

## January MCQ Compilation

1. Which of the following languages are not considered for the Sahitya Akademi awards

- A:) English
- B:) Malayalam
- C:) Bodo
- D:) None of the above

**Answer: D**

**Explanation**

[About the awards](#)

- The Sahitya Akademi award is considered as the Government of India's second-highest literary honour, following the Jnanpith prize. The **Akademi** is **under the central government's Ministry of Culture**, but works as an autonomous institution.
- Every year since **its inception in 1954 (and first awarded in 1955)**, the Sahitya Akademi Award **prizes** to the most **outstanding books of literary merit** published in any of the **major Indian languages recognised by the Akademi**.
- Akademi bestows **24 prizes on literary works in the languages it has recognised**, as well as an equal number of honours for literary translations from and into Indian languages.
- **In addition to the 22 languages listed in the Indian Constitution**, the Sahitya Akademi has **designated English and Rajasthani** as the languages chosen.
- The **most recent additions** were **Bodo and Santhali in 2005**.
- **Awards in English** began in 1960 — the **first recipient** was **R K Narayan** for his novel The Guide.

[Conditions of bestowing the award](#)

- The author **must be of Indian origin**.
- The book/work must be an excellent contribution to the language and literature
- When two or more works have similar worth, specific factors such as overall literary contribution and author status must be considered before awarding a prize.

## 2. The SMILE scheme is related to

- A:) Reducing Under-5 mortality rate in India
- B:) Rehabilitation of persons engaged in begging and supporting transgender persons
- C:) Improving the tourism potential in India
- D:) Improving the health of elderly in India

**Answer: B**

### Explanation

- The Union Social Justice and Empowerment Ministry is set to launch a scheme for rehabilitation of persons engaged in begging and for providing support to transgender persons.
- The Ministry said it had formulated an umbrella scheme, SMILE (Support for Marginalised Individuals for Livelihood and Enterprise), that included two sub-schemes for the welfare of transgender persons and persons engaged in begging.
- The scheme will cover rehabilitation, provision of medical facilities, counselling, education, skill development and economic linkages.
- As a part of the national anti-drug campaign, the Nasha Mukta Bharat Abhiyan that was launched in 2020, the Ministry said it had planned to declare 100 districts as “drug sensitised districts” soon.

<https://www.thehindu.com/news/national/afspa-extended-in-nagaland-for-6-more-months/article38068888.ece>

## 3. Consider the following statements about Jal Jeevan Mission

- 1) The scheme is being implemented by the Ministry of Jal Shakti.
- 2) To create a sense of “Jan Andolan” is one of the intentions of the scheme

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: C**

### Explanation

### What's in the news?

- **Statement 1 and statement 2 is correct.**
- Launched in 2019, the chief objective of the Mission is to provide **Functional Household Tap Connection (FHTC) to every rural household by 2024** and thereby ensuring potable water supply in adequate quantity i.e. **@ 55 lpcd** (Litres per capita per day) of prescribed quality on a long-term and regular basis.
- This Mission is under the **Department of Drinking Water and Sanitation, Ministry of Jal Shakti.**
- **Hence statement 1 is correct**
- It focuses on **integrated demand and supply-side management** of water at the local level.
- The programme also implements **source sustainability measures** as mandatory elements, such as recharge and reuse through greywater management, water conservation and rainwater harvesting.
- The Jal Jeevan Mission is based on a **community approach** to water and will include **extensive Information, Education and Communication (IEC)** as a key component of the mission.
- JJM looks to create a **Jan Andolan** (People's Movement) for water, thereby making it everyone's priority.
- **Hence statement 2 is correct**
- The fund sharing pattern is 90:10 for Himalayan and North-Eastern States; 50:50 for other States and 100% for UTs.

### Why in News?

- 315 water supply schemes of Rs. 9,544 Crore has been approved under Jal Jeevan Mission for Jharkhand. These schemes will provide tap water supply to about 8 lakh rural households in 4,424 villages of the State.

### Related Information

#### Jal Jeevan Mission (Urban)

- In the latest budget, the Government has announced that Jal Jeevan Mission (Urban) will be launched to provide **universal coverage of water supply to all households** through **functional taps in all 4,378 statutory towns** in accordance with **SDG Goal-6** ("clean water and sanitation for all").

## Key Highlights

- The project will focus on **rejuvenation of water bodies** to augment sustainable fresh water supply and creating **green spaces and sponge cities** to reduce floods and **enhance amenity value** through an Urban Aquifer Management plan.
- JJM(U) will promote **circular economy of water** through development of a city water balance plan for each city focusing on recycle/reuse of treated sewage, rejuvenation of water bodies and water conservation. **20% of water demand** to be met by reused water with development of institutional mechanisms.
- **Information, Education and Communication (IEC) campaign** is proposed to spread awareness among masses about conservation of water.
- In order to promote **Public private partnership**, it has been mandated for cities having million plus population to take up PPP projects worth minimum of 10 percent of their total project fund allocation.
- Funding Pattern :
  - For Union Territories, there will be 100% central funding.
  - For North Eastern and Hill States, central funding for projects will be 90%.
  - Central funding will be 50% for cities with less than 1 lakh population, one third for cities with 1 lakh to 10 lakh population and 25% for cities with million plus population.
- Mission will be monitored through a **technology-based platform** on which beneficiary response will be monitored along with progress and output-outcome.

