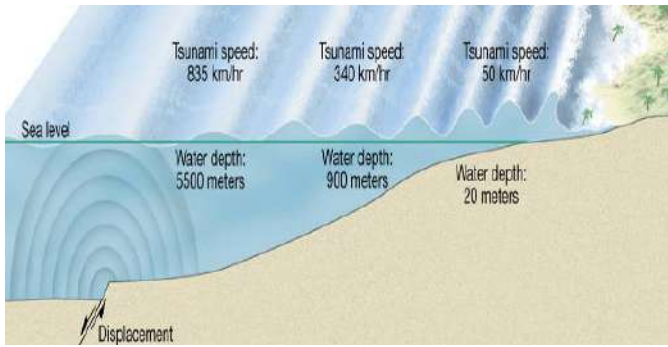
5. a

### Tsunami

Tsunami waves hit several parts of Japan's coastal areas.

- Tsunami is a Japanese word that means harbour wave, is a series of giant ocean waves caused by earthquakes or volcanic eruptions under the ocean.
- When an earthquake takes place under the ocean, a large chunk of the ocean floor can suddenly move upward or downward, leading to a sudden displacement of a large volume of water, thereby causing tsunami waves.
- **Not all earthquakes or volcanic eruptions lead to tsunamis.**
- The formation of a tsunami can depend on a host of factors, including the shape of the ocean floor and the earthquake's distance and direction.

- **The Indian Tsunami Early Warning Centre (ITEWC)** – Is the national authority to issue tsunami advisories for India.
- **It works under the aegis of Ministry of Earth Sciences.**
- It is established at Indian National Centre for Ocean Information Sciences (INCOIS), Hyderabad.



**05-01-2024**

1) Prerana Program, sometimes seen in the news is an initiative of which of the following ministry?

- Ministry of Environment, Forest and Climate Change.
- Ministry of Education.
- Ministry of Science and Technology.
- Ministry of Electronics and Information Technology.

2) Consider the following statements with respect to Wetland City Accreditation

1. It is a voluntary system that recognizes cities which have taken exceptional steps to safeguard their urban wetlands.
2. It is established under the Ramsar Convention.
3. No Indian city have been formally accredited in the Wetland City Accreditation.

How many of the statements given above are **incorrect**?

- Only one
- Only two
- All Three
- None of the above

3) Consider the following statements with respect to Thaluyatti and Uruttu Dolls

1. It is a traditional Indian dolls modelled on the human form that is predominantly made in Thanjavur of Tamil Nadu.
2. The art of making these dolls was introduced by Maratha rule in the early 19th Century.
3. It was granted the Geographical Indication (GI) tag in 2009.

How many of the statements given above are correct?

- Only one
- Only two
- All Three
- None of the above

4) Consider the following passage:

Banvasi was the ancient capital of this rulers. This dynasty replaced Satavahana Empire in the northern Karnataka in 3rd century. In goa they were subordinates of Chalukyas of Kalyana. The inscription of this dynasty was written in Kannada and Sanskrit languages.

The above passage best describes which one of the following kingdom or dynasty?

- Kalabhras
- Ikshvakus
- Kadambas
- Rashtrakutas

5) Consider the following pairs

Places in news	Countries
1. Kerman	– Iran
2. Beirut	– Lebanon
3. Haifa	– Israel

How many of the statements given above are correct?

- Only one
- Only two
- All Three
- None of the above

## Answers

1. b

### Prerana Program

*Prerana Program was recently launched.*

- Prerana Program aims to offer a meaningful, unique and inspiring experience to all participants, thereby empowering them with leadership qualities.
- It is a *week-long residential program* for **20 selected students** of class IX to XII.
- It is an Experiential Learning Program to empower students with leadership qualities.
- **It was launched by the Department of School Education & Literacy, Ministry of Education.**
- Prerana program will run from a Vernacular School which was established in 1888 at Vadnagar, Gujarat. Vadnagar is one of the oldest living cities of India.
- The **Prerana** stands as a tribute to Vadnagar's indomitable spirit, a living city that has triumphed over challenges like earthquakes and natural calamities.
- The **curriculum** of Prerana School prepared by **IIT Gandhi Nagar**.

2. d

### Wetland City Accreditation

*The Ministry of Environment, Forest, and Climate Change selected Indore, Bhopal and Udaipur to get accredited for Wetland City Accreditation under the Ramsar Convention.*

- Wetland City Accreditation (WCA) aims to promote the conservation and wise use of urban and peri-urban wetlands, as well as sustainable socio-economic benefits for local populations.
- The Accreditation seeks to encourage cities that are close to and dependent on wetlands, primarily Wetlands of International Importance.
- The **Ramsar Convention** during COP12 held in the year 2015 approved this voluntary WCA system that recognizes cities that have taken exceptional steps to safeguard their urban wetlands.
- This **voluntary scheme** provides an opportunity for cities that value their natural or human-made wetlands to gain international recognition.

- No Indian city have been formally accredited in the Wetland City Accreditation.

- **Criteria** – A city to get accredited formally for Wetland City Accreditation should satisfy the standards used to implement each of the 6 international criteria mentioned Operational Guidance for WCA of the Ramsar Convention on Wetlands.
- **The Amrit Dharohar** – Is an initiative of the MoEF&CC that aims to achieve similar goals by promoting unique conservation values of Ramsar Sites.

3. c

### Thalaiyatti and Uruttu Dolls

*The makers of Thalaiyatti and Uruttu Dolls are having tough time due to the stiff competition from electronic toys and e-commerce platforms.*

- Thalaiyatti and Uruttu Dolls are traditional Indian dolls modelled on the human form that is predominantly made in Thanjavur of Tamil Nadu.
- The art of making these dolls was introduced by Maratha rule Raja Serfoji in the early 19th Century.
- **Thalaiyatti and Uruttu Dolls are also known as Thanjavur dolls which received Geographical Indication (GI) tag in 2009.**
- *Earlier the dolls were heavier as they were made of terracotta.*
- At present, all the dolls have a **lightweight body** which are made of tapioca flour, papier mache and plaster of Paris cooked and kneaded to the consistency of roti dough.

4. c

### Kadambas

*A 10th century Kadamba inscription written in Kannada, Sanskrit was discovered in the Mahadeva temple at Cacoda in southern Goa.*

- The Satavahana Empire declined around the 3rd century CE and was replaced by the Ikshvakus, followed by Pallavas in Andhra and the **Kadambas in northern Karnataka.**
- Kadambas ruled over the northern part of Karnataka.
- **Banvasi** was also the ancient capital of this rulers.

- King Ravivarma ruled the kingdom from 485-519 AD and Banavasi in Uttar Kannada district (now) was the capital then.
- Their inscriptions can be found in the languages of **Kannada** and **Sanskrit**.
- *Kadambas of Goa were the subordinates of Chalukyas of Kalyana.*
- Chalukyan emperor Tailapa II appointed Kadamba Shasthadeva as mahamandaleshwara of Goa for his help in overthrowing the Rashtrakutas.
- The epigraph is engraved in Kannada and Nagari characters.
- It is in the literary style of Talangre inscription of Jayasimha I of the same period.

5. c

#### Kerman, Beirut and Haifa

- **Kerman** – Kerman is a city in **Iran**.
- **Beirut** – The Hamas leader Saleh al-Arouri was killed in a drone strike at Beirut, **Capital of Lebanon**.
- **Haifa** – Hezbollah drone was intercepted over Haifa a bay-side suburban of Israel.

**06-01-2024**

1) Consider the following statements with respect to Plasma Waves

1. They are interconnected set of particles and fields which propagate in a periodically repeating fashion.
2. Plasma Waves are found only in Earth in the entire Solar System.

Which of the above given statement(s) is/are correct?

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

2) Consider the following statements with respect to PRITHVI Vigyan (PRITHVI) Scheme.

1. It is a joint initiative of the Ministry of Science and Technology and Ministry of Defence.

2. The scheme aims to produce indigenous class of Agni and Prithvi missiles under Make in India Program.
3. SAGE (Seismology and Geosciences) is one of the sub-schemes of the PRITHVI scheme.

How many of the statements given above are **incorrect**?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

3) Consider the following statements with respect to Mitigation Work Programme (MWP)

1. It is part of Global Stocktake, which was originally proposed during the COP28.
2. The programme is a brainchild of India's Ministry of Environment Forest and Climate Change.

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

4) Consider the following statements with respect to Pallas's Fish Eagle

1. It is the largest eagle species in the world.
2. The species is found only in India's west coast region.
3. It is classified as endangered by the IUCN Red List.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

5) Consider the following statements with respect to Etikoppaka Toys

1. These toys are manufactured in the state of Andhra Pradesh.
2. Etikoppaka Toy is a Geographical Indication (GI) tagged product.
3. These toys have no sharp edges and are rounded on all sides.

How many of the statements given above is/are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

## Answers

1. a

### Plasma Waves

*The researchers at Indian Institute of Geomagnetism (IIG) have examined the existence of high-frequency plasma waves in the Martian plasma environment.*

- It is an interconnected set of particles and fields which propagate in a periodically repeating fashion.
- The waves that emanate from the sun having Low-density, ionized gases are called as **plasmas**.
- Plasma is a *good electrical conductor* with properties that are strongly affected by electric and magnetic fields.
- Various plasma waves are often *observed in the Earth's magnetosphere*, a magnetic field cavity around the Earth.
- In general, plasma waves are identified as the short-time scale fluctuations in the electric and magnetic field observations.
- These plasma waves *play an important role in the energization and transport of the charged particles in the Earth's magnetosphere*.
- Some of the plasma waves like [electromagnetic ion cyclotron waves](#) act as a cleaning agent for the Earth's radiation belt, which is hazardous to our satellites.
- **Mars** – The planet does not have any intrinsic magnetic field therefore the high-speed solar wind coming from the Sun interacts directly

with the Mars atmosphere, like an obstacle in the flow.

- Indian Institute of Geomagnetism (IIG) is an autonomous institute of Department of Science and Technology.

2. b

### PRITHVI Vigyan (PRITHVI) Scheme

- PRITHVI stands for Promoting Research in Earth Systems Science, Technology, & Human Resource Development.
- It is an initiative of **Ministry of Earth Sciences (MoES)**.
- **Major Objectives** – Augmentation and sustenance of long-term observations of the atmosphere, ocean, geosphere, cryosphere and solid earth to record the vital signs of the Earth System and change.
- Development of modelling systems for understanding and predicting weather, ocean and climate hazards and understanding the science of climate change.
- Exploration polar and high seas regions of the Earth towards discovery of new phenomena and resources.
- Development of technology for exploration and sustainable harnessing of oceanic resources for societal applications.
- Translation of knowledge and insights from Earth systems science into services for societal, environmental and economic benefit.
- **Sub schemes** – It integrates 5 existing sub-schemes that includes:
  1. ACROSS – Atmosphere & Climate Research-Modelling Observing Systems & Services
  2. O-SMART – Ocean Services, Modelling Application, Resources and Technology
  3. PACER – Polar Science and Cryosphere Research
  4. SAGE – Seismology and Geosciences
  5. REACHOUT – Research, Education, Training, and Outreach

3. d

### Mitigation Work Programme

*The Second Global Dialogue and Investment-Focused Event under the Sharm el-Sheikh Mitigation Ambition*

and Implementation Work Programme (MWP) took place from October 2023 in Abu Dhabi.

- Mitigation Work Programme is a part of Global Stocktake which was originally proposed by the **United States** at **COP26**.
- It aims to encourage countries to heighten mitigation ambition in their climate plans in order to stay within 1.5 degrees Celsius (°C) of warming.
- There are 2 possible reasons for the failure of the MWP to discuss substance in Dubai:
  1. Unwillingness to prejudge the Global Stocktake (GST) until the final day and commit more than what it agreed to.
  2. The atmosphere of mistrust that exists among Parties with respect to who will bear the mitigation burden.

4. a

### Pallas's Fish Eagle

The rare Pallas's fish eagle was spotted after a decade on Asia's largest brackish water lagoon, Chilika Lake in Odisha.

- Pallas's fish eagle (*Haliaeetus leucoryphus*) is also known as Pallas's sea eagle or band-tailed fish eagle, is a large, brownish sea eagle.
- **It is not the largest eagle species in the world.**
- **Conservation** – It is listed as **Endangered** on the IUCN Red List.
- It is a winter migrant, which is protected under the **Schedule-I** of the Wildlife Protection Act, 1972.
- **Distribution** – It can be found in the east Palearctic in Kazakhstan, Russia, Tajikistan, Turkmenistan, Uzbekistan, Mongolia, China, **India**, Nepal, Bangladesh, Myanmar and Bhutan.
- **It is endemic to Asia.**



5. c

### Etikoppaka Toys

The Etikoppaka Toy industry is flourishing.

- The Etikoppaka toy industry is believed to be around 400 years old.
- In early days, some craftsmen from *Etikoppaka*, a Village in Andhra Pradesh made in small wooden bowls and boxes for household purposes.
- These versatile items found utility in storing salt, turmeric, and other aromatic substances, with women especially preferring them for keeping 'kum-kum' or their precious gold jewellery.
- Initially, wooden creations from Etikoppaka were sold at stalls near temples and during weekly markets, better known as 'vaaram - santha'.
- Over time, local kings, zamindars, and landlords began placing orders for these wooden products, utilising them both in kitchens and as decorative elements in homes.
- The introduction of *Lakkapidathalu*, a kitchen set featuring vibrant vessels, a stove, a roti-making plate with a stick, and plates marked a breakthrough in the toy industry.
- **Etikoppaka toys was granted the Geographical Indication (GI) tag in 2017.**
- These toys have no sharp edges and are rounded on all sides.



**08-01-2024**

1) Consider the following statements with respect to PM- Ayushman Bharat Health Infrastructure Mission (PM-ABHIM)

1. It is a Centrally Sponsored Scheme with some Central Sector Components.
2. The scheme focusses on developing capacities of health systems and institutions at all the primary, secondary and tertiary levels.

3. The scheme functions under the Ministry of Health and Family Welfare (MoHFW).

3. Koraput Kala Jeera Rice – Dongria Kondh tribe

How many of the statements given above are correct?

How many of the statements given above is/are correct?

- a. Only one  
b. Only two  
c. All Three  
d. None of the above

- a. Only one  
b. Only two  
c. All Three  
d. None of the above

2) Consider the following statements with respect to Camptothecin (CPT)

5) Consider the following statements with respect to Elasmobranchs

1. It is an anti-cancer drug that is majorly produced in the Southeast Asian region.  
2. It is produced using *Nathapodytes nimmoniana*, a non-native invasive plant.

1. Elasmobranchs are a subclass of cartilaginous fish that includes sharks, rays, skates and sawfish.  
2. Shark Specialist Group (SSG) is an initiative of the International Union for Conservation of Nature (IUCN) for conservation of shark, ray and chimaera.  
3. Kerala has the highest percentage of 'elasmobranch' (shark and ray) meat selling restaurants in India.

Which of the above statement(s) is/are correct?

How many of the statements given above are correct?