<https://pib.gov.in/PressReleasePage.aspx?PRID=1786548>

### 4. The term Log4j which was recently seen in news, is related to

- A:) New rocket technology developed by the NASA
- B:) A technology to capture atmospheric carbon dioxide
- C:) New Artificial Intelligence Bot
- D:) Cyber security issue

**Answer: D**

**Explanation:**

- A **new vulnerability named Log4Shell** is being touted as **one of the worst cybersecurity flaws** to have been discovered. The vulnerability is **based on an open-source logging library** used in most applications by enterprises and even government agencies.
- The term **open source refers** to something **people can modify and share** because its **design is publicly accessible**.

#### About Log4j

- **Log4j is an important Java-logging framework** that is **open-source software** maintained by a group of volunteer programmers .
- The Log4j library is **incorporated in every Java-based online service** or application and is used by a variety of businesses to provide application logging. Java is one of the world's most popular programming languages.

#### The issue

- The vulnerability **grants hackers access to an application**, and could potentially let them **run malicious software** on a device or servers.
- The **vulnerability** is dubbed **Log4Shell** and is **officially CVE-2021-44228** (CVE number is the unique number given to each vulnerability discovered across the world).
- The problem **impacts** Log4j 2 versions which is a very **common logging library used by applications** across the world. **Logging lets developers see all the activity of an application**. Tech companies such as Apple, Microsoft, Google all rely on this open-source library.
- The vulnerability is serious because exploiting it could allow hackers to control java-based web servers and launch what are called '**remote code execution**' (**RCE**) **attacks**. In simple words, the vulnerability could allow a hacker to take control of a system.
- The **process of storing application events is known as application logging**. It differs from conventional event logs in IT systems in that the information gathered by an application event log is mandated by the programme itself, rather than the operating system. They **aid in providing visibility** into how our apps perform on each of the infrastructure components. **Out of memory exceptions** and **hard drive errors** are examples of log data.

#### Why the worry

- Security experts have **rated Log4Shell a severity rating of 10**, the **maximum** degree conceivable.

- The flaw might allow a **hacker to gain control of a system**.
- A simple log entry might wind up being a **malware installation** event as a single line of code may be used to exploit the vulnerability, allowing attackers to **execute remote instructions on a victim's PC**.
- Attackers can use it to take control of any Java-based web server and launch **Remote Code Execution (RCE) attacks**. In an RCE attack, the attackers get complete control of the targeted system and may execute any function they choose.

#### The extent of impact

- In India, approximately 41% of business networks in India have previously been subjected to an attempted attack.
- Because they deploy Java-based apps, Indian enterprises are not more vulnerable than their Western counterparts. Because of their inadequate security posture, Indian enterprises are at great danger, particularly smaller companies that may lack the know-how or resources to detect and resolve the issue fast.

#### What is a zero-day vulnerability and is log4j one of this kind?

- A **0day (or zero-day vulnerability)** refers to a **security flaw** which has **not been publicly disclosed** and for **which a software patch or remediation technique is not available**.
- Considering that attempts at **exploiting Log4Shell were observed** at least a **week prior to it being publicly disclosed**, it could be said that **it was a 0day vulnerability**.

<https://indianexpress.com/article/explained/log4j-vulnerability-cybersecurity-7671367/>

<https://www.livemint.com/technology/tech-news/log4j-vulnerability-puts-41-of-indian-corporates-at-risk-of-hacks-11639503090170.html>

<https://logging.apache.org/log4j/log4j-2.12.1/manual/index.html>

<https://www.thehindu.com/sci-tech/technology/internet/the-log4j-vulnerability/article38053462.ece>

**5. With reference to “e-Sanjeevani”, consider the following statements.**

1. It can be called as an example of e-governance
2. It consists a framework for Doctor to Patient consultation only

**Which of the statements given above is/are correct?**

- A:) 1 only  
B:) 2 only  
C:) Both 1 and 2  
D:) Neither 1 nor 2

**Answer: A**

**Explanation:**

**Statement 1 is correct and statement 2 is incorrect**

**About 'eSanjeevani'**

- Launched in 2009 by the **Ministry of Health & Family Welfare** 'eSanjeevani' is a **web-based comprehensive telemedicine solution**. It aims to provide healthcare services to patients in their homes.
- **Hence, Statement 1 is correct**
- Besides enhancing the quality of medical services, addressing issues about uneven distribution and shortage of infrastructural as well as human resources, eSanjeevani also aims to make healthcare services equitable by **bridging the digital divide** that exists between the urban vs. rural, rich vs. poor etc.
- eSanjeevani can also be used to provide **medical education** to interns, people across Various Common Service Centers (CSCs), etc.
- The portal was designed & developed by the **Centre for Development of Advanced Computing (C-DAC)**, a premier R&D organization of the Ministry of Electronics and Information Technology (MeitY).

**Services provided**

- eSanjeevani platform has enabled two types of telemedicine services viz.
  - Doctor-to-Doctor (eSanjeevani) and
  - Patient-to-Doctor (eSanjeevani OPD) Tele-consultations.

- **Statement 2 is incorrect**

**eSanjeevani**

- It is being implemented under the **Ayushman Bharat Health and Wellness Centre (AB-HWC)**. It aims to implement Doctor-to-Doctor teleconsultation in all the 1.5 lakh Health and Wellness Centres in conjunction with identified Medical College hospitals in a 'Hub and Spoke' model.
- States have identified and set up dedicated 'Hubs' in Medical Colleges and District hospitals to provide teleconsultation services to 'Spokes', i.e SHCs, PHCs and HWCs.

### **eSanjeevani OPD**

- Owing to the ongoing COVID-19 pandemic, the Health Ministry launched the second teleconsultation service enabling patient-to-doctor telemedicine through 'eSanjeevaniOPD'.
- This service is available as an Android mobile application as well. This has made it convenient for the people to avail of the health services without having to travel.
- This e-health service is offered free of cost and has proved a boon in containing the spread of COVID while simultaneously enabling provisions for non-COVID essential healthcare.

### **Why in News?**

- The Ministry of Health & Family Welfare has conducted review of the eSanjeevani initiative.  
<https://pib.gov.in/PressReleasePage.aspx?PRID=1786590>

## **6. Consider the following statements about Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)**

- 1) The vision of the scheme is to ensure access to some means of protective irrigation to selected agricultural farms in the country.
- 2) Enhancing the adoption of precision-irrigation and other water saving technologies is one of its components.

### **Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: B**

**Explanation**

- The vision of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) is to ensure **access to some means of protective irrigation to all agricultural farms** in the country, to produce 'per drop more crop', thus bringing much desired rural prosperity.
- Launched in 2015 by the **Ministry of Agriculture & Farmers Welfare**, PMKSY has **been conceived amalgamating ongoing schemes** viz. Accelerated Irrigation Benefit Programme (AIBP), Integrated Watershed Management Programme (IWMP) and the On Farm Water Management (OFWM).

#### **Broad objectives of PMKSY**

- Achieve **convergence of investments in irrigation** at the field level (preparation of district level and, if required, sub district level water use plans).
- **Enhance the physical access of water** on the farm and expand cultivable area under assured irrigation (Har Khet ko pani),
- Integration of water source, distribution and its efficient use, to make best use of water through appropriate technologies and practices.
- **Improve on-farm water use efficiency** to reduce wastage and increase availability both in duration and extent.
- Enhance the adoption of **precision-irrigation and other water saving technologies (More crop per drop)**.
- Enhance recharge of aquifers and introduce sustainable water conservation practices.

#### **Four components of PMKSY:**

- **Accelerated Irrigation Benefits Programme (AIBP)**,
  - To focus on faster completion of ongoing Major and Medium Irrigation including National Projects.
- **Har Khet Ko Pani ('all fields will get water')**,
  - Activities including Creation of new water sources through Minor Irrigation and Creation and rejuvenation of traditional water storage systems like Jal Mandir (Gujarat); Khatri, Kuhl (H.P.); Zabo (Nagaland); Eri, Ooranis (T.N.); Dongs (Assam); Katas, Bandhas (Odisha and M.P.) etc. at feasible locations.
- **Per Drop More Crop**
  - Promoting efficient water conveyance and precision water application devices like drips, sprinklers, pivots, rain-guns in the farm.

- **Watershed Development**

- Effective rainfall management like field bunding, contour bunding/trenching, staggered trenching, land levelling, mulching etc. and Creating Water harvesting structures such as check dams, nala bund, farm ponds, tanks etc.

**Implementation**

- PMKSY adopts a '**decentralized State level planning and projectized execution**' structure that allows States to draw up their own irrigation development plans based on **District Irrigation Plan (DIP)** and **State Irrigation Plan (SIP)**.
- PMKSY acts as a convergence platform for all water sector activities including drinking water & sanitation, MGNREGA, application of science & technology etc. through comprehensive plans.

**Why in News?**

- The Ministry of Jal Shakti has said that more than 22 thousand 500 irrigation wells have been constructed under Pradhan Mantri Krishi Sinchayi Yojana.
- As of November 2021, nearly 36 thousand small and marginal farmers have been benefited under the scheme.

**7. Consider the following statements about National Mission for Clean Ganga (NMCG)**

- 1) It is registered as a society under the Societies Registration Act 1860.
- 2) It acted as the implementation arm of National Ganga River Basin Authority (NGRBA) which was constituted under the provisions of the Environment (Protection) Act (EPA),1986.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: C**

**Explanation**

### About NMCG

- National Mission for Clean Ganga (NMCG) is registered as a society under the Societies Registration Act 1860.
- It acted as the **implementation arm of National Ganga River Basin Authority (NGRBA)** which was constituted under the provisions of the Environment (Protection) Act (EPA), 1986.
- NGRBA has since been dissolved with effect from the 7th October 2016, consequent to constitution of **National Council for Rejuvenation, Protection and Management of River Ganga** (referred as **National Ganga Council**).

### Why in News?

- G Asok Kumar, Additional Secretary, Ministry of Jal Shakti took over as the new Director General for the National Mission for Clean Ganga, Ministry of Jal Shakti.