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

- a. Only one  
b. Only two  
c. All Three  
d. None of the above

3) Consider the following passage:

It is located on the southern bank of the Brahmaputra River. It is characterized by grasslands, woodlands and numerous wetlands that is located in central part of Assam. It is home to the great Indian one horned rhinoceros, elephants, royal Bengal tigers and Asiatic water buffaloes.

The above passage best describes which of the following Sanctuary/ National Park?

- a. Shiroi National Park  
b. Namdapha National Park  
c. Phawngpui Wildlife Sanctuary  
d. Laokhowa-Burachapori Wildlife Sanctuary

## Answers

1. c

### PM- Ayushman Bharat Health Infrastructure Mission (PM-ABHIM)

Ministry of Health and Family Welfare (MoHFW) added 30 bedded additional wards under the Emergency Covid Response Package under PM-ABHIM scheme.

- The Atmanirbhar Swasth Bharat Yojana' (PMASBY) scheme was renamed as PM-Ayushman Bharat Health Infrastructure Mission (PM-ABHIM) on 1st February, 2021.
- The **objective** of the scheme is to fill critical gaps in health infrastructure, surveillance and health research.
- The scheme focusses on *developing capacities of health systems and institutions* across the

4) Consider the following pairs

- | <i>GI Products</i>                 |   | <i>Tribes</i> |
|------------------------------------|---|---------------|
| 1. Kapdaganda shawl                | – | Meena tribe   |
| 2. Lanjia Saura Painting community | – | Lanjia Saura  |



continuum of care at all levels viz. primary, secondary and tertiary.

- PM-ABHIM is the *largest pan-India scheme* for strengthening healthcare infrastructure across the country which focuses on the primary, secondary and tertiary care services, since 2005.
- Under the scheme, there is a provision for setting up of Integrated Public Health Labs (IPHLs) in all 730 districts across the country.

2. a

### Camptothecin (CPT)

*IIT Madras researchers have metabolically engineered the plant cells of Nothapodytes nimmoniana to increase the production of Camptothecin, which is used to treat cancer.*

- Camptothecin (CPT) is an important anti-cancer drug lead molecule for high-value drugs like Topotecan and Irinotecan.
- It is a molecule procured from nature and then (in a) one-step derivative it is produced as drug.
- Camptothecin is majorly produced in **Southeast Asian region**, with the plant being *largely found only in China and India*.
- It is the 3rd most in-demand alkaloid which is commercially extracted in India.
- **Nathapodytes nimmoniana** – It is a medicinal plant that is a major source of the anticancer drug camptothecin (CPT).
- In India, the plant is a native to **Western Ghats**.
- The IUCN has red-listed the plant.

3. d

### Laokhowa-Burachapori Wildlife Sanctuary

*Greater one-horned rhinoceros has returned to central Assam's Laokhowa-Burachapori Wildlife Sanctuary after 40 years.*

- Laokhowa-Burachapori Wildlife Sanctuary is also called as Laokhowa Wildlife Sanctuary that lies on the *southern bank of the Brahmaputra River*.
- It is located in the *central part of Assam*.
- It is surrounded by many key Protected Areas that include:
  - Kaziranga National Park to the east,

- Orang National park and Pobitora Wildlife sanctuaries to the west,
- Pakke-Nameri NPs to the north and
- The Forests of Karbi Anglong to the south.

- Laokhowa-Burachapor is characterized by grasslands, woodlands and numerous wetlands.
- It is home to the great Indian one horned rhinoceros, elephants, royal Bengal tigers and Asiatic water buffaloes.
- **Phawngpui (Blue Mountain) National Park** – Mizoram.
- **Shiroi National Park** – Manipur.
- **Namdapha National Park** – Arunachal Pradesh.

4. a

### Kapdaganda shawl, Lanjia Saura Painting and Koraput Kala Jeera Rice

*7 products from Odisha have bagged the Geographical Indication (GI) tag in recognition of their exclusivity to the state.*

- The 7 products from Odisha that have bagged the Geographical Indication (GI) tag recently include:
  1. Kapdaganda shawl
  2. Lanjia Saura Painting
  3. Koraput Kala Jeera Rice
  4. Similipal Kai chutney
  5. Nayagarh Kanteimundi Brinjal
  6. Odisha Khajuri Guda
  7. Dhenkanal Magji
- **Kapdaganda shawl** – It is woven and embroidered by the women of the **Dongria Kondh tribe**.
- Dongria Kondh tribe is a particularly vulnerable tribal group (PVTG) in the Niyamgiri hills in Odisha's Rayagada and Kalahandi districts.
- **Lanjia Saura Painting** – It is one of the oldest tribal art forms, is also known as **Idital**.
- The art form belongs to the **Lanjia Saura community**, a PVTG largely residing in the Rayagada district.

- **Koraput Kala Jeera Rice** – It is black-coloured rice variety which is also known as the ‘Prince of Rice’ and is famous for its aroma, taste, texture and nutritional value.
- **Tribal farmers of the Koraput region** have preserved the rice variety for around 1,000 years.
- As the rice grains resemble cumin seeds, it is also called Kala Jeera.
- **Similipal Kai chutney** – The chutney is made with red weaver ants is a traditional delicacy of the tribals in Odisha’s Mayurbhanj district.
- The ants are found in the forests of Mayurbhanj, including in the Similipal forests, the Asia’s second-largest biosphere.
- **Nayagarh Kanteimundi Brinjal** - Is known for its prickly thorns on the stems and the whole plant.
- **Odisha Khajuri Guda** – Khajuri Guda or jaggery is a natural sweetener extracted from date palm trees and has its origin in the Gajapati district.
- Traditionally, the jaggery is prepared in a trapezoidal form called Patali Gur and is organic by nature.
- **Dhenkanal Magji** – Is a type of sweet made from cheese from buffalo milk, with distinct characteristics in terms of appearance, taste, flavour, shape and size.
- Five to seven pairs of gills opening individually to the exterior
- Rigid dorsal fins,
- Rough skin made up of small dermal denticles,
- The upper jaw is not fused to the skull and they have several rows of teeth, which are continually replaced.
- **Shark Specialist Group (SSG)** – Was established by the Species Survival Commission (SSC) of the International Union for Conservation of Nature (IUCN) in 1991.
- It was established in response to growing awareness and concern of the severe impact of fisheries on shark, ray and chimaera populations around the world.
- **India – Goa had the highest percentage of ‘elasmobranch’ (shark and ray) meat selling restaurants (35.8%),** followed by Tamil Nadu (34.6%) and Maharashtra (4.6%).
- India has banned the live-finning of sharks and also the export of fins of all shark and ray species.

09-01-2024

1) Consider the following statements regarding GI Tagged products in India:

1. Every State in India has at least one GI tagged product.
2. Agricultural sector has the most number of GI tagged products when compared to other sectors.
3. Tamil Nadu has the maximum number of GI tagged products in India.

How many of the above statement(s) is/are correct?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

2) Which of the following parameters are used in classifying communities as Schedule Tribes by the Lokur Committee?

1. Indications of primitive traits.
2. Distinctive culture.

5. b

### Elasmobranchs

*Elasmobranch meat (meat of sharks and rays) has found favour among foreign tourists and Indian middle and upper classes.*

- Elasmobranchs are a subclass of cartilaginous fish that includes sharks, rays, skates and sawfish.
- Cartilaginous fish, also known as chondrichthyans, are a group of fish with skeletons made of cartilage rather than bone.
- Demand for fresh, salted, and dried elasmobranch meat has increased since the 1960s and 1970s in South Asia and globally.
- Defining features of Elasmobranchs include:
  - A skeleton made of cartilage and no swim bladders,

3. Geographical isolation.
4. The shyness of contact with the community at large.
5. Backwardness.

Choose the correct code.

- a. 1, 4 and 5 only
- b. 2, 3 and 5 only
- c. 2 and 3 only
- d. All of the above

3) Consider the following statements with respect to Dark Fibre:

1. It is an unused optical fibre without active electronics, carrying no data flow.
2. It is a single mode optical fibre that runs from end to end with no active equipment in-between.
3. A Dark Fibre network provides reliable and secure optical infrastructure.

How many of the above statement(s) is/are **incorrect**?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

4) Consider the following statements with respect to Lakshadweep:

1. It is India's smallest Union Territory with just one district.
2. Lakshadweep has a tropical climate.
3. There are no Scheduled Caste communities in Lakshadweep.

How many of the above statement(s) is/are correct?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

5) Consider the following statements regarding the remission laws in India.

1. Articles 72 and 161 of the Constitution provides power to Governors and President respectively to remit a sentence passed by the Courts.
2. Prisons is a Concurrent subject under the 7th Schedule and hence State governments have power to remit sentences.

Which of the above statement(s) is/are correct?

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

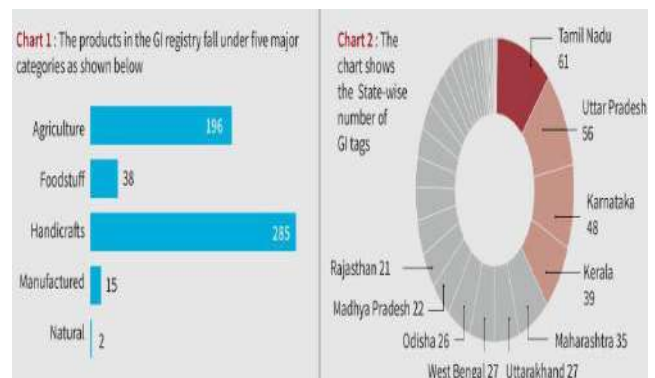
### Answers

1. b

### Status of GI Tagged products

17 products across various sectors were awarded the GI tag.

- The GI Tag is valid for ten years.
- Every State in India has at least one [GI Tag](#).
- The products in the GI registry fall under five major categories such as Agriculture, Foodstuff, Handicrafts, Manufactured products, and natural products.
- Handicrafts have the most number of GI tagged products when compare to other sectors.
- Tamil Nadu has the maximum number of GI tagged products, followed by the state of Uttar Pradesh.
- The first product in India to be accorded with GI tag was Darjeeling Tea in the year 2004-05.
- A total 504 items from different parts of the country have had the tag so far since 2004.



2. d

### Criteria for Scheduled Tribes (STs)

*Centre asks to study delisting Kukis, Zomis from ST list.*

- The criteria used by the government to declare communities as STs were decided upon by the Lokur Committee in 1965 and continue to be in use today.
- These are: primitive traits, distinctive culture, geographical isolation, shyness of contact with the community at large, and backwardness.
- Nearly 6 decades ago the Lokur Committee defined the criteria to include a new community in the Scheduled Tribe list.
- The Office of the Registrar-General of India (RGI) is still following the set of criteria set out by the Committee.
- The RGI's office permission is mandatory for the inclusion of any community in ST lists.

### The process

- The process of adding tribes to the ST list starts with a recommendation from the State governments.
- It is sent to the Tribal Affairs Ministry, which reviews and sends them to the Registrar General of India, Under the Home Ministry for approval.
- After approval, it is sent to the National Commission for Scheduled Tribes and then sent to the Cabinet for a final decision.
- Once the cabinet finalizes it, then it introduces a bill in the parliament to amend the Constitution (Scheduled Castes) Order, 1950, and the Constitution (Scheduled Tribes) Order, 1950.
- After the amendment bill is passed by both the Lok Sabha and Rajya Sabha, the President's office takes the final decision under Articles 341 and 342 of the Constitution.

3. d

### Dark Fibre or Unlit Fibre

*The Securities Appellate Tribunal (SAT) has quashed SEBI's order against the National Stock Exchange (NSE), in the dark fibre case.*

- The Dark fibre or unlit fibre is an unused optical fibre without active electronics, carrying no data flow.

- The actual fibre is leased or bought from a network owner or telecoms provider.
- It is a single mode optical fibre that runs from end to end with no active equipment in-between.
- A Dark Fibre network provides reliable and secure optical infrastructure.
- It enables the potential for Dense Wavelength Division Multiplexing (DWDM), which splits the fibre in to individual wavelengths across the spectrum allowing greater capacity to be achieved.

4. c

### Lakshadweep Islands

*A diplomatic row has erupted following derogatory remarks against PM Modi by Maldivian ministers after PM's visit to the Lakshadweep islands to promote tourism there.*

- Lakshadweep, the group of 36 islands is known for its exotic and sun-kissed beaches and lush green landscape.
- The name Lakshadweep in Malayalam and Sanskrit means 'a hundred thousand islands'.
- India's smallest Union Territory Lakshadweep is an archipelago consisting of 36 islands with an area of 32 sq km.
- It is a uni-district Union Territory and is comprised of 12 atolls, three reefs, five submerged banks and ten inhabited islands.
- The capital is Kavaratti and it is also the principal town of the UT.
- All Islands are away from the coastal city of Kochi in Kerala, in the emerald Arabian Sea.
- Lakshadweep has a tropical climate and it has an average temperature of 27° C – 32° C.
- Annual rainfall decreases from South to North.
- The entire indigenous population has been classified as Scheduled Tribes because of their economic and social backwardness.
- According to the Scheduled Castes and Scheduled Tribes list (modification orders), 1956, there are no Scheduled Castes in this Union Territory.
- In 2020, the Lakshadweep Islands administration established the world's first conservation area for sea cucumbers, the Dr. KK Mohammed Koya Sea Cucumber Conservation Reserve.



5. d

### Remission Laws in India

The Supreme Court quashed the order of remission granted by the State of Gujarat in 2022 to 11 men sentenced to life imprisonment for the gangrape of Bilkis Bano and murder of her family during the 2002 Gujarat riots.

- **Articles 72 and 161 of the Constitution** - The President and Governors respectively have the pardoning powers and can remit a sentence passed by the courts.
- **Code of Criminal Procedure (CrPC)** - Since **Prisons is a State subject**, State governments have powers under **Section 432 of the CrPC** to remit sentences by setting up a Sentence Review Board.
- In **Laxman Naskar vs Union of India (2000)** the SC laid down 5 grounds on which remission is considered.
  - Whether the offence is an individual act of crime that does not affect the society
  - Whether there is a chance of the crime being repeated in future
  - Whether the convict has lost the potentiality to commit crime
  - Whether any purpose is being served in keeping the convict in prison
  - Socio-economic conditions of the convict's family
- **Jail manuals** contain rules that allow certain days of remission in every month for good behaviour of convicts.

### 10-01-2024

1) Consider the following statements with respect to International Classification of Diseases (ICD)

1. It is an initiative of the World Health Organization (WHO).

2. National Centre for Disease Control (NCDC) serves as the WHO Collaboration Centre for ICD-related activities 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

2) Consider the following statements with respect to Sisal Plants

1. It has the ability to store water and thrive in drought-prone areas.
2. It is native to India and are used in making ropes, paper and cloth.
3. The ancient Aztec and Mayan civilisations were the first to begin making paper out of sisal leaves.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

3) NUTEC Plastics, sometimes seen in the news, is an initiative of which of the following organisations?