### 8. 'NEAT 3.0' recently seen in the news is related to which of the following?

- A:) Improving Quality of School Education through Integrated Teacher Training
- B:) Pension scheme for unorganized workers
- C:) Network to nurture women entrepreneurship
- D:) Platform to provide the best-developed ed-tech solutions and courses to students of the country.

**Answer: D**

### Explanation

- The Ministry of Education launched NEAT 3.0, a **single platform to provide the best-developed ed-tech solutions and courses** to students of the country.
- NEAT will be a game-changer in **bridging the digital divide**, especially among the economically disadvantaged students and also in fulfilling the knowledge-based requirement of India and the world.
- 58 global and Indian start-up ed-tech companies are onboard NEAT and are offering 100 courses and e-resources for bettering learning outcomes, developing employable skills and overcoming learning loss.

### 9. Consider the following statements about Draft National Air Sports Policy

- 1) It covers most of the air sports except skydiving.
- 2) The vision is to make India one of the top air sports nations by 2030.
- 3) An Air Sports Federation of India (ASFI) will be established as the apex governing body.

**Which of the statements given above is/are correct?**

- A:) 1 and 2 only  
B:) 2 and 3 only  
C:) 1 and 3 only  
D:) 1,2 and 3

**Answer: B**

**Explanation**

**What's in the news?**

- The Ministry of Civil Aviation has released the draft National Air Sports Policy (NASP) for public feedback.

**Significance**

- India has the potential to be among the leading nations in the world of air sports. It has a large geographical expanse, diverse topography and fair weather conditions. It has a large population, especially the youth. It has a growing culture for adventure sports and aviation.
- Other than the direct revenue from air sports activities, the multiplier benefits in terms of growth of travel, tourism, infrastructure and local employment, especially in hilly areas of the country, are several times greater. Creation of air sports hubs across the country will also bring in air sports professionals and tourists from across the world.

**Key features of the Draft National Air Sports Policy:**

- NASP 2022 covers sports like aerobatics, aeromodelling, amateur-built and experimental aircraft, ballooning, drones, gliding, hang gliding and paragliding; microlighting and paramotoring; skydiving and vintage aircraft.
- The vision is to **make India one of the top air sports nations by 2030**. The mission is to provide a safe, affordable, accessible, enjoyable and sustainable air sports ecosystem in India.
- NASP 2022 seeks to leverage India's huge potential for air sports given its large geographical expanse, diverse topography and fair weather conditions.

- An **Air Sports Federation of India (ASFI)** will be established as the apex governing body. Associations for each air sport will handle day to day activities e.g. Paragliding Association of India or Skydiving Association of India etc.
- The air sports associations shall be accountable to ASFI with respect to the regulatory oversight and for providing safe, affordable, accessible, enjoyable and sustainable conduct of their respective air sport.
- Domestic design, development and manufacturing of air sports equipment will be promoted in line with the Atmanirbhar Bharat Abhiyan.

**10. Which of the following is referred to as ‘twin deficits’?**

- A:) Capital account deficit and current account deficit
- B:) Current account deficit and fiscal deficit
- C:) Fiscal deficit and primary deficit
- D:) Capital account deficit and budget deficit

**Answer: B**

**Explanation**

- **Current Account Deficit** and **Fiscal Deficit** are together known as **twin deficits**. Indian economy is one of the few economies in the world to have both fiscal and current account deficits. Hence it is also termed as a twin deficit economy.

**Fiscal Deficit**

- Fiscal Deficit is a term used to refer to the **difference between the government’s total revenue and total expenditure** in a financial year. Since the government borrows from the market to bridge this gap, this also indicates the **total borrowings needed by the government** in a particular year.
- While a nominal fiscal deficit is considered normal for a developing economy, it becomes a worry when it shoots up beyond a threshold, which depends on different interpretations.
- One of the major problems with fiscal deficit is that the **larger it is, the larger the market borrowing the government of the day resorts to**, thereby **crowding out private investment**.
- The government has to borrow to meet its excessive expenditure leading to the government **absorbing a higher portion of domestic savings** and higher interest rates. This in turn

leads to crowding out of private sector investment in the economy. Higher interest rates, in turn lowers the private sector investment and consumption levels.

### **Current Account Deficit**

- Current account deficit is simply the **difference between the value of the goods and services that a country imports and the value of the products it exports.**
- It encompasses the trade deficit plus capital like net income and transfer payments. In other words, it can be measured with the **difference between foreign exchange inflows and outflows.** An economy manages its current account deficit by **foreign savings/foreign capital inflows.**

### **11. Which of the following pairs is/are correctly matched?**

- 1) Shukrayaan- mission to investigate Venus's surface processes
- 2) DISHA- satellite system that investigate the earth's aeronomy
- 3) TRISHNA- satellite system to monitor the water cycle and map the surface temperature of land.

**Select the correct answer using the codes given below**

- A:) 1 only
- B:) 2 only
- C:) 1 and 3 only
- D:) 1,2 and 3

**Answer: D**

### **Explanation**

- The Indian Space Research Organization (ISRO) has planned the '**Shukrayaan' Venus orbiter mission.** It is a mission to **investigate Venus's surface processes and shallow subsurface stratigraphy,** as well as the **interaction of solar wind with the Venusian ionosphere and the structure, composition, and dynamics of the atmosphere.**
- **DISHA** is a **satellite system** that will **investigate the earth's aeronomy,** which is the **earth's uppermost layer of atmosphere.**
- **ISRO** and the **French space agency CNES** have **collaborated** on the development of advanced satellites such as **TRISHNA** to **monitor the water cycle( to assist in determining the best methods to use it) and map the surface temperature of land.**

## 12. Consider the following statements about Surrogacy (Regulation) Act, 2021

- 1) The Act prohibits both commercial surrogacy and altruistic surrogacy.
- 2) According to the Act, a child born out of a surrogacy procedure will be deemed to be the biological child of the intending couple.

Which of the statements given above is/are correct?

- A:) 1 only  
B:) 2 only  
C:) Both 1 and 2  
D:) Neither 1 nor 2

**Answer: B**

### Explanation

- The Surrogacy (Regulation) Act, 2021 was recently passed by the Parliament.
- The Act defines surrogacy as a practice where a woman gives birth to a child for an intending couple with the intention to hand over the child after the birth to the intending couple.

### Highlights of the Act

#### Regulation of surrogacy

- The Act **prohibits commercial surrogacy, but allows altruistic surrogacy**. Altruistic surrogacy involves **no monetary compensation** to the surrogate mother other than the medical expenses and insurance coverage during the pregnancy.
- Commercial surrogacy includes surrogacy or its related procedures undertaken for a monetary benefit or reward (in cash or kind) exceeding the basic medical expenses and insurance coverage.

#### Purposes for which surrogacy is permitted

- Surrogacy is permitted when it is: (i) for intending couples who suffer from proven infertility; (ii) altruistic; (iii) not for commercial purposes; (iv) not for producing children for sale, prostitution or other forms of exploitation; and (v) for any condition or disease specified through regulations.

#### Eligibility criteria for intending couple

- The intending couple should have a '**certificate of essentiality**' and a '**certificate of eligibility**' issued by the appropriate authority.
- A certificate of essentiality will be issued upon fulfilment of the following conditions: (i) a certificate of proven infertility of one or both members of the intending couple from a District Medical Board; (ii) an order of parentage and custody of the surrogate child passed by a Magistrate's court; and (iii) insurance coverage for a period of 16 months covering postpartum delivery complications for the surrogate.
- The certificate of eligibility to the intending couple is issued upon fulfilment of the following conditions: (i) the couple being **Indian citizens and married for at least five years**; (ii) **between 23 to 50 years old (wife) and 26 to 55 years old (husband)**; (iii) they **do not have any surviving child** (biological, adopted or surrogate); this would not include a child who is mentally or physically challenged or suffers from life threatening disorder or fatal illness; and (iv) other conditions that may be specified by regulations.

#### **Eligibility criteria for surrogate mother**

- To obtain a **certificate of eligibility** from the appropriate authority, the surrogate mother has to be: (i) a **close relative** of the intending couple; (ii) a **married woman** having a child of her own; (iii) **25 to 35 years old**; (iv) a **surrogate only once** in her lifetime; and (v) possess a **certificate of medical and psychological fitness** for surrogacy. Further, the surrogate mother cannot provide her own gametes for surrogacy.

#### **National and State Surrogacy Boards**

- The central and the state governments shall constitute the **National Surrogacy Board (NSB) and the State Surrogacy Boards (SSB)**, respectively.
- Functions of the NSB include, (i) advising the central government on policy matters relating to surrogacy; (ii) laying down the code of conduct of surrogacy clinics; and (iii) supervising the functioning of SSBs.

#### **Parentage and abortion of surrogate child**

- A child born out of a surrogacy procedure will be **deemed to be the biological child of the intending couple**. An abortion of the surrogate child requires the **written consent** of the surrogate mother and the authorisation of the appropriate authority. This authorisation must be compliant with the **Medical Termination of Pregnancy Act, 1971**.

- Further, the surrogate mother will have an option to withdraw from surrogacy before the embryo is implanted in her womb.

### **Offences and penalties**

- The offences under the Act include: (i) undertaking or advertising commercial surrogacy; (ii) exploiting the surrogate mother; (iii) abandoning, exploiting or disowning a surrogate child; and (iv) selling or importing human embryo or gametes for surrogacy.
- The penalty for such offences is imprisonment up to 10 years and a fine up to 10 lakh rupees.

### **Why in News?**

- President Ram Nath Kovind has given his assent to the Surrogacy (Regulation) Act, 2021.

### **13. Consider the following statements about Assisted Reproductive Technology (Regulation) Bill, 2020**

- 1) The Bill provides that every ART clinic and bank must be registered under the National Registry of Banks and Clinics of India.
- 2) ART procedures can only be carried out with the written informed consent of both the party seeking ART services as well as the donor.

### **Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: C**

### **Explanation**

#### **What's in the news?**

- The Parliament has passed the Assisted Reproductive Technology (Regulation) Bill, 2020. The Bill seeks to provide for the regulation of Assisted Reproductive Technology services in the country.