- a. International Atomic Energy Agency (IAEA)
- b. United Nations Environment Programme (UNEP)
- c. International Union for Conservation of Nature (IUCN)
- d. World Wide Fund for Nature (WWF)

4) Consider the following statements with respect to Active rock glaciers (ARGs)

1. ARGs are permafrost landforms in alpine regions that contain significant amounts of ice and move downslope or down valley.
2. They are not found in the young fold mountains.

3. It can contribute to natural disasters as the region warms.

How many of the statements given above are **incorrect**?

- a. Only one  
b. Only two  
c. All Three  
d. None of the above

5) Consider the following statements with respect to Chemical, Biological, Radiological and Nuclear (CBRN) Warfare/Disasters

1. The CBRN defence teams of the National Disaster Response Force (NDRF) is the first respondent of any disaster related to CBRN in India.  
2. TARKASH is an exercise between USA and India to address the terror threat related to CBRN.

Which of the statement(s) given above is/are correct?

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

## Answers

1. a

### International Classification of Diseases (ICD)

- International Classification of Diseases (ICD) provides critical knowledge on the extent, causes and consequences of human disease and death worldwide via data that is reported and coded with the ICD.
- International Classification of Diseases (ICD) is diagnostic tool that maintains information for health analyses, such as the study of mortality (death) and morbidity (illness) trends.
- The **World Health Organization (WHO)** has developed a classification series called International Classification of Diseases (ICDs) to classify diseases internationally.
- Infectious diseases like Malaria and lifestyle diseases like chronic insomnia are included in this classification.**

- The global data on diseases currently available is mainly based on healthcare practices to be diagnosed through modern biomedicine.
- International Classification of Diseases (ICD) - 11** – Is the latest version of the ICD.
- It was adopted by the 72nd World Health Assembly in 2019 and came into effect on 1st January 2022.
- It allows the systematic recording, analysis, interpretation and comparison of mortality and morbidity data collected in different countries or regions and at different times.



- India** – The classification of data and terminology relating to diseases based on Ayush systems including **Ayurveda, Siddha and Unani is not yet included in the WHO ICD series.**
- ICD 11 TM Module 2, Morbidity Codes, World Health Organization launch event will be held in New Delhi on 10th January, 2024.
- The data and terminology relating to diseases based on Ayurveda, Siddha and Unani systems will now be included in the ICD11 classification of WHO.
- Central Bureau of Health Intelligence (CBHI)** is an agency under the Ministry of Health and Family Welfare that serves as the WHO Collaboration Centre for ICD-related activities.
- It facilitates the collection and dissemination of data on various diseases and mortality.
- The **Ministry of Ayush** has already developed the Code for Ayurveda, Siddha, and Unani Medicine through the National Ayush Morbidity and Standardized Electronic Portal (NAMSTE).

- The Ministry of Ayush in collaboration with WHO has prepared a categorization of data and terminology related to diseases based on Ayush - Ayurveda, Siddha, and Unani systems under TM2 module of ICD11 series.

2. b

### Sisal Plants

*Researchers at Stanford University has found that the absorption capacity of a sisal-based material to be higher than commercial menstrual pads that could make sanitary napkins more sustainable in India.*

- Sisal (*Agave sisalana*) is a plant of the family Asparagaceae and its fibre, the most important of the leaf fibre group.
- The lifespan of a sisal plant is about 7-10 years, during which it produces 200-250 usable leaves.
- Each leaf has about a thousand fibres that can be used to make ropes, paper, and cloth. Now, it could be used to make a highly absorbent material as well.
- **The plant is native to Central America**, where its fibre has been used since pre-Columbian times.
- The ancient **Aztec and Mayan civilisations** were the first to begin making paper out of sisal leaves.
- The plant itself is also used to make mezcal, a distilled alcoholic beverage.
- The **absorption capacity of the material is high** and found to be higher than those found in commercial menstrual pads.

3. a

### NUTEC Plastics Initiative

*International Atomic Energy Agency and the Argentine Antarctic Institute (IAA), under the IAEA's NUTEC Plastics Initiative conducted a study about effects of micro-plastics in the Antarctic.*

- NUTEC Plastics is a flagship initiative by the **International Atomic Energy Agency (IAEA)**.
- It aims to address the global challenge of plastic pollution.
- It brings together countries and partners from around the world to fight plastic pollution on 2 fronts:

1. At point of source, by introducing new technologies to improve plastic recycling.
2. In the ocean, where the bulk of plastic waste ends up.

- 63 countries are participating in marine monitoring of micro-plastics and 30 around the world are developing innovative recycling technology.
- **India is part of the NUTEC Plastics Initiative.**

4. a

### Active rock glaciers (ARGs)

*'Permafrost Zonation Map', a new study that mapped Active rock glaciers in Kashmir Himalayas shows that it hold significant volumes of water that could cause disaster once it melts.*

- Rock glaciers typically form in mountainous regions where there is a combination of permafrost, rock debris, and ice.
- Over time, if the glacier recedes or thaws, the debris-covered ice can transform into a rock glacier.
- These are called 'active glacial rocks' and may **contribute to natural disasters as the region warms.**
- ARGs are permafrost landforms in alpine regions that contain significant amounts of ice and move downslope or down valley.
- Permafrost are thick ground layers frozen for at least 2 years, is at an advanced stage in places like Greenland, Alaska and Siberia.
- **ARGs can also be found on the young fold mountains including Himalayas.**
- The Kashmir Himalayas are dotted with permafrost structures called 'rock glaciers'.

5. c

### Chemical, Biological, Radiological and Nuclear (CBRN) Warfare/Disasters

*The Chemical, Biological, Radiological, Nuclear (CBRN) teams reached the spot of the Chlorine leak in Dehradun with detectors and rescue equipment.*

- CBRN agents include:
  1. Material from nuclear fission or fusion, or other radioactive material with the potential to affect human health,

2. Biological agents causing infection or disease and
3. Toxic chemicals that can cause poisoning.

- *The CBRN teams of the National Disaster Response Force (NDRF) is the first respondent of any disaster related to CBRN in India.*
- **TARKASH** – Is a joint exercise by the National Security Guard (NSG), India and US Special Operations Forces (SOF), USA.
- It aims to address the threats related to the CBRN terror attacks.

3. Algeria
4. Mauritania

Choose the correct code.

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

4) Consider the following statements with respect to Grant for Research and Entrepreneurship across Aspiring Innovators in Technical Textiles (GREAT)

1. It provides grant up to 50 lakhs for start-ups in technical textiles field.
2. It is an initiative of the Ministry of Enterprise and Innovation.
3. It is part of the Multiplier Grants Scheme (MGS).

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

5) Panspermia, sometimes seen in the news is related to which of the following?

- a. A natural pathogenic fungi to help save eucalyptus forests from devastating pest.
- b. A Greece hypothesis that attributes the origin of life on one planet to a different planet.
- c. A type of sustainable fuel that is produced from the whiskey.
- d. A new class of antibiotics that can kill drug-resistant bacteria.

### 11-01-2024

1) Consider the following pairs of the terms in news and their relevance:

Terms in news	Relevance
1. Ugram	- Scheme for building pucca house
2. Drishti 10 Starliner	- India's first cruise in the Western Coast
3. VINBAX	- Military exercise between India-Vietnam

How many of the above pair(s) is/are matched **incorrectly**?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

2) Operation Prahaar and Operation Shakthi, sometimes seen in the news recently, was conducted by which of the following organisation(s)?

- a. Indian Coast Guard
- b. Financial Intelligence Unit
- c. Central Bureau of Narcotics
- d. Central Bureau of Investigation

3) Which of the following countries are part of the Sahel Region?

1. Algeria
2. Libya

### Answers

1. b

#### Ugram

- It is an indigenous assault rifle also named the fierce one.



- The Armament Research and Development Establishment (ARDE), and the Hyderabad-based Dvipa Armour India Private Limited (DAIPL).
- Ugram is a 7 to 15 mm assault rifle that was developed within 100 days for both the Indian Army and paramilitary forces.
- The rifle has a 20-round magazine that fires robust and full auto mode.
- The rifle is effective for 500 metres and the weight of the rifle including the magazine is less than 4 kg.

### Drishti 10 Starliner

- It is the first indigenously manufactured Unmanned Aerial Vehicle (UAV), by Adani Defence and Aerospace.
- Adani Aerospace Park is the country's first final assembly line in the private sector for military-grade unmanned systems.
- The Drishti 10 Starliner is an advanced intelligence, surveillance, and reconnaissance (ISR) platform with 36 hours of endurance and a 450 kg payload capacity.
- It is the only all-weather military platform with NATO's STANAG 4671 (standardised agreement 4671) certification for the UAV system's airworthiness.
- The drone is cleared to fly in both segregated and unsegregated airspace.
- The UAV will now be taken from Hyderabad to Porbandar to be inducted into naval maritime operations.

### VINBAX Exercise

- The VINBAX exercise, initiated in 2018, is an annual training event that alternates between India and Vietnam.
- The first edition took place in Jabalpur, Madhya Pradesh, and the most recent edition occurred at Chandimandir Military Station in August 2022.
- The primary objective of VINBAX-2023 is to enhance collaborative partnerships, promote interoperability, and share best practices between the Indian and Vietnamese armed forces.
- The exercise falls under Chapter VII of the United Nations Charter, specifically focusing on Peacekeeping Operations.

2. c

### Operation PRAHAAR & Operation Shakthi

- Operation PRAHAAR & Operation Shakthi are the destruction operation of illicit opium poppy crop by Central Bureau of Narcotics in India.

3. d

### Sahel Region

- Africa's Sahel, a region running across the breadth of the continent, between the Sahara in the north and the Sudanian Savanna in the south.
- It is a largely semi-arid belt of barren, sandy and rock-strewn land.
- Sahel marks the physical and cultural transition between the continent's more fertile tropical regions to the south and its desert in the north.
- The Sahel stretches from Senegal on the Atlantic coast, through parts of Mauritania, Mali, Burkina Faso, Niger, Nigeria, Chad and Sudan to Eritrea on the Red Sea coast.



4. a

### Grant for Research and Entrepreneurship across Aspiring Innovators in Technical Textiles (GREAT)

*The Ministry of Textiles is all set to organize a hackathon on Fostering Innovations in Technical Textiles, in the event the ministry will announce the top 3 winners of the GREAT initiative.*

- Under GREAT, Ministry of Textiles shall provide grant-in-aid of normally up to **INR 50 Lakhs** for a period of 18 months.
- **Objectives** – GREAT believes in utilizing the in exhaustive talent pool and expertise of India in Technical Textiles sector to bring innovative products/technologies to the market to:

1. Support young innovators/entrepreneurs in Technical

Textiles to translate their prototypes to technologies/products.

2. Support commercialization of technologies developed by innovators/start-ups in Technical Textiles.
3. Bring forward a culture of rapid translation of ideas/prototypes to products through collaboration.

- It has evolved under the Research, Development and Innovation Component of National Technical Textiles Mission (NTTM) and **not a part of the Multiplier Grants Scheme (MGS)**.
- **National Technical Textiles Mission (NTTM)** – Is a flagship scheme of Ministry of Textiles.
- NTTM primarily focusses on research, development, and innovation (RD &I) along with education, skill and market promotion for the technical textiles.

5. b

### Panspermia

- Panspermia is a **hypothesis** that simply attributes the origin of life on one planet to a different planet, it doesn't actually explain how life came to be.
- The hypothesis has prevailed since ancient Greece.
- *It was first posited by the Greek philosopher Anaxagoras (500-428 BC), who coined the term and first articulated life's potential to travel as 'seeds' between planets.*
- **Modern version** – The idea of panspermia advances 3 stages:
  1. Escape from a planet
  2. Transit through interplanetary space
  3. Landing on another planet
- It has also become the seed of many controversies, including one suggesting the interstellar object Oumuamua was an alien object engaged in panspermia.

**12-01-2024**

1) Consider the following statements regarding Pradhan Mantri Anusuchit Jaati Abhuyday Yojana (PM- AJAY):

1. The scheme aims to reduce poverty of the SC Communities.
2. The scheme is implemented by the Ministry of Tribal Affairs.
3. Pradhan Mantri Adarsh Gram Yojana is a sub-scheme to PM-AJAY.

How many of the above statement(s) is/are correct?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

2) Consider the following statements with respect to Swami Vivekananda:

1. Vivekananda preached neo-Vedanta, an interpretation of Hinduism through a Western lens.
2. He was the chief disciple of Ramakrishna Paramhansa and established the Ramakrishna Mission.
3. The Powers of the Mind is a book written by Swami Vivekananda.

How many of the above statement(s) is/are **incorrect**?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

3) Consider the following statements with respect to the Volatiles Investigating Polar Exploration Rover (VIPER) Mission:

1. It is a 100-day Mission conducted by NASA.
2. It is a mobile robot to map resources on another celestial body.
3. VIPER is part of NASA's Artemis mission.

How many of the above statement(s) is/are correct?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

4) Arrange the following cities (cleaner to less cleaner) based on the recent Swachh Survekshan Awards, 2023:

1. Indore
2. Mumbai
3. Navi Mumbai
4. Visakhapatnam
5. Tirupati

Choose the correct code.

- a. 5, 4, 3, 2, 1
- b. 2, 4, 1, 3, 5
- c. 3, 1, 4, 5, 2
- d. 1, 2, 3, 4, 5

5) Consider the following statements with respect to the Atal Setu Nhava Sheva Sea Link:

1. It is the countries longest bridge over the Sea.
2. The bridge is built over the Thane Creek in the Arabian Sea.

Which of the above statement(s) is/are correct?

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

## Answers

1. b

### Pradhan Mantri Anusuchit Jaati Abhuyday Yojana (PM- AJAY)

- Pradhan Mantri Anusuchit Jaati Abhuyday Yojana (PM- AJAY) is a merged scheme of 03 Centrally Sponsored Scheme namely:
  1. Pradhan Mantri Adarsh Gram Yojana (PMAGY),
  2. Special Central Assistance to Scheduled Castes Sub Plan (SCA to SCSP)
  3. Babu Jagjivan Ram Chhatrawas Yojana (BJRCY)
- The scheme works with an aim to reduce poverty of the SC communities.

- The scheme works to improve socio-economic developmental indicators by ensuring adequate infrastructure and requisite services in the SC dominated villages.
- The scheme is implemented by the Ministry of Social Justice & Empowerment.

2. d

### Swami Vivekananda

- Swami Vivekananda was born in 1863 as Narendranath in a Bengali family.
- He was monk, a chief disciple of the Indian mystic Ramakrishna and the founder of Ramakrishna Mutt.
- In 1888, Narendra left the monastery and travelled extensively in India for five years.
- In 1893 Vivekananda represented India and Hinduism in The Parliament of the World's Religion in Chicago.
- In 1894, he founded the Vedanta Society in New York to study, practice and propagate the principles of Vedanta.
- He was a key figure in the introduction of the Indian philosophies of Vedanta and Yoga to the Western world.
- He raised interfaith awareness, as his two favourite books being Bhagavad Gita and The Imitation of Christ and contributed to the concept of nationalism in colonial India.
- In 1902, he died at the age of 39, with the rupture of a blood vessel in his brain being the possible cause of death.
- Vivekananda preached neo-Vedanta, an interpretation of Hinduism through a Western lens.
- The Powers of the Mind is a book written by Swami Vivekananda.