### **Highlights of the Bill**

#### **Assisted Reproductive Technology (ART)**

- The Bill defines ART to include all techniques that seek to obtain a pregnancy by handling the sperm or the oocyte (immature egg cell) outside the human body and transferring the gamete or the embryo into the reproductive system of a woman.
- Examples of ART services include **gamete (sperm or oocyte) donation, in-vitro-fertilisation** (fertilising an egg in the lab), and **gestational surrogacy** (the child is not biologically related to surrogate mother).
- ART services will be provided through: (i) **ART clinics**, which offer ART related treatments and procedures, and (ii) **ART banks**, which store and supply gametes.

#### **Regulation of ART clinics and banks**

- The Bill provides that **every ART clinic and bank must be registered under the National Registry of Banks and Clinics of India**. The National Registry will be established under the Bill and will act as a central database with details of all ART clinics and banks in the country.
- Clinics and banks will be registered only if they **adhere to certain standards** (specialised manpower, physical infrastructure, and diagnostic facilities).
- The registration will be **valid for five years and can be renewed for a further five years**.
- Registration may be cancelled or suspended if the entity contravenes the provisions of the Bill.

#### **Conditions for gamete donation and supply**

- Screening of gamete donors, collection and storage of semen, and provision of oocyte donor **can only be done by a registered ART bank**. A bank can obtain **semen from males between 21 and 55 years of age**, and **oocytes from females between 23 and 35 years of age**.
- An oocyte donor should be an **ever-married woman having at least one alive child of her own (minimum three years of age)**. The woman can donate oocyte **only once in her life** and **not more than seven oocytes can be retrieved from her**. A bank cannot supply gamete of a single donor to more than one commissioning couple (couple seeking services).

#### **Conditions for offering ART services**

- ART procedures can only be carried out with the **written informed consent** of both the party seeking ART services as well as the donor. The party seeking ART services will be required to provide **insurance coverage** in the favour of the oocyte donor (for any loss, damage, or death of the donor).

- A clinic is **prohibited from offering to provide a child of pre-determined sex**. The Bill also **requires checking for genetic diseases** before the embryo implantation.

#### **Rights of a child born through ART**

- A child born through ART will be **deemed to be a biological child of the commissioning couple** and will be entitled to the rights and privileges available to a natural child of the commissioning couple. A donor **will not have any parental rights over the child**.

#### **National and State Boards**

- The Bill provides that the **National and State Boards for Surrogacy** constituted under the Surrogacy (Regulation) Bill, 2019 will act as the National and State Board respectively for the regulation of ART services.
- Key powers and functions of the National Board include: (i) advising the central government on ART related policy matters, (ii) reviewing and monitoring the implementation of the Bill, (iii) formulating code of conduct and standards for ART clinics and banks, and (iv) overseeing various bodies to be constituted under the Bill.
- The State Boards will coordinate enforcement of the policies and guidelines for ART as per the recommendations, policies, and regulations of the National Board.

#### **Offences and penalties**

- Offences under the Bill include: (i) abandoning, or exploiting children born through ART, (ii) selling, purchasing, trading, or importing human embryos or gametes, (iii) using intermediates to obtain donors, (iv) exploiting commissioning couple, woman, or the gamete donor in any form, and (v) transferring the human embryo into a male or an animal.
- These offences will be punishable with a fine between five and ten lakh rupees for the first contravention.
- Any clinic or bank advertising or offering sex-selective ART will be punishable with imprisonment between five and ten years, or fine between Rs 10 lakh and Rs 25 lakh, or both. No court will take cognisance of offences under the Bill, except on a complaint made by the National or State Board or any officer authorised by the Boards.

**14. Consider the following pairs:**

| Economic Integration | Meaning  |
|----------------------|--|
| 1. Free Trade Area   | Common external tariffs                        |
| 2. Common Market     | Factors of production are mobile among members |
| 3. Economic Union    | Integration of monetary and fiscal policies    |

**Which of the pairs given above is/are correctly matched?**

- A:) 1 only
- B:) 2 and 3 only
- C:) 1 and 3 only
- D:) 1, 2 and 3 only

**Answer: B**

**Explanation:**

- Economic integration takes the form of the Preferential Trade Area, Free Trade Area, Customs Union, Common Market and Economic Union.
- A **preferential trade area (PTA)** is a trading bloc that gives preferential access to certain products from the participating countries. This is done by reducing tariffs but not by abolishing them completely. A PTA can be established through a trade pact. It is the first stage of economic integration.
- A **free trade area** is the region encompassing a trade bloc whose member countries have signed a free-trade agreement (FTA). Such agreements involve cooperation between at least two countries to reduce/abolish trade barriers. e.g. SAFTA.
- A **customs union** is defined as a type of trade block which is composed of a free trade area with no tariffs among members and (zero tariffs among members) with a **common external tariff**. e.g. BENELUX (Belgium, Netherlands and Luxembourg).
- A **common market** has the same features as a customs union, but, in addition, factors of production (labour, capital and technology) are mobile among members. Restrictions on immigration and cross-border investment are abolished. e.g. European Common Market (ECM).