3. c

### Volatiles Investigating Polar Exploration Rover (VIPER) Mission

- The Volatiles Investigating Polar Exploration Rover mission was aimed to be launched in 2023 by NASA.
- For the 100-day mission, the launch vehicle and lander will be supplied by NASA's Commercial Lunar Payload Services (CLPS).

- VIPER is a mobile robot and the mission is to map resources, is the first on another celestial body.
- The rover will study the Moon's water and understand the environment where it plans to land the first woman and first person of color under its Artemis program.

4. d

### Swachh Survekshan Rankings 2023

- The list categorised Maharashtra as one of the best-performing states followed by Madhya Pradesh and Chhattisgarh.
- Indore and Surat were declared the 'cleanest cities' in the country with Navi Mumbai maintaining its third position in the annual cleanliness survey conducted by the Central government.
- Indore bagged its title for the seventh time in a row.

Ranking	2023	2022	2021
1	Indore & Surat	Indore	Indore
2	NA	Surat	Surat
3	Navi Mumbai	Navi Mumbai	Vijayawada
4	Visakhapatnam	Visakhapatnam	Navi Mumbai
5	Bhopal	Vijayawada	NDMC
6	Vijayawada	Bhopal	Ambikapur
7	NDMC	Tirupati	Tirupati
8	Tirupati	Mysuru	Pune
9	Greater Hyderabad	NDMC	Noida
10	Pune	Ambikapur	Ujjain

5. c

### Atal Setu Nhava Sheva Sea Link

- It is also known by the name Mumbai Tans Harbour Link (MTHL).
- The bridge will cut the travel time between Sewri and Chirle to under 20 minutes.
- It is a 22-km-long twin-carriageway six-lane bridge over the Thane Creek in the Arabian Sea.
- **Objective** - To improve connectivity in the Mumbai Metropolitan Region which comprises the districts of Mumbai, Thane, Palghar, and Raigad, and promote the region's economic development.

**13-01-2024**

1) Consider the following statements with respect to Atal Setu

1. It is the longest sea bridge in the world.
2. It is located in Mumbai.

Which of the statement(s) given above is/are correct?

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

2) Consider the following statements with respect to Thylakoid Membranes

1. The thylakoid membrane is the site of photochemical and electron transport reactions of oxygenic photosynthesis.
2. They are little pouches located in the chloroplasts of plants.
3. They have the ability to store chlorophyll and can be found in cyanobacteria.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

3) Consider the following passage:

It is located on the banks of the Godavari River. The temple derives its name from a black statue of the Lord. The Babasaheb Ambedkar led a landmark agitation demanding temple entry rights for Dalits in this temple. The sanctum sanctorum has statues of Ram, Sita and Lakshman.

The above passage best describes which of the following temple?

- a. Vaikom Mahadeva Temple
- b. Kalaram temple
- c. Chennakeshava Temple
- d. Simhachalam Temple

4) Consider the following statements with respect to Operation AMRITH

1. It aims to curb the illegal trade of Timber, including Red Sanders.
2. It is an initiative of the Ministry of Commerce and Industry.

Which of the statement(s) given above is/are correct?

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

5) Humboldt's Enigma, sometimes seen in the news is related to which of the following?

- a. The ability of certain materials to generate an electric charge in response to applied mechanical stress.
- b. The Thunderbolts will attempt to steal Vibranium from a different location altogether.
- c. A climate classification that widely uses vegetation-based empirical data for classification of climate.
- d. None of the above

## Answers

1. b

### Atal Setu Nhava Sheva Sea Link

- It is also known by the name Mumbai Tans Harbour Link (MTHL).
- The bridge will cut the travel time between Sewri and Chirle to under 20 minutes.
- It is a 22-km-long twin-carriageway six-lane bridge over the Thane Creek in the Arabian Sea.
- **Objective** - To improve connectivity in the Mumbai Metropolitan Region which comprises the districts of Mumbai, Thane, Palghar, and Raigad, and promote the region's economic development.

2. c

### Thylakoid Membranes

- The thylakoid membrane is the site of photochemical and electron transport reactions of oxygenic photosynthesis.

- Thylakoids are little pouches located in the chloroplasts of plants.
- They store chlorophyll, the substance in plant that reacts to sunlight and triggers photosynthesis.
- They are found in ancient, light-sensitive bacteria called cyanobacteria.
- Around that time, the oxygen released by cyanobacteria, filled the ocean and made its waters oxygen rich.
- As more oxygen escaped, methane was eventually displaced, and oxygen became a major component of the atmosphere.
- This event is known as the **Great Oxidation Event**.

3. b

### Kalaram temple

*Prime Minister visited the Kalaram Temple.*

- Kalaram temple was built in 1792 with the efforts of one Sardar Rangarao Odhekar.
- The Kalaram temple derives its name from a black statue of the Lord, which is Kala Ram that translates to Black Ram.
- The sanctum sanctorum has statues of Ram, Sita and Lakshman.
- A black idol of Hanuman is located at the main entrance of the temple.
- The main temple has 14 steps, which represent the 14 years of Ram's exile.
- It has 84 pillars, which represents the cycle of 84 lakh species that one has to complete in order to be born as a human.
- It is located on the banks of the **Godavari River**.
- **Babasaheb Ambedkar** – In 1930, B R Ambedkar led an agitation to demand access for Dalits to Hindu temples.

4. d

### Operation AMRITH

*The Operation AMRITH conducted by the Kerala state government to tackle antimicrobial resistance.*

- **Operation AMRITH** – **Antimicrobial Resistance Intervention for Total Health** to prevent the overuse of antibiotics in the state.

- It is aimed at conducting surprise raids in retail medical shops for detecting OTC sale of antibiotics that was launched by the **Kerala state government**.
- Through this initiative, we are seeking the help of everyone in Kerala to join in the fight against antimicrobial resistance (AMR).
- With regard to surveillance, the Kerala government launched Kerala Antimicrobial Resistance Surveillance Network (KARS-NET) for human use surveillance.
- The Kerala State Pollution Control Board (KSPCB) also inaugurated an AMR laboratory for environmental surveillance of AMR in August 2023.
- **Operation Sesha** – To curb the illegal trade of Timber, including Red Sanders.
- **Operation Nanhe Faristey** – Reunification of children in need of care and protection with their families.

5. d

### Humboldt's Enigma

- The modern geographers used modern tools to establish a link between biodiversity and mountains.
- Based on their findings, they proposed their own version of the link between biodiversity and mountains and called it Humboldt's enigma.
- Humboldt suggested there was a relationship between temperature, altitude and humidity on one hand and the occurrence patterns of species or their biodiversity on the other hand.
- The essence of Humboldt's enigma is that as one move away from the tropics, the biodiversity decreases with mountains being exception.

17-01-2024

1) Consider the following statements with respect to Diodes

1. It is an electronic component whose primary purpose is to allow current to flow in only one direction.
2. LEDs (Light-emitting Diodes) can produce all three primary colours such as red, green and blue.
3. An OLED is a solid-state device consisting of a thin, carbon-based semiconductor layer that

emits light when electricity is applied by adjacent electrodes.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

2) Consider the following passage:

They are a unique dwarf breed, considered the shortest humped cattle in the world. It is an indigenous breed native to Rayalaseema region of southern Andhra Pradesh. It can be white or grey, or of shades of light or dark brown.

The above passage best describes which of the following cow breeds?

- a. Sahiwal
- b. Rathi
- c. Ongole
- d. Punganur

3) Syndiniales, sometimes seen in the news, is related to which of the following?

- a. A meteor shower that occurs every year in the month of December.
- b. A new species of marine amphipod that was discovered in Chilika Lake, Odisha.
- c. A group of parasitic single-celled organisms.
- d. An island country near Africa that was recently declared malaria-free.

4) Defence Technology Council, sometimes seen in the news, is a recommendation of which of the following committee?

- a. Vijay Raghavan Committee
- b. CI Issac Committee
- c. Akhilesh Ranjan Committee
- d. Rekhi Committee

5) Consider the following statements with respect to e-SAKSHI Mobile Application

1. The e-SAKSHI mobile application provides real-time access, enhancing decision-making processes for MPs.
2. It was launched by the Ministry of Statistics and Programme Implementation.

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

## Answers

1. c

### Diodes

- A diode is an electronic component about 5 mm wide.
- It has two points of contact, or terminals, called its anode and cathode.
- A diode's primary purpose is to allow current to flow in only one direction.
- It achieves this using a p-n junction.
- A p-n junction is made of two materials laid next to each other.
- **Light-emitting diode (LED)** – An LED is a diode that emits light.
- LEDs (Light-emitting Diodes) can produce all three primary colours such as red, green and blue.
- It can also produce a variety of colours or emit energy at higher and lower frequencies.
- The application ranges from smartphones to TV screens, from signboards to 'feeding' plants light in greenhouses, from barcode scanners to monitoring air quality.
- **Organic LEDs (OLED)** – The key building blocks for them are organic (carbon-based) materials.
- An OLED is a solid-state device consisting of a thin, carbon-based semiconductor layer that emits light when electricity is applied by adjacent electrodes.

- The energy-saving potential of OLEDs is similar to that of LEDs, but the two technologies differ in a number of ways.
- OLEDs can also be made in almost any shape, can be deposited on flexible substrates, and can be transparent, emitting light from both sides of the device.

2. d

### Punganur

- The Punganur is an indigenous breed native to the Punganur, Vayalpadu, Madanapalli, and Palamaneer talukas of Chittoor district in the Rayalaseema region of southern Andhra Pradesh.
- They are a unique dwarf breed, considered the shortest humped cattle in the world. Their small size makes it easy to keep them at home.
- Punganur cows can be white or grey, or of shades of light or dark brown.
- The Punganur were once on the verge of extinction, and their numbers had fallen below 3,000 heads of cattle across the country.
- However, in recent years, these numbers have increased.
- In the 2012 livestock census Punganur were found only in Andhra Pradesh.
- The Andhra Pradesh government has provided financial support through its budget for the promotion of the Punganur breed.

3. c

### Syndiniales

*Scientists have discovered that the presence of a certain single-celled microbe could be key to the survival of some corals.*

- Corals face more and more heat-stress events due to climate change.
- Syndiniales is a group of parasitic single-celled organisms that could be the possible reason for the corals to survive the heat stress
- The presence of Coralicolids, a group of single-celled organism related to the parasite that causes malaria, was more common likely to cause corals die from heat stress.

4. a

### Defence Technology Council

- Defence Technology Council is a top body chaired by the Prime Minister, with the Defence

Minister and the National Security Advisor as its Vice Presidents.

- It is a top body to have an executive committee chaired by the Chief of Defence Staff.
- It will include representation from academia and industry, with two members from each sector.
- The 9 member Vijay Raghavan Panel was set up by the government last year to review the functioning of the Defence Research and Development Organisation (DRDO) and it has submitted its report recently.

5. c

### e-SAKSHI Mobile Application

- The MPLAD Scheme, designed to empower Members of Parliament (MPs) to recommend developmental projects, has undergone a transformation with the introduction of a revised fund flow procedure.
- The primary objective is to facilitate the recommendation of works that focus on creating lasting community assets based on locally perceived needs.
- The e-SAKSHI mobile application provides real-time access, enhancing decision-making processes for MPs.
- It was launched by the Ministry of Statistics and Programme Implementation.
- This innovative technology solution aims to enhance transparency, accessibility, and efficiency in the execution of MPLAD scheme.
- The mobile app will promote transparency by providing MPs with instant updates on the status and progress of their proposed projects.

**18-01-2024**

1) Consider the following statements with respect to the Thirty Meter Telescope (TMT) Project:

1. The project aims to study the moons of Venus.
2. It is a joint collaboration between U.S., Japan, China and Canada.
3. India is not a participatory to the project.

How many of the above statement(s) is/are **incorrect**?

- a. Only one
- b. Only two

- c. All three
- d. None of the above

2) Consider the following statements with respect to Shankaracharyas:

1. It is a religious title for the heads of the peeths established by Adi Shankara.
2. Adi Shankara is associated with Advaita Vedanta, a Hindu philosophy and spiritual discipline.
3. The Statue of Oneness is associated with Shankaracharyas.

How many of the above statement(s) is/are correct?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

3) Consider the following statements with respect to Prior Approval Requirement:

1. It is applicable to employees who held a rank higher than joint secretary.
2. Prior approval falls under the aegis of the Prevention of Corruption Act (PCA), 1988.
3. Supreme Court struck down this requirement in 2014.

How many of the above statement(s) is/are correct?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

4) Consider the following statements with respect to the Annual Status of Education Report (ASER):

1. It is released by the Ministry of Education and Niti Aayog.
2. The National Statistical Office provides the data for the report.
3. It records the education level of both school and college students.

How many of the above statement(s) is/are correct?



- Only one
- Only two
- All three
- None of the above

5) Consider the following statements with respect to Rossby Waves:

- These waves are a natural phenomenon in rotating fluids such as Earth's ocean and atmosphere, resulting from the planet's rotation.
- It is also known by the name Planetary Waves.
- These waves are also associated with the jet stream and pressure systems.

How many of the above statement(s) is/are correct?

- Only one
- Only two
- All three
- None of the above

## Answers

1. b

### Thirty Meter Telescope (TMT) Project

- The TMT has been conceived as a 30-metre diameter primary-mirror optical and infrared telescope that will enable observations into deep space.
- It is proposed as a joint collaboration involving institutions in the U.S., Japan, China, Canada, and India.
- Indian participation in the project was approved by the Union Cabinet in 2014.
- India to provide the project with hardware, instruments, software worth Rs.200 million.
- The project will be set up in Mauna Kea, an inactive volcano on the island of Hawai'i, United States.

2. c

### Shankaracharyas

- Shankaracharya, is a religious title used by the heads of the four cardinal mathas or peeths

believed to have been established by Adi Shankara (c 788 CE-820 CE).

- They are religious teachers who belong to a line of teachers going back all the way to Adi Shankara himself.
- However, there is little historical evidence for the existence of these mathas prior to the 14th century CE, when the Vijayanagara kingdom began to patronise the Sringeri matha.
- Adi Shankara's life-story, was born in Kalady village on the bank of the River Periyar in what is today Kerala's Ernakulam district.
- The Statue of Oneness depicts Adi Shankaracharya as a 12-year-old child, the age he was when he is said to have visited Omkareshwar.
- It is part of a larger temple tourism project in the state of Madhya Pradesh.

3. c

### Prior Approval Requirement

- In 2003, the Delhi Special Police Establishment Act, 1946, which governs agencies like the CBI, was amended.
- Under Section 6A, it was required to seek approval from the central government before investigating alleged offences under the Prevention of Corruption Act (PCA), 1988, if the employee in question held a rank higher than joint secretary.
- The Supreme Court struck down this requirement in 2014.
- Four years later, the PCA was amended and a similar provision was introduced as Section 17A.
- Under this section, if a public servant commits an offence under the Act while discharging their official duties, investigators must receive approval from the central/ state government, or a competent authority to open an inquiry or investigation.

4. d

### Annual Status of Education Report (ASER)

- It is released annually by the Non-Government Organisation (NGO) Pratham.
- The report records trends in school enrolment, attendance, and reading and arithmetic abilities among children ages 6-14 years in rural areas of the country.

- The 2023 survey focused on an older group of 14-to-18-year-old children, specifically on their ability to apply reading and math skills to everyday situations, and their aspirations.
- It also sought to capture their access to digital technology, and whether they possess the skills to use it.

5. c

### Rosby Waves

- Rossby Waves are massive meanders in the atmosphere, also referred to as planetary waves, which significantly impact the weather.
- Rossby waves are initial types of oscillations that are seen in rotating fluids in their natural state.
- These waves are named after Carl-Gustaf Rossby, who identified them in 1939.
- These waves are a natural phenomenon in rotating fluids such as Earth's ocean and atmosphere, resulting from the planet's rotation.
- Shear in the spinning fluid causes the Coriolis force to vary along the sheared coordinate, leading to Rossby waves' development.
- The Coriolis Effect varies with latitude, which causes the Rossby wave to emerge in the planet's atmosphere and oceans.
- These waves are also associated with the jet stream and pressure systems.

**19-01-2024**

1) Consider the following statements with respect to ChAdOx1 Vaccine

1. It is a replication-deficient adenoviral vector vaccine against COVID-19.
2. ChAdOx1 NipahB vaccine is the first human vaccine trials for deadly Nipah virus.

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

2) Operation Shard Hawa, sometimes seen in the news is led by which of the following agency?

- a. Central Bureau of Narcotics
- b. Central Vigilance Commission
- c. Border Security Force
- d. Indian Railways

3) Consider the following pairs:

#### Musical Instruments

#### Regions

- |               |   |             |
|---------------|---|-------------|
| 1. Kali       | – | West Bengal |
| 2. Mridang    | – | Tamil Nadu  |
| 3. Pung       | – | Manipur     |
| 4. Ravanhatha | – | Karnataka   |

How many of the pairs given above are correctly matched?

- a. Only one
- b. Only two
- c. Only three
- d. All four

4) Consider the following statements with respect to Lithium Triangle

1. It accounts for more than half of the world's total lithium resources.
2. The Lithium Triangle includes countries such as Argentina, Chile and Bolivia.

Which of the above statement(s) is/are **incorrect**?

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

5) Consider the following statements with respect to Gulf of Aden

1. Gulf of Aden is a deep-water basin that forms a natural sea link between the Red Sea and the Mediterranean Sea.
2. It is bordered by Yemen, Somalia and Djibouti.

3. The Bab-el-Mandeb strait connect the Gulf of Aden with the Red Sea.

How many of the statements given above are correct?

- a. Only one  
b. Only two  
c. All Three  
d. None of the above

## Answers

1. c

### ChAdOx1 Vaccine

*Trials of the ChAdOx1 NipahB vaccine, consisting of 51 people aged 18 to 55, will be led by the Oxford Vaccine Group.*

- ChAdOx1 Vaccine is a replication-deficient adenoviral vector vaccine against coronavirus disease 2019 (COVID-19) developed by the Jenner Institute at the University of Oxford.
- Replication-deficient means that a viral vector can no longer replicate due to the removal of critical portions of its genome.
- It is a modified chimpanzee adenovirus that has been modified to prevent replication.
- Adenoviruses are effective vectors for boosting and inducing cellular immunity to encoded recombinant antigen.
- **ChAdOx1 NipahB Vaccine** – Is the first human vaccine trials for deadly Nipah virus.
- **Nipah virus** – Is a devastating disease that can be fatal in around 75% of cases.
- It is carried by fruit bats and may also be transmitted by contact with infected animals (such as pigs) or from person-to-person via close contact.

2. c

### Operation Shard Hawa

*Border Security Force launched Operation Shard Hawa to prevent cross-border intrusions during low temperature and dense fog.*

- It is part of the Border Security Force's winter exercise.
- The operation involves constant patrolling by vehicles, camels and other means in areas where vehicles cannot easily reach.

3. b

### Hudka, Mridang, Pung and Mardala

- **Kali** – Is a wind instrument made of metal.
- It is widely used in **Assam**.
- **Mridang** – Is a percussion instrument made of leather and jackwood.
- This traditional instrument is found in various parts of South India including **Tamil Nadu**.
- **Pung** - Pung is a percussion instrument made of softwood, parchment, leather, and cotton.
- This traditional instrument is found in **Manipur**.
- **Ravanhatha** – Is a stringed instrument, made of coconut shell, bamboo, steel, horsehair, wood, and parchment.
- This folk instrument is found in different parts of the country like **Rajasthan and Gujarat**.
- **Algoze** – Is a pair of Punjabi woodwind instruments adopted by Sindhi, Rajasthani and Baloch folk musicians also call it as Jorhi.

4. d

### Lithium Triangle

*India is all set to invest about INR 200 crore to explore and develop 5 lithium blocks in Argentina which is a part of the Lithium Triangle.*

- Lithium Triangle includes countries such as Argentina, Chile and Bolivia.
- It accounts for more than half of the world's total lithium resources.
- Argentina has the second largest lithium resources in world.
- India's Khanij Bidesh India Limited (KABIL) and Argentina's state-owned enterprise of Catamarca province have forged an agreement to explore lithium.



5. b

d. Neither 1 nor 2

### Gulf of Aden

- Gulf of Aden is a deep-water basin that forms a natural sea link between the **Red Sea and the Arabian Sea**.
- The gulf connects the [Red Sea](#) to the Arabian Sea via the Strait of Bab-el-Mandeb.
- It is bordered by Yemen, Somalia, Djibouti and the Arabian Sea.
- **Significance** – Nearly 13% of India's trade is dependent on the Gulf of Aden route.
- The Ministry of Shipping estimates that Indian imports through the Gulf of Aden route was valued at around USD 50 billion and exports at USD 60 billion.

3) Consider the following statements with respect to Gangetic Dolphin

1. It is the national aquatic animal of India that are only found in four river systems around the world, including Ganga River.
2. It is an ecosystem indicator species that is protected under the Schedule 1 of the Wildlife Protection Act, 1972.
3. It is legally protected in all countries and categorised as endangered under the International Union for Conservation of Nature's Red List of threatened species.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

**20-01-2024**

1) Consider the following statements with respect to Nagara Architecture

1. It emerged during the 5th century CE, during the late Gupta period.
2. The nagara style temples usually have elaborate boundary walls or gateways.
3. The garbhagriha in the nagara style temples is always located directly under the tallest tower.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

2) Consider the following statements with respect to Chabahar Port

1. It is Iran's first deep-water port that is located on the Gulf of Oman.
2. It is part of the proposed International North-South Transport Corridor (INSTC).

Which of the above statement(s) is/are correct?

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

4) Consider the following statements with respect to Scrub Typhus

1. Scrub typhus is an infectious seasonal disease caused by virus and transmitted through infected bats.
2. Higher rainfall and humidity conditions decreases the incidents of the infection.
3. There is no vaccination for this disease.

How many of the above statement(s) is/are **incorrect**?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

5) Which of the following statement(s) are feature(s) of the Strategic Interventions for Green Hydrogen Transition (SIGHT) Programme?

- a. They are key to the realisation of the objectives of the Nagoya Protocol.
- b. Financial incentive mechanisms to support domestic manufacturing of electrolyzers and production of Green Hydrogen.

c. The programme makes mandatory provisions for environmental costs in a government project/programme.

d. All of the above.

## Answers

1. b

### Nagara Architecture

*The Ram temple in Ayodhya, to be inaugurated on January 22 is built on the Nagara style of architecture.*

- The style of temple architecture that became popular in northern India is known as Nagara.
- In North India it is common for an entire temple to be built on a stone platform with steps leading up to it.
- It emerged during the 5th century CE, during the late Gupta period.
- Unlike in South India, **Nagara temples does not usually have elaborate boundary walls or gateways.**
- The **garbhagriha is always located directly under the tallest tower.**
- There are many subdivisions of nagara temples depending on the shape of the shikhara that includes:
  - Latina or the rekha-prasada Phamsana
  - Valabhi
  - Shekhari
  - Bhumija
- **Latina** – Shikhara which is square at the base and whose walls curve or slope inward to a point on top is called the 'latina' or the rekha-prasada type of shikhara.
- **Phamsana** – Buildings tend to be broader and shorter than latina ones.
- Phamsana roofs do not curve inward, instead they slope upwards on a straight incline.
- **Valabhi** – These are rectangular buildings with a roof that rises into a vaulted chamber.
- The edge of this vaulted chamber is rounded, like the bamboo or wooden wagons that would have been drawn by bullocks in ancient times.
- **Shekhari and Bhumija** – From the tenth century onwards, composite Latinas began to

emerge, giving rise to Shekhari and Bhumija styles.

2. c

### Chabahar Port

- It is Iran's first deep-water port that is located on the Gulf of Oman.
- It is part of the proposed International North-South Transport Corridor (INSTC).
- INSTC is a multi-modal transportation project linking the Indian Ocean and Persian Gulf to the Caspian Sea via Iran, and onward to northern Europe via St Petersburg in Russia.
- India, Iran, and Afghanistan signed a trilateral agreement in April 2016, after which the Indian Shipping Ministry worked at a rapid pace towards developing the port.
- There are two distinct ports in the Chabahar project, Shahid Beheshti and Shahid Kalantari. India's investment is restricted to the Shahid Beheshti port.

3. c

### Gangetic Dolphin

*The Gangetic dolphin rescued in Jalaka River of Odisha indicates that there is presence of more freshwater dolphins in the river.*

- Ganges river dolphins are usually a grey or light brown colour, but may also have a pinkish tone to the belly.
- The Ganges river dolphin is known as the Tiger of the Ganges for the role it plays as a top predator and because it is an **ecosystem indicator species.**
- This species is **functionally blind** and **relies heavily on echolocation** to navigate and hunt.
- It is categorised as **endangered** under the International Union for Conservation of Nature's Red List of threatened species.
- **Distribution and habitat** – It includes over 10,000 km of the Ganges-Brahmaputra-Meghna, and the Sangu-Karnaphuli River systems in **Bangladesh, India and Nepal.**
- **Protection** – It is protected under the Schedule 1 of the Wildlife Protection Act, 1972.
- It is **legally protected in all countries within which it is found** and is the National Aquatic Animal of India.

- In 2009, Gangetic dolphins were declared the ***national aquatic animal of India***.
- ***Project Gangetic Dolphin*** which was announced on 2015 for the conservation of the Gangetic dolphins.

4. b

### Scrub Typhus

- Scrub typhus is an infectious disease caused by ***bacteria*** called *Orientia tsutsugamushi* and transmitted through infected ***mites***.
- Mite is a term commonly used to refer to a group of insect-like organisms, some of which bite or cause irritation to humans.
- They are more ***common in old age people***.
- *An increase in rainfall and humidity led to a spike in cases of Scrub typhus.*
- **Seasonal disease** – This disease tends to be seasonal in the endemic areas.
- **Symptoms** – It typically include fever, headache, body ache and sometimes a rash.
- In severe cases, the infection can lead to respiratory distress, brain and lung inflammation, kidney failure and multi-organ failure, ultimately resulting in death.
- **Treatment** – It should be treated with the antibiotic doxycycline.
- Doxycycline can be used in persons of any age.
- **Prevention - No vaccine is available to prevent scrub typhus.**

5. b

### The Strategic Interventions for Green Hydrogen Transition (SIGHT) Programme

*The Union Ministry of New and Renewable Energy (MNRE) has launched the SIGHT Programme for inciting the manufacturing of electrolyzers and production of green hydrogen.*

- SIGHT Programme aims to bolster domestic electrolyser manufacturing and green hydrogen production.
- It is a major financial measure with two distinct financial incentive mechanisms to support domestic manufacturing of electrolyzers and production of Green Hydrogen.
- It includes incentives for manufacturing of electrolyzers and production of green hydrogen.

- It is a sub-component of the National Green Hydrogen Mission.
- The scheme offers a direct incentive over 3 years from the beginning of production and supply.
- A scheme monitoring committee is co-chaired by the secretary of the Union Ministry of Petroleum and Natural Gas (MoPNG), secretary of the Ministry of New and Renewable Energy, mission director of the National Green Hydrogen Mission and other experts.
- The committee will review the implementation status and performance of capacities awarded or established under the scheme.

**22-01-2024**

1) Which of the following statements best defines the term Gold Hydrogen?

- a. It refers to hydrogen being produced by electrolysis using 'excess' electricity from renewable sources.
- b. It refers to hydrogen derived from natural gas and emits carbon.
- c. It refer to naturally occurring hydrogen found underground, akin to oil and natural gas.
- d. It refers to hydrogen which is produced through electrolysis powered by nuclear energy.

2) Consider the following statements with respect to Binturong

1. It is the largest civet in India which need tall and healthy forests for their survival.
2. It is native to the Western Ghats of India.
3. They are classified as a vulnerable species under the International Union for Conservation of Nature (IUCN) red list.

How many the above statement(s) is/are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

3) Consider the following statements with respect to Alliance for Global Good- Gender Equity and Equality

1. It is an initiative of India with 'Invest India' as an 'Institutional Partner'.
2. It aims to bring together global best practices, knowledge sharing and investments in the identified areas of women's health, education, and enterprise.
3. The alliance will be housed and anchored by the CII Centre for Women Leadership.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

4) Consider the following statements with respect to Free Movement Regime, sometimes seen in the news recently

1. It allows people living in border areas of India and Myanmar to travel up to 16km inside the other country without a visa.
2. The border free movement regime between the countries is traditionally called as Sunauli.
3. India has recently decided to extend the free movement regime till 2030.

Which of the above statement(s) is/are **incorrect**?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

5) Consider the following statements with respect to Foreign Contribution (Regulation) Act, 2010

1. The foreign source under the act does not include the contribution from the World Bank and International Monetary Fund.
2. A political party or office bearer cannot receive foreign contribution under the act.
3. The contributions made by a Non-Resident Indian from his personal savings, through the normal banking channels is not treated as foreign contribution.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

## Answers

1. c

### Gold Hydrogen

- It is also known as white hydrogen.
- It refers to **naturally occurring hydrogen found underground**, akin to oil and natural gas.
- The reserves of such gold hydrogen in various locations, such as the Lorraine coal basin in north-eastern France, which contains an estimated 250 million tonnes of the gas.
- The discovery of smaller gold hydrogen reservoirs in Spain, across Europe, and in countries like Mali, Namibia, Brazil, and the U.S. has suggested that this resource could be available worldwide.
- **Diagenesis** – Is the most common way hydrogen is produced naturally.
- It is a water-rock interaction where hydrogen is released from water by oxidation.
- **Radiolysis** – Is another process whereby H<sub>2</sub> is released from water by ionising radiation.
- **Grey hydrogen** – Derived from natural gas and emits carbon.
- **Blue hydrogen** – Is a term for hydrogen that is manufactured from natural gas reforming and carbon capture and storage (CCS).
- **Brown hydrogen** – Is produced by gasification, where carbonous materials are heated into a gas.
- **Yellow hydrogen** – A renewable energy source that's made by extracting hydrogen gas from water through electrolysis.
- **Turquoise hydrogen** – Is a carbon-neutral hydrogen produced from natural gas through a process called pyrolysis.
- **Pink hydrogen** – Is a type of hydrogen that is produced through electrolysis powered by nuclear energy.