An **economic union** is the last step in an economic integration process. In addition to free movement of goods, services and production factors, it also requires integration of economic

policies, both monetary and fiscal. Under an economic union members harmonized monetary policies, taxation and government spending. (e.g. European Economic Union)

**15. Which of the following countries does not share its border with Jordan?**

- A:) Syria
- B:) Saudi Arabia
- C:) Iraq
- D:) Turkey

**Answer: D**

**Explanation**



- Jordan is part of Western Asia. It is located on the East Bank of the Jordan River.

- With **Syria** in the north and **Saudi Arabia** to the south, Jordan shares borders with three other countries, along with the Dead Sea in the west and the Red Sea along its northwestern border. The three countries that encompass Jordan are **Israel, Iraq, and Palestine**.

**16. Consider the following statements about National Tiger Conservation**

**Authority (NTCA)**

- 1) NTCA is a statutory body under the Ministry of Environment, Forest and Climate Change.
- 2) It performs functions as provided in the Environment Protection Act, 1986.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: A**

**Explanation**

- NTCA is a **statutory body** under the **Ministry of Environment, Forest and Climate Change**.
- It performs functions as provided in the **Wildlife (Protection) Act, 1972**.
- It is **chaired by the Minister in charge of the MoEF&CC**.

**Why in News?**

The 19th Meeting of National Tiger Conservation Authority (NTCA) was held recently under the chairmanship of Union Minister for Environment, Forest & Climate Change.

**17. Consider the following statements about Atal Pension Yojana**

- 1) Atal Pension Yojana (APY) addresses the old age income security of the working poor, focussing on the organized sector workers.
- 2) Any citizen of India between 18-60 years can join the scheme.
- 3) APY is administered by the Pension Fund Regulatory and Development Authority (PFRDA).

**Which of the statements given above is/are incorrect?**

A:) 1 and 2 only

B:) 2 and 3 only

C:) 1 and 3 only

D:) 1,2 and 3

**Answer: A**

### **Explanation**

- Atal Pension Yojana (APY) addresses the **old age income security** of the working poor. It is **focused on the unorganized sector workers**.
- It encourages the workers in the **unorganised sector to voluntarily save for their retirement**. The Government had launched the scheme with effect from **1st June, 2015**.

### **Eligibility**

- Any citizen of India can join the APY scheme. The age of the subscriber should be between **18-40 years**. The contribution levels would vary and would be low if a subscriber joins early and increases if she joins late.
- The benefits of the scheme will arise to the subscribers on attaining the **age of 60 years**.

### **Features of APY**

- Fixed pension for the subscribers ranging between **Rs.1000 to Rs. 5000**, if s/he joins and contributes **between the age of 18 years and 40 years**.
- The same pension is payable to Spouse after death of Subscriber.
- Return of indicative pension wealth to nominees after death of spouse.
- Under the scheme, individuals who have registered before March 31, 2016, will get a co-contribution from the government, which will be 50 percent of the subscriber contribution up to a maximum of Rs. 1,000. The co-contribution will be for 5 years from 2015-16 to 2019-20.
- APY is administered by the **Pension Fund Regulatory and Development Authority (PFRDA)**.

### **Why in News?**

- Since the inception of in 2015, 3.68 crore enrolments have been completed under Atal Pension Yojana.

**18. Consider the following statements about Formalisation of Micro food processing Enterprises Scheme**

- 1) Only Individual entrepreneurs engaged in food processing activities are provided support under this scheme.
- 2) Under the scheme credit flow to micro food processing industries will be strengthened along with support for their integration with organised supply chains by providing brand and marketing facilitation.

**Which of the statements given above is/are correct?**

- A:) 1 only  
B:) 2 only  
C:) Both 1 and 2  
D:) Neither 1 nor 2

**Answer: B**

**Explanation**

- In 2020, the **Ministry of Food Processing Industries** launched the PM Formalisation of Micro food processing Enterprises Scheme (PM FME Scheme) for providing financial, technical and business support for upgradation of existing micro food processing enterprises.
- With an outlay of Rs. 10,000 crore, it was launched as a **centrally sponsored scheme** aimed at **covering two lakh enterprises over five years** from 2020-21 to 2024-2025.
- During the first year of implementation, the **total expenditure will be borne by the Central government**, but in successive years **centre and states will share the expenditure in a 60:40 ratio.**

**About the scheme**

- Under the scheme, **capacity building of entrepreneurs** will be undertaken through technical knowledge, skill training and hand holding support services. **Credit flow to micro food processing industries** will be strengthened along with **support for their integration with organised supply chains** by providing brand and marketing facilitation.
- Apart from individual entrepreneurs, support will also be extended to Farmer Producer Organizations (FPOs), SHGs, producers co-operatives and co-operative societies engaged in food processing activities.

### Potential of the scheme

- The focus will be on **women and SC/ST owned units and those in Aspirational districts** and a **cluster-based approach** (e.g. Mango in UP, Tomato in Karnataka, Chilli in Andhra Pradesh, Orange in Maharashtra etc.) will be followed to reap the benefit of scale in terms of procurement of inputs, availing common services and marketing of products.
- The scheme provides **credit linked grants** to enterprises with provision of seed capital to SHGs for meeting working expenses and purchase of small tools.
- The scheme is set to transform the unorganised micro food processing enterprises for the larger benefit of rural people and rural economy.