2. b

### Binturong

- Binturong is a member of the Viverridae family, which includes animals such as civets and genets.
- The binturong has shaggy black hair, which is sometimes streaked with silver, and wiry whiskers that can give the animal a rather frumpy appearance.
- The animal looks like a cross between a cat and a bear.
- **It is native to the tropical rainforests of South and Southeast Asia.**
- **Range** – Its range extends from Nepal, India, and Bhutan southward to the Indonesian islands of Sumatra and Java and eastward to Borneo.
- It feeds mainly on fruit, such as figs, but it also takes eggs and small animals.
- *They are classified as a **vulnerable** species by the International Union for Conservation of Nature (IUCN).*

3. c

### Alliance for Global Good-Gender Equity and Equality

*The Alliance for Global Good- Gender Equity and Equality was launched by India on the side-lines of the World Economic Forum Annual Meeting.*

- The primary objective of this new Alliance is to bring together global best practices, knowledge sharing and investments in the identified areas of women's health, education and enterprise.
- The Alliance will be taking forward the commitments of the G20 leaders for the benefit of the larger global community.
- It is supported by the Bill and Melinda Gates Foundation.
- **Network Partner** – The World Economic Forum. **Institutional Partner** – Invest India.

4. b

### India-Myanmar border Free Movement Regime

*Home Minister recently announced that the Centre has decided to fence the entire length of the India-Myanmar border to stop the free movement of people.*

- India and Myanmar share a long land border of over 1600 km and a maritime boundary in the Bay of Bengal.

- India-Myanmar border Free Movement Regime is a mutually agreed arrangement between the two countries that allows tribes living along the border on either side to travel up to 16 km inside the other country **without a visa**.
- It was implemented in 2018 as part of the Narendra Modi government's Act East policy, at a time when diplomatic relations between India and Myanmar were on the upswing.
- *Myanmar is the only ASEAN country which shares a land border with India.*
- The border between India and Myanmar was demarcated by the British in 1826, without seeking the opinion of the people living in the region.
- **The border crossing between India and Nepal is traditionally called Sunauli.**

5. c

### Foreign Contribution (Regulation) Act, 2010

- The Foreign Contribution (Regulation) Act (FCRA) of 2010 regulates and prohibits the acceptance and use of foreign funds by individuals, associations or companies for activities that could harm the national interest.
- The act also prohibits the use of foreign funds for activities that are detrimental to the national interest.
- The FCRA defines bank as a banking company as defined in the Banking Regulation Act of 1949.
- It also defines authorized person in foreign exchange as an authorized person as defined in the Foreign Exchange Management Act of 1999.
- Under the act **A person** include:
  1. An individual
  2. A Hindu undivided family
  3. An association
  4. A company registered under section 25 of the Companies Act, 1956
- **The foreign source under the act does not include the contribution from the World Bank and International Monetary Fund.**
- **A foreign source** under the act include:



1. Sources from the Government of any foreign country or territory and any agency of such Government.
  2. Any international agency, *not being the United Nations or any of its specialized agencies, the World Bank, International Monetary Fund.*
  3. A foreign company and a corporation, not being a foreign company, incorporated in a foreign country or territory.
  4. A multi-national corporation.
- Foreign contribution **excludes** earnings from foreign client(s) by a person in lieu of goods sold or services rendered by it as this is a transaction of commercial nature.
  - **A political party or office bearer cannot receive foreign contribution under the act.**
  - The contributions made by a Non-Resident Indian from his personal savings, through the normal banking channels is not treated as foreign contribution.

**23-01-2024**

1) Consider the following statements with respect to Pradhanmantri Suryodaya Yojana

1. It aims to reduce the electricity bill of the poor and middle class, along with making India self-reliant in the energy sector.
2. It has a target of installing rooftop solar on 1 crore houses.

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

2) Consider the following statements with respect to Batadrava Than

1. It is a holy prayer house founded by the revered Vaishnavite reformer-saint Srimanta Sankardeva.
2. It is located in the state of Manipur.
3. Doul Mahotsav is an annual festival that attracts the devotees in Bordowa Than.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

3) Consider the following statements with respect to Qanat System

1. The system identifies aquifers using underground tunnels and transport it to the surface.
2. The system is indigenously developed by the Council for Scientific and Industrial Research - Water Research Institute (CSIR-WRI).
3. This system can be built only in the delta plain regions.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

4) The Global Tree Assessment (GTA) is an initiative of which of the following organisation?

- a. United Nations Environment Programme (UNEP)
- b. International Union for Conservation of Nature (IUCN)
- c. Global Environment Facility (GEF)
- d. Intergovernmental Panel of Climate Change (IPCC)

5) Consider the following statements with respect to Fusarium Acuminatum

1. It is a fungal plant pathogen that causes ripe rot in fuzzy kiwifruit.
2. It is a known ice-nucleator that can freeze water better than bacteria.

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

## Answers

1. c

### Pradhanmantri Suryodaya Yojana

Prime Minister announced Pradhan Mantri Suryodaya Yojana to electrify one crore households with solar electricity.

- Pradhanmantri Suryodaya Yojana is an initiative to generate electricity through solar power.
- It aims to reduce the electricity bill of the poor and middle class, along with making India self-reliant in the energy sector.
- It has a target of installing rooftop solar on 1 crore houses.
- People living in remote areas will be covered under this scheme.
- **Rooftop Solar Programme** – It was launched in 2014.
- It aims to expand India's rooftop solar installed capacity in the residential sector by providing Central Financial Assistance.
- The programme's goal is to increase rooftop solar installed capacity to 40 GW by March 2026 and it is currently in its second phase.

2. b

### Batadrava Than

Rahul Gandhi was prevented from visiting Batadrava Than.

- The Batadrava Than, or Bordowa Than, is a temple complex at the birthplace of revered Vaishnavite reformer-saint Srimanta Sankardeva.
- It is located in Nagaon district of **Assam**.
- It is one of the most sacred sites for Assamese Vaishnavites.
- It is the birthplace of Mahapurush Srimanta Sankardeva (1449-1568) the great Vaisnavite saint of Assam, founded by him in 1494 A.D.
- The rituals conducted at Bordowa Than follow the norms of Purush sanghati, emphasising the teachings of Ekasarana Dharma.

- The Kirtan Ghar, a spacious prayer house, was originally constructed by Sankardev with impermanent materials.
- A very big festival Doul Mohotsava (Holi) is a yearly attraction for the devotees in Bordowa.

3. a

### Qanat System

- The Persian Qanat or Qanat is an **ancient irrigation system** for transporting water from underground sources to the surface.
- The system originated in Iran around 3,000 years ago.
- It **can be built in arid regions** of Iran, agricultural and permanent settlements.
- It's known by a variety of names such as foggara in North Africa, falaj in Oman and qarez in parts of Asia.
- **Qanats can only be built where there's a slope, like a mountain or a valley.**
- **Advantages** – The qanat is sustainable as it works with gravity and no electricity is needed.
- Qanats are multiple kilometres long and once this water hits a floodplain, it can irrigate multiple hectares of land.

4. b

### Global Tree Assessment (GTA)

- The Global Tree Assessment was launched in 2015 in recognition of the poor understanding of the conservation status of the world's tree species, limiting the conservation action that can be taken towards saving threatened species.
- The Global Tree Assessment is an initiative coordinated by:
  - Botanic Gardens Conservation International (BGCI) and the **International Union for Conservation of Nature (IUCN)** Species Survival Commission Global Tree Specialist Group (IUCN-SSC GTSG).
- It is a comprehensive list of species and critical health indicator of global world bio-diversity.
- The 6 major threats categorised by the Global Tree Assessment are:
  1. **Crop agriculture expansion**
  2. **Tree cover decline** as a proxy for overexploitation in all vegetation types

3. **Urbanisation**
4. **Deforestation** as a proxy for land-use change threats in forested areas, changes in burnt area descaled as fire and fire suppression
5. **Climate change** measures in terms of changes in annual variation in figures of temperatures and precipitation
6. Seasonality and vapour pressure deficit (VPD) and VPD seasonality

5. c

### Fusarium Acuminatum

- Fusarium acuminatum (F. acuminatum) is a fungal plant pathogen that causes ripe rot in Actinidia deliciosa (fuzzy kiwifruit).
- Fungi produce highly efficient ice nucleators that can cause water to start crystallising at temperatures as warm as minus 2 degrees C.
- Recently scientists found that F. acuminatum possesses more than a hundred such ice-nucleation proteins that can form functional aggregates outside the fungus's cells, triggering ice formation.
- It is a known ice-nucleator that can freeze water better than bacteria.
- Fungi are extremely stable because [the proteins are] basically released into the environment and not bound to any membrane."

**24-01-2024**

1) Consider the following statements with respect to the Parvatmala Pariyojana:

1. It is an initiative of the Ministry of Road Transport & Highways.
2. Parvatmala Scheme aims to build sustainable and robust ropeway infrastructure in India.
3. The funding is based on Private-Public Partnership (PPP) model.

How many of the above statement(s) is/are correct?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

2) Consider the following statements:

1. They are the largest, heaviest land animals.
2. They are the natural heritage animal of India.
3. The young ones of the species can walk within 1-2 hours of birth.
4. They are categorized as Endangered by IUCN Red List.

The above statement(s) correspond to which of the following species?

- a. Elephants
- b. Tigers
- c. Hippopotamus
- d. Rhinoceros

3) Consider the following statements with respect to the Election Seizure Management System (ESMS):

1. It is a dedicated technology platform where all the enforcement agencies share information in real time.
2. Only the Central enforcement agencies are allowed to share the information.
3. The system was first used in the Parliamentary elections of 2019 in India.

How many of the above statement(s) is/are **incorrect**?

- a. Only one
- b. Only two
- c. All three
- d. None of the above

4) Consider the following statements with respect to the Indian Tectonic Plate:

1. It is a minor tectonic plate that spreads on both sides of the Equator.
2. It is bounded by the Eurasian plate, Australian plate, African plate and the Arabian Plate.

Which of the above statement(s) is/are correct?

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

5) Which of the following statement(s) is associated with the term Muirburn, recently seen in news?

- a. Skin disease caused by a chemical components in cosmetics.
- b. Burning of vegetation to promote growth in moorland.
- c. Thawing of ice sheets in the third pole of the world, Tibet.
- d. It is a sacrifice practice followed by the Kamba Tribes.

## Answers

1. c

### Parvatmala Pariyojana

- The National Ropeways Development Programme, known as the 'Parvatmala Pariyojana', is set to undertake over 200 projects over the next five years.
- The project was proposed during the Union Budget 2022.
- It is an initiative of the Ministry of Road Transport & Highways.
- The focus will be on public-private partnership (PPP) through the Hybrid Annuity Model, with the government providing 60% of the funding support.
- The Parvatmala Pariyojana is being started in regions like Uttarakhand, Himachal Pradesh, Manipur, Jammu & Kashmir and the other North Eastern states.

2. a

### Elephants

- Elephants are the natural heritage animal of India.
- They are the largest, heaviest land animals.
- The Asian elephant is the largest mammal living on the land of Asia.
- **Scientific name** - *Elephas maximus*; **Gestation period** - 22 months
- Elephant calves are able to walk within one or two hours of birth.
- **IUCN Red List** - Endangered; **Wildlife Protection Act 1972** - Schedule I; **CITES** - Appendix I

- **Population** - there are about 50,000-60,000 Asian elephants in the world.
- The number of elephant reserves in India is 32 with the latest addition being the Agasthyamalai Elephant Reserve in 2022.
- About 101 elephant corridors have been identified in the country which need to be secured for conservation of elephants.

3. b

### Election Seizure Management System (ESMS)

- The Election Commission of India (ECI) has developed Election Seizure Management System (ESMS) for real-time updates.
- The ESMS is a dedicated technology platform where all the enforcement agencies such as police, transportation authorities, Central tax agencies and others share information in real time.
- Both the Central and State government enforcement agencies share the information on the platform.
- It was used for the 1st time during the State Assembly Elections in November 2023 in the 5 states of Mizoram, Chhattisgarh, Madhya Pradesh, Rajasthan and Telangana.
- **Objective** - To check the flow of illegal cash, drugs and freebies such as sarees, liquor etc. thereby ensuring free and fair elections.
- **Nodal agencies** - State nodal officers, District nodal officers and flying squad teams.

4. c

### Indian Tectonic Plate

- It is a minor tectonic plate in the Eastern Hemisphere.
- The plate straddles the Equator.
- It is bound by four major tectonic plates:
  1. North - Eurasian plate
  2. South-east - Australian plate
  3. South-west - African plate
  4. West - Arabian plate
- The Indian Plate encompasses the majority of South Asia, that is, the Indian subcontinent, as well as a piece of the basin beneath the Indian Ocean.

- This includes parts of South China and western Indonesia, as well as Ladakh, Kohistan, and Balochistan.



- Peat soils damaged by fire release this carbon, warming the climate.
- Fire damage can also mean the peat retains less water, and so rain washes more quickly into rivers which increases flooding downstream.
- Scotland contains 7% of Europe's peatlands and their sustainable management is of global importance.

**25-01-2024**

5. b

### Muirburn

- Muirburn is the burning of vegetation in moorland areas, usually in a controlled manner, in order to promote growth and maintain open moorland.
- It is a tool used by land managers in Scotland to improve grazing, provide food and shelter for gamebirds, and reduce the risk of wildfires and for selected conservation objectives for habitats and species.
- The Muirburn season runs from 1 October to 15 April inclusive in Scotland, but this can be extended to 30 April at the landowner's discretion.

### Moorlands

- Moorlands are open habitat highland areas with acidic, low nutrient, and water-logged soils.
- Moorland habitats comprise of heath-lands, acid grasslands, and swampy landscapes.
- The heath-lands are dotted with shrubs like bilberry and ling heather, while acid grasslands have wavy hair grass, sheep fescue, and matgrass.
- On the swampy landscapes, mosses like sphagnum spp, sedges like cotton grass, and small shrubs grow there.
- Scotland's moorlands are deliberately burned in a practice known as Muirburn.

### Peatlands

- A healthy peatland is a soggy and spongy terrain made up of partially decomposed plant matter known as peat.
- Peat soils lock away vast amounts of carbon.
- In fact, peatlands globally store twice as much carbon as the world's forests.

1) Consider the following statements with respect to Bharat Ratna Awards

1. It is the highest civilian award in the country instituted in the year 1954 that was originally limited only to arts, literature, science and public services.
2. In terms of Article 18 (1) of the Constitution, the award can be used as a prefix or suffix to the recipient's name.
3. Tamil Nadu has maximum number of Bharat Ratna recipients.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

2) Consider the following statements with respect to Operation Sarvashakti

1. The operation is carried out by the Indian army to neutralise terrorist threats in Pir Panjal range.
2. It is similar to the Operation Sarpvishash.

Which of the above statement(s) is/are correct?

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

3) Consider the following statements with respect to Tax-GDP Ratio

1. It reflects the share of taxes in the overall output generated in the country.
2. It has steadily increased in the recent years.
3. For the year 2022-23, the growth rate for taxes is higher than the nominal GDP growth.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

4) The Supreme Court can entertain a curative petition under which of the following grounds?

- a. Violation of principles of natural justice
- b. Question of bias against the presiding judge
- c. Abuse of the process of the court
- d. All of the above

5) The member countries of North Atlantic Treaty Organization (NATO) includes which of the following:

1. Belgium
2. Italy
3. Sweden
4. Iceland
5. Slovakia
6. Germany

Choose the correct codes

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

## Answers

1. a

### Bharat Ratna Awards

*Union Government announced it would award the Bharat Ratna posthumously to Karpooori Thakur, former chief minister of Bihar.*

- Bharat Ratna is the highest civilian award in the country instituted in the year 1954.
- The award is conferred in recognition of exceptional service/performance of the highest order in any field of human endeavour, without distinction of race, occupation, position or sex.
- The award was originally limited to achievements in the arts, literature, science, and public services but the government expanded the criteria to include any field of human endeavour in December 2011.
- The **first recipients** of the Bharat Ratna were politician C. Rajagopalachari, philosopher Sarvepalli Radhakrishnan and scientist C. V. Raman, who were honoured in 1954.
- It is also **not mandatory** that Bharat Ratna be awarded every year.
- The number of annual awards is restricted to a maximum of **three** in a particular year.
- *The Award does not carry any monetary grant.*
- **The recommendations for Bharat Ratna are made by the Prime Minister himself to the President.** No formal recommendations for this are necessary.
- On conferment of the award, the recipient receives a Sanad (certificate) signed by the President and a medallion.
- **In terms of Article 18 (1) of the Constitution, the award cannot be used as a prefix or suffix to the recipient's name.**
- **Maharashtra** has maximum number of Bharat Ratna recipients.
- It is followed by Uttar Pradesh (8 recipients) and Tamil Nadu (7 recipients).

2. c

### Operation Sarvashakti

- Operation Sarvashakti is an initiative of Indian army to neutralise terrorist threats in Pir Panjal range.

- As part of the operation at least three brigades of additional troops are being deployed in the sector from various reserve and strike corps formations in order to increase the density of troops.
- ***It is similar to the Operation Sarpvinash.***
- In 2003, Indian forces launched **Operation Sarpvinash** to flush out terrorists who had infiltrated from across the border and set up camps in the thick forests south of the Pir Panjal range, especially in the Hilkaka area in Poonch.

3. b

### Tax-GDP Ratio

The time-series data that was released by the Central Board of Direct Taxes (CBDT) indicates that the Direct tax-GDP ratio rose to 15-year high in FY23.

- The tax-to-GDP ratio is the measure of a nation's tax revenue relative to the size of its economy.
- It's calculated by dividing a period's tax revenue by its GDP.
- According to the World Bank, tax revenues above 15% of a country's gross domestic product (GDP) are a key ingredient for economic growth and poverty reduction.
- ***It has not steadily increased in the recent years.***
- For the year 2020-21, the direct tax decreased in relative to the previous year (2019-20).
- **Tax buoyancy** is an indicator to measure efficiency and responsiveness of revenue mobilization in response to growth in the Gross domestic product or National income.
- A tax buoyancy greater than 1 reflects a faster growth in taxes as against the country's national income.
- In India, Tax buoyancy had improved to 2.52 in 2021-22 due to a low base effect.

4. d

### Curative Petition

- Curative jurisdiction is a rare remedy evolved by a Constitution Bench of the Supreme Court in 2002 in the Ashok Hurra Vs Rupa Hurra case.
- It is a final remedy to reconsider dismissed review petitions.

- The Supreme Court could entertain a curative petition under the following grounds:
  1. Violation of principles of natural justice
  2. Question of bias against the presiding judge
  3. Abuse of the process of the court
- Curative petition can be filed in the Supreme Court by elucidating the scope of:
  1. The curative nature of power conferred on the Supreme Court under **Article 142.**
  2. The power to review judgment pronounced or order made by the Supreme Court under **Article 137.**
- The **following cases** were subjected to Curative Petition
  1. National Commission for Women v Bhaskar Lal Sharma, 2013.
  2. Navneet Kaur v State of NCT of Delhi, 2014.
  3. Yakub Abdul Razak Memon v State of Maharashtra, 2015.
  4. Union of India v Union Carbide, 2025.

5. b

### North Atlantic Treaty Organization (NATO)

- NATO was created in 1949 by the United States, Canada, and several Western European nations to provide collective security against the Soviet Union.
- It was the first peacetime military alliance the United States entered into outside of the Western Hemisphere.
- For a new country to join the North Atlantic Treaty Organization (NATO), all the existing members have to approve it.
- Once a country is a NATO member, an attack on its territory is considered an attack on the US-led alliance, and all 31 members are obliged to defend each other.
- **Sweden is officially not part of the NATO.**
- But Sweden will soon officially become the member of NATO.

**27-01-2024**

1) SARATHI App, recently seen in the news is an initiative of which of the following ministry?

- Ministry of Rural Development
- Ministry of Electronics and Information Technology
- Ministry of Culture
- Ministry of Tourism

2) Consider the following statements with respect to Maasir-i-Alamgiri

- It is an account of Emperor Shah Jahan's reign.
- It is written in Persian language.
- It was written by Muhammad Hashim.

How many of the statements given above are correct?

- Only one
- Only two
- All Three
- None of the above

3) Consider the following statements

- The 'Declaration of the Independence of India' was promulgated by the Indian National Congress on 26 January 1930 to fight for Purna Swaraj.
- On January 26, 1930, the tricolour of India was hoisted by Jawaharlal Nehru on the banks of the Ravi River in Lahore.
- The theme for the 75th Republic Day is 'Viksit Bharat' & 'Bharat-Loktantra ki Matruka'.

How many of the statements given above are correct?

- Only one
- Only two
- All Three
- None of the above

4) Consider the following statements with respect to OTOF Gene

- It encodes the otoferlin protein.

2. OTOF mutations can cause both profound hearing loss and a type of hearing loss called auditory neuropathy.

Which of the above statement(s) is/are **incorrect**?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

5) Consider the following statements with respect to Model Code of Conduct (MCC)

- MCC was first introduced in the state assembly elections in Kerala in 1960.
- The MCC comes into force from the date the election schedule is announced until the date that results are out.
- It has no statutory backing and it is voluntary.

How many of the statements given above are correct?

- Only one
- Only two
- All Three
- None of the above

## Answers

1. a

### SARATHI App

- It aims to serve as a national tech solution to facilitate strategic interventions for the benefit of marginalized communities.
- It is an **initiative of Ministry of Rural Development** in partnership with the Nudge Institute.
- It will be immediately deployed in 6 states where special projects, funded by DAY-NRLM's Innovation, are underway for 24,000 of the most vulnerable households.
- The seamless integration of SARATHI into the LokOS system, reinforcing its potential as a transformative tool for rural development.
- LokOS is an operating system (OS) for SHGs and their federations. It's a comprehensive ERP solution for financially intermediating federations and cooperatives of SHGs



- LokOS is an all-in-one management information system. It acts as a single source of up-to-date and validated data for NRLM.
- The **SaaRthi app** is a mobile app launched by the Securities and Exchange Board of India (SEBI).
- It aims to create awareness among the investors about the basic concepts of Securities Market, KYC Process, trading and settlement, mutual funds, recent market developments, investor grievances redressal mechanism, etc.

2. a

### Maasir-i-Alamgiri

- Maasir-i-Alamgiri is an account of Emperor **Aurangzeb's** (1620-1707) reign.
- It was composed by **Saqi Mustaid Khan** at the behest of Inayatullah Khan Kashmiri, the emperor's last secretary after the death of the Aurangzeb.
- It is a **Persian-language chronicle**.
- The chronicle is abridged in comparison to Alamgirnamah.
- The printed Persian text was edited by Maulvi Agha Ahmad Ali and published by Bibliotheca Indica, Asiatic Society of Bengal.
- The chronicle was translated into English by Sir Jadunath Sarkar and published in 1947.
- **Muhammad Hashim**, better known by his title Khafi Khan, was an Indo-Persian historian of Mughal India.
- He was historian during the Shah Jahan' reign.

3. b

### Republic Day

- Republic Day marks the adoption of India's constitution and the country's transition to a republic.
- January 26 was chosen as the official enactment date as a nod to the Purna Swaraj (complete self-rule) declaration of independence by the Indian National Congress in 1930.
- The Purna Swaraj resolution or Declaration of the Independence of India was promulgated by the then Indian National Congress on 26 January 1930 to fight for Purna Swaraj, or complete self-rule independent of the British Empire.

- The flag of India was hoisted by Congress President Jawaharlal Nehru on December 31, 1929, on the banks of the Ravi River in Lahore, modern-day Pakistan.

4. d

### OTOF Gene

*6 children who were born deaf due to the mutation of the OTOF gene were given a revolutionary gene therapy treatment in the form of an injection in the ear.*

- The OTOF gene manufactures a protein that plays an important role in transmitting signals from the ear to the brain.
- The OTOF gene encodes the protein otoferlin, which is necessary for the hair cells in the inner ear to transmit information to the nerve that takes the signal to the brain.
- Otoferlin is a critical protein at the synapse of auditory sensory cells, the inner hair cells (IHCs).
- In the absence of otoferlin, signal transmission of IHCs fails.
- Gene therapies use a virus to insert the OTOF gene into the children's inner ear so that the hair cells there can sense sound and transmit it to the brain.
- OTOF mutations can cause both profound hearing loss and a type of hearing loss called auditory neuropathy.
- The OTOF gene mutation the children had is an attractive target for gene therapy because it is a relatively simple condition caused by a single mutation.
- It also involves no physical damage to the cochlear cells.

5. c

### Model Code of Conduct (MCC)

*The election commission recently responded to the law panel by stating that the Model Code of Conduct (MCC) is necessary and a not a disruption to the current ongoing policies and programmes.*

- The MCC is a code containing some general precepts for model behaviour during elections conducted by Election Commission (EC).
- It has 8 chapters, with one dedicated to what the party in power can and cannot do once elections are announced by the EC.
- The code's purpose, emphasising it **only prohibits new projects**, programmes,

financial grants or promises that could influence the electorate in favour of the ruling party.

- The MCC restrictions are solely applicable to states undergoing elections.
- It **forbids** use of official machinery and personnel for the political gains of the party in power.
- MCC evolved as part of the ECI's drive to ensure free and fair elections, and was the result of a **consensus among major political parties**.
- It has **no statutory backing**. Simply put, this means anybody breaching the MCC can't be proceeded against under any clause of the Code. Everything is voluntary.
- A version of the MCC was first introduced in the state assembly elections in Kerala in 1960.

### 29-01-2024

1) Rakthashali and Rajamudi, sometimes seen in the news is related to which of the following?

- Indigenous dog breeds
- Indigenous paddy varieties
- Indigenous cattle breeds
- Indigenous Languages

2) With reference to Jerezo, consider the following statements:

- It is a crater in the south pole of the Moon.
- Recently it have been confirmed that there is evidence of ancient lake sediments deposited by water in this site.

Which of the above statement(s) is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

3) Consider the following statements with respect to UF Water Purifier

- It utilizes a membrane-based technology called ultrafiltration to effectively cleanse water.

- The purifier can be used only in the industrial sector.
- It eliminates both the pollutants and minerals such as magnesium, calcium, and potassium in the impure water.

How many of the statements given above are correct?

- Only one
- Only two
- All Three
- None of the above

4) Consider the following statements with respect to Aurangzeb

- The Visvanatha Temple of Banaras was the only temple built during his reign.
- During his reign the ambassador by King James I, succeeded in securing permission to establish a British factory at Surat.
- He is contemporary to the Louis XIV of France.

How many of the statements given above are correct?

- Only one
- Only two
- All Three
- None of the above

5) The criteria to identify a planet includes:

- It must orbit a star.
- It must be big enough that gravity has forced it into a spherical shape.
- It must be big enough that its own gravity has cleared away any other objects of a similar size near its orbit.
- All the above.

### Answers

1. b

### Rakthashali and Rajamudi

- **Rakthashali** – Is a rare and precious variety of rice.

- It is a medicinal rice that is dark red in colour and medium in quality.
- It is a small and slender-grained rice that is unpolished and has full bran.
- Rakthashali is used in Ayurveda to treat imbalances in the body.
- **Rajamudi** - A rice variety cultivated in a small area around Hassan, Karnataka which is popular for its taste and perceived health benefits.
- It is a variety of red rice that was earlier grown exclusively for the Wadiyars or Maharajas of Mysore in Karnataka.

2. b

### Jerezo

- Jerezo is a crater on **Mars** that is about 45 kilometers in diameter.
- It is located in the Syrtis Major quadrangle and is thought to have once been filled with water.
- Recently [NASA's rover Perseverance](#) have confirmed that there is evidence of ancient lake sediments deposited by water in this site.
- Radar observations by the rover also reveal sedimentary-like features resembling river deltas on Earth.
- The portions of Jerezo were once covered in water and may have harboured microbial life.

3. a

### Ultrafiltration Water Purifier

- It utilizes a membrane-based technology called ultrafiltration to effectively cleanse water.
- This advanced technology is highly efficient in eliminating various impurities such as bacteria, viruses and suspended particles.
- Unlike ordinary filters, which cannot fully remove tiny impurities, ultrafiltration adds another layer to make sure a safe water supply.
- It eliminates pollutants while **allowing important minerals like magnesium, calcium, and potassium pass through.**

4. d

### Aurangzeb

- Aurangzeb, the last of the Great Mughals, started off his reign by imprisoning his old father.

- He was **no lover of art** like his grandfather Jahangir and architecture like his father Shah Jahan.
- He assumed the title Alamgir and **re-imposed the jizya tax** on Hindus.
- He tolerated no religion excepting Islam.
- **The Visvanatha Temple of Banaras was built during the reign of Akbar** by Raja Man Singh.
- During the **Jahangir** reign the ambassador by King James I, succeeded in securing permission to establish a British factory at Surat.
- **Shah Jahan was contemporary of Louis XIV of France.**

Important Officials in Mughal administration	Relevance
Wakil	Prime Minister
Wazir or diwan	in charge of the revenue and expenditure
Mir Bhakshi	in- charge of the army
Mir Saman	looked after the royal household
Qazi	Chief Judge
Sadr-us-Sudr	minister for enforcing Islamic law (Sharia)

5. d

### Criteria of a planet

*With the discovery of new and distant dwarf planets, there is a chance for 9th planet to be included in the solar system.*

- The Criteria of a planet were set by the International Astronomical Union.
- The criteria to identify a planet includes:
  1. It must orbit a star (in our Solar System this would be the Sun).
  2. It must be big enough that gravity has forced it into a spherical shape.
  3. It must be big enough that its own gravity has cleared away any other objects of a similar size near its orbit.
- The 3rd criterion was the reason for elimination of Pluto as a planet. It hasn't cleared its neighbouring region of other objects.
- A 'dwarf planet' is a celestial body that:

1. Is in orbit around the Sun.
  2. Has sufficient mass for its self-gravity to overcome rigid body forces so that it assumes a hydrostatic equilibrium (nearly round) shape.
  3. Has not cleared the neighbourhood around its orbit.
  4. Is not a satellite.
- All other objects, except satellites, orbiting the Sun shall be referred to collectively as Small Solar System Bodies.

d. None of the above

3) Consider the following statements with respect to All India Survey of Higher Education (AISHE) 2021–22

1. According to the survey, the number of women enrolled in higher educational institutes has steadily increased.
2. According to the survey, the Bachelor of Arts (BA) programme has the highest enrolment of total undergraduate enrolment across 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

4) With reference to Alpenglow phenomenon, which of the statement given below is true?