### Role of Micro food processing industries

- Micro food processing industries represent the **unorganised food processing sector** comprising nearly 25 lakh units. **Nearly 74 percent of the total employment in the food processing sector** comes from these units.
- Micro food processing enterprises are a major contributor to the rural economy as nearly **66 percent of these units are located in rural areas** and **about 85 percent of them are family based enterprises supporting the livelihood of households.**
- These units play a significant role in **checking rural-urban migration.**

### Why in News?

- Union Minister for Ministry of Food Processing Industries Pashupati Kumar Paras launched six, One District One Product (ODOP) brands under the Pradhan Mantri Formalisation of Micro food processing Enterprises Scheme.

### 19. With reference to the Street Lighting National Program (SLNP), consider the following statements.

1. It is considered as the world's largest domestic lighting project which aims to replace incandescent lamps with LED bulbs at the residential level.
2. It is spearheaded and implemented by Energy Efficiency Services Limited.

Which of the statements given above is/are correct?

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: B**

### **Explanation**

- **Statement 1 is incorrect:** Launched in 2015, the Street Lighting National Program (SLNP) aims to **replace conventional street lights with smart and energy efficient LED street lights** across India.
- **Statement 2 is correct:** SLNP is also implemented by **Energy Efficiency Services Limited**.
- EESL replaces the conventional street lights with LEDs at its own costs (without any need for municipalities to invest) and the consequent reduction in energy and maintenance cost of the municipality is used to repay EESL over a period of time.
- EESL is also implementing **LED Street lighting projects in Gram Panchayats** on the same service model as the SLNP for municipalities with the objective to promote the use of efficient lighting in rural areas.

### **Objectives**

- Mitigate climate change by implementing energy efficient LED based street lighting
- Reduce energy consumption in lighting which helps DISCOMs to manage peak demand
- Provide a sustainable service model that obviates the need for upfront capital investment as well as additional revenue expenditure to pay for procurement of LED lights
- Enhance municipal services at no upfront capital cost of municipalities.

### **About UJALA**

- **Statement 1 is related to the Unnat Jyoti by Affordable LEDs for All (UJALA) scheme.** It is the **world's largest domestic lighting project.**
- It was launched with a target of replacing 77 crore incandescent lamps with LED bulbs and to nullify the high-cost of LEDs that acted as a barrier previously in the adoption of energy-efficient systems.
- While UJALA is the world's largest domestic lighting project, SLNP is the world's largest streetlight replacement programme.
- UJALA scheme aims to promote:
  - efficient use of energy at the **residential level;**
  - enhance the awareness of consumers about the efficacy of using energy efficient appliances and

- aggregating demand to reduce the high initial costs thus facilitating higher uptake of LED lights by residential users.
- It is spearheaded and implemented by **Energy Efficiency Services Limited (EESL)**, a joint venture of PSUs under the Ministry of Power.

#### **Who is eligible to get LEDs under the UJALA scheme?**

- Every domestic household having a metered connection from their respective Electricity Distribution Company is eligible to get the LED bulbs under the UJALA Scheme.
- The consumer can purchase the LED on **EMI payment** (monthly/bimonthly instalments in electricity bill) or on **upfront payment** by paying the full amount.
- UJALA appliances can be purchased at Rs 70 per LED bulb, Rs 220 per LED tube light and Rs 1110 per Fan. The price of appliances consist of components such as price of bulb, distribution, awareness cost, which is discovered through competitive bidding, Annual Maintenance Cost (AMC), cost of capital and administrative costs.
- If the LED bulb stops working due to technical defects, **EESL provides free-of-cost replacements for a period of one year.**

#### **Where and how can the LED bulb be procured?**

- UJALA LED bulbs are being distributed through special counters (kiosks) set up at designated places in a city. These will not be available at retail stores. The location details of distribution counters is available at [www.ujala.gov.in](http://www.ujala.gov.in), wherein the locations are geo-tagged for consumer convenience.

#### **Why in News?**

- The UJALA and SLNP completed seven years of implementation.

**20. It is a long narrow, deep, endorheic (landlocked) lake situated at a height of more than 14,000 ft in the Ladakh Himalayas. It is a transboundary lake that is expanded between India and China for almost 134 kms. During winter, the lake freezes completely, despite being saline water.**

#### **The above description refers to?**

- A:) Tso Moriri lake
- B:) Pangong Tso lake
- C:) Wular lake
- D:) Chandra Taal lake

**Answer: B**

**Explanation**

**Why in News?**

- China is constructing a bridge in Eastern Ladakh connecting the North and South Banks of Pangong Tso which would significantly bring down the time for People's Liberation Army (PLA) to move troops and equipment between the two sectors

**About Pangong Tso Lake**



- **Pangong Tso** is a long narrow, deep, **endorheic (landlocked)** lake situated at a height of more than 14,000 ft in the **Ladakh Himalayas**.
- The **brackish water** lake freezes over in winter.
- By itself, the lake does not have major tactical significance. But **it lies in the path of the Chushul approach**, one of the **main approaches that China can use for an offensive** into Indian-held territory.

- Indian assessments show that a major Chinese offensive, if it comes