- a. It is a natural northern lights or southern lights in the Earth's sky that appears as curtains, rays, spirals, or flickers.
- b. It is the magnified shadow of an observer cast in mid-air upon any type of cloud opposite a strong light source.
- c. It is a reddish hue seen near mountain summits during sunrise or sunset.
- d. It is a measure of the Earth's surface's ability to reflect incoming solar energy.

5) Consider the following statements with respect to the Supreme Court of India

1. Harilal J. Kania is the first Chief Justice of India.
2. The original Constitution of 1950 envisaged a Supreme Court with a Chief Justice and 7 puisne Judges.
3. SuSwagatam is an initiative by the Supreme Court to facilitate the visitors to have a smooth and simple process of getting online ePass.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three

### 30-01-2024

1) Consider the following statements with respect to Maratha Military Landscapes of India

1. It was developed between 15th and 17th centuries.
2. Khanderi and Taragarh forts are part of this landscape.
3. Recently the Maratha Military landscapes was nominated in the UNESCO World Heritage List under the category of "nature".

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

2) Consider the following statements with respect to the Border Security Force (BSF) Act, 1968

1. Every member of the Force holds office during the pleasure of the President.
2. In 2021, the section 139 of the Act was amended to increase the jurisdiction of BSF to 50 km from the international border.
3. BSF is empowered to arrest, search and seize under Criminal Procedure Code, the Passports Act and the Passport (Entry into India) Act.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three

d. None of the above

## Answers

1. d

### Maratha Military Landscapes of India

- The Maratha Military Landscapes of India was developed between **17th and 19th centuries**, represent an extraordinary fortification and military system envisioned by the Maratha rulers.
- This extraordinary network of forts, varying in hierarchies, scales and typological features, is a result of integrating the landscape, terrain and physiographic characteristics distinctive to:
  - Sahyadri mountain ranges,
  - Konkan Coast,
  - Deccan Plateau and
  - Eastern Ghats in the Indian Peninsula.
- **Taragarh fort is located in Ajmer, Rajasthan.**
- There are more than 390 forts in Maharashtra out of which only 12 forts are selected under the Maratha Military Landscapes of India, of these 8 forts are protected by the Archaeological Survey of India.
- **Hill forts** - Salher fort, Shivneri fort, Lohgad, Raigad, Rajgad and Gingee.
- **Hill-forest fort** – Pratapgad.
- **Hill-plateau fort** – Panhala.
- **Coastal fort** – Vijaydurg.
- **Island forts** – Khanderi fort, Suvarnadurg and Sindhudurg.
- There are two categories of nomination in the UNESCO world heritage list that includes cultural and natural criteria.
- **Maratha Military landscapes is nominated in the category of cultural criteria.**

2. c

### Border Security Force (BSF) Act, 1968

- Border Security Force (BSF) is an armed force of the Union for ensuring the security of the borders of India.

- It is the First Line of Defence of Indian Territories.
- In 2021 the Union government amended the **Section 139 of the BSF Act, 1968** to increase the jurisdiction of the BSF from 15 kilometres up to 50 kilometres inside the international borders in the States of Punjab, West Bengal and Assam.
- The provision authorises the Centre to confer powers and duties on the BSF with respect to any Central Act including:
  1. Passport (Entry into India) Act, 1920 and Registration of Foreigners' Act, 1939,
  2. Central Excises and Salt Act, 1944,
  3. Foreigners Act, 1946 and Foreign Exchange Regulation Act, 1947,
  4. Customs Act, 1962 or Passports Act, 1967 and
  5. Any cognizable offence punishable under any other Central Act.
- Every member of the Force holds office during the pleasure of the President.

3. c

### All India Survey of Higher Education (AISHE) 2021-22

- All India Survey of Higher Education (AISHE) is conducted by the Ministry Of Education since 2010-11.
- The survey covers **all the Institutions in the country engaged in imparting of higher education.**
- **Women in higher education** – From 1.5 crore women enrolled in 2014-15, there has been a jump of 32% to 2.07 crores enrolled in 2021-22.
- **UG programmes enrolment** - The survey showed that the Bachelor of Arts (BA) programme has the highest enrolment, with 1.13 crore students (34.2%) of total undergraduate enrolment across India.
- Similarly, the social science stream has also the highest number of postgraduate students enrolled at 10.8 lakh.
- The graduation rate in arts and social sciences streams is higher than others.
- In the government sector, state public universities have the largest share of

enrolment, accounting for around 31% of the total enrolment for universities.

- Even though there are more private universities, students prefer government educational institutions.
- **Category distribution** – In 2021-22, around 35% of the students belong to Other Backward Classes (OBC), 13% are from Scheduled Caste (SC) community and 5.7% of the graduates are from Scheduled Tribe (ST) community.

4. c

### Alpenglow

*Alpenglow phenomenon was recently seen near the Hindu Kush mountain range.*

- Alpenglow is a reddish hue seen near mountain summits during sunrise or sunset.
- It refers to the **indirect sunlight reflected or diffracted** by the atmosphere before sunrise or after sunset, giving a horizontal reddish glow near the horizon opposite the Sun.
- It occurs when direct sunlight around sunrise or sunset is reflected off airborne precipitation, ice crystals or particulates in the lower atmosphere, as the sunlight has no direct path to reach a mountain.
- After sunset, if there are no mountains the aerosols in the eastern sky can be lit up by the remaining red light scattered above the edge of Earth's shadow.
- It produces a pinkish band on the opposite side of the Sun's direction, named the Belt of Venus.
- **Aurora** – It is a natural northern lights or southern lights in the Earth's sky that appears as curtains, rays, spirals or flickers.
- **Albedo Effect** – It is a measure of the Earth's surface's ability to reflect incoming solar energy.
- **Broken spectre** – It is the magnified shadow of an observer cast in mid-air upon any type of cloud opposite a strong light source.

5. c

### Supreme Court of India

- It is the apex judicial body of India.
- It was established under **Article 124** of the Constitution.
- It came into existence on 26 January 1950 with the coming into force of the Constitution.

- It initially functioned from the old Parliament House till it moved to the present building located on Tilak Marg, New Delhi in 1958.
- **Harilal J. Kania is the first Chief Justice of India.**
- It was established with a sense of idealism and to serve as a bulwark against injustice, tyranny and arbitrariness.
- **SuSwagatam** is an initiative by the Supreme Court to facilitate the visitors to have a smooth and simple process of getting online ePass.
- **Gender Sensitization and Internal Complaints Committee (GSICC)** – It addresses complaints of sexual harassment and sensitizes the public to gender issues.
- It also trains volunteers from NGOs to address issues and act as a bridge between the GSICC and victims.

### 31-01-2024

1) Bharat GPT, India's first indigenous GenAI (Large Language Model), is developed by which of the following?

- a. CoRover.ai
- b. Alphabet
- c. Microsoft
- d. Infosys

2) With reference to Bharat 5G Portal, consider the following statements

1. It aims to propel India's 5G capabilities, foster innovation, collaboration and knowledge-sharing within the telecom sector.
2. It is an integrated portal that acts as one-stop solution for start-ups, industry and academia in the fields of 5G, 6G and quantum.
3. Telecommunications Consultants India Limited (TCIL) is the implementing agency of the portal.

How many of the statements given above are **incorrect**?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

3) Consider the following statements with reference to the Snow Leopard Population Assessment in India (SPAI)

1. According to the assessment, Himachal Pradesh has the highest population of snow leopard in India.
2. Wildlife Institute of India (WII) is the National Coordinator for this exercise.
3. The snow leopard is classified as vulnerable by the International Union for the Conservation of Nature (IUCN).

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

4) Consider the following statements with respect to the District Agro-met Units (DAMUs)

1. They are the only units involved in rendering Agro-met advisory services at a district or block level.
2. They are established by India Meteorological Department (IMD) and Indian Institute of Agricultural Research (ICAR).
3. It is a part of Soil Health Card Scheme.

How many of the statements given above are correct?

- a. Only one
- b. Only two
- c. All Three
- d. None of the above

5) Consider the following statements with respect to Corruption Perceptions Index 2023

1. It is a global corruption ranking released by the Transparency International.
2. The report uses a scale of 0 to 100, where 0 is highly corrupt and 100 is very clean.
3. India's overall score remained relatively stable when compared to 2022.

How many of the statements given above are correct?

- a. Only one

b. Only two

c. All Three

d. None of the above

## Answers

1. a

### BharatGPT

- BharatGPT is a revolutionary **innovation by CoRover.ai**, the Conversational AI Platform.
- CoRover.ai, the world's first human-centric conversational AI platform being used by 130 crore users which has launched BharatGPT.
- It is the only Indian Indigenous Generative AI platform available across channels in 14+ Indian languages, in Video, Voice & Text.
- It integrates voice modality in more than 12 Indian languages and text modality in 22 languages in collaboration with the National Hub of Language Technology (NHLT).
- The NHLT is a key component of Digital India's efforts, tasked with executing the National Language Translation Mission (NLTM) under the ministry of electronics and information technology (MeitY).
- It also offers a sandbox environment for real-time API transactions.
- Besides, CoRover's platform, enriched with BharatGPT it offers a range of features such as:
  1. Payment gateway integration,
  2. Aadhar-based authentication for KYC and
  3. Various AI components like speech-to-text, text-to-speech and sentiment analysis.

2. d

### Bharat 5G Portal

- The Bharat 5G portal is an integrated portal is a comprehensive platform serving the interests of start-ups, industry and academia in quantum, 6G, IPR and 5G domains.
- It aims to propel India's 5G capabilities, foster innovation, collaboration, and knowledge-sharing within the telecom sector.
- The Portal acts as a one-stop solution for all quantum, IPR, PoCs/Pilot, 5G and 6G-related

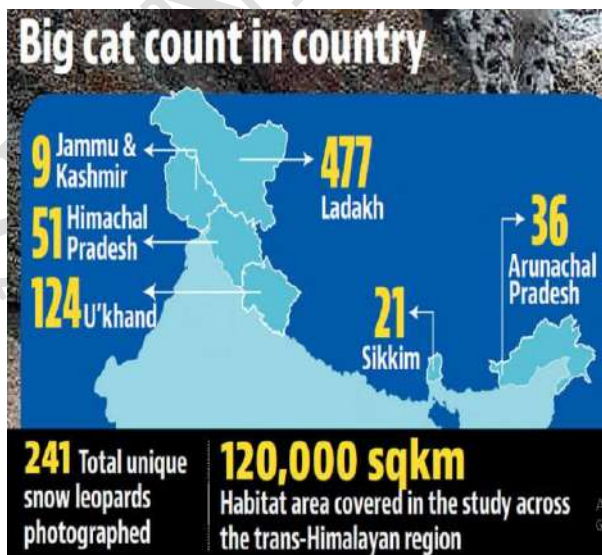
works, capturing academic R&D developments, industry standards, OEMs, start-ups/MSMEs and subject matter experts.

- Telecommunications Consultants India Limited (TCIL) is the implementing agency of the portal.

3. b

### Snow Leopard Population Assessment in India (SPAI)

- The Snow [Leopard](#) Population Assessment in India (SPAI) Program is an **initiative of the Dehradun-based Wildlife Institute of India (WII)**.
- It has used software and statistical methods to estimate the number of individual cats that are present but not caught on camera and combined them with those caught on camera.
- The Assessment was conducted for the years (2019-2023) and involves the **World-Wide Fund for Nature-India** and the **Nature Conservation Foundation**, Mysuru, along with the WII.
- **Key findings** – The highest number of snow leopards are in **Ladakh** (477).
- It is followed by Uttarakhand (124) and Himachal Pradesh (51).
- Sikkim and Jammu and Kashmir recorded 21 and 9 individuals respectively.
- **There are 718 snow leopards in India and only 1/3rd of their habitat is under legal protection.**
- *Dehradun-based Wildlife Institute of India is an autonomous body of the Union Environment Ministry.*



4. b

### District Agro-met Units (DAMUs)

- District Agromet Units (DAMUs) are units established at Krishi Vigyan Kendras (KVKs) to provide block level Agro-Met (agrometeorological) Advisory Services (AAS) for farmers.
- *They are the only units involved in rendering Agro-met (agrometeorological) advisory services at a district or block level.*
- They are established by:
  1. India Meteorological Department (IMD) under the Union Ministry of Earth Sciences (MoES)
  2. Indian Institute of Agricultural Research (ICAR) under the agriculture ministry.
- DAMUs were set up in 2018-19 in the premises of Krishi Vigyan Kendras (KVK) of ICAR and state agriculture universities, **under the Gramin Krishi Mausam Seva (GKMS) scheme.**
- They have played an important role in providing value added weather forecast data for the next five days with crop specific weather advisory messages.
- **The funding agency is Ministry of Earth Sciences (MoES) or India Meteorological Department (IMD).**
- Till date, 199 District Agro-met Units (DAMUs) have been established at KVKs across the country under ICAR network.
- **Agro-met Field Units (AMFU)** - AMFUs also issue similar advisories similar to DAMUs, but the shortcoming is that these have less capacity, when compared to DAMUs.
- One AMFU covers 4 to 5 districts on average and will not be able to provide block level information.

5. c

### Corruption Perceptions Index 2023

- The Corruption Perceptions Index (CPI) is the most widely used global corruption ranking in the world.
- Each country's score is a combination of at least 3 data sources drawn from 13 different corruption surveys and assessments.



- These data sources are collected by a variety of reputable institutions, including the World Bank and the World Economic Forum.
- A country's score is the perceived level of public sector corruption on a scale of 0-100, where 0 means highly corrupt and 100 means very clean.
- A country's rank is its position relative to the other countries in the index. Ranks can change merely if the number of countries included in the index changes.
- **India scored 39 and ranked 93**, with minimal change from 2022.
- The score of India in the Corruption Perceptions Index 2022 was 40.
- **India shares its ranking with Maldives.**
- Countries with continued high scores, such as New Zealand (3) and Singapore (5), maintain their positions at the top of the index globally.
- Most transparent such as Denmark (90), Finland (87), New Zealand (85) lead the index.

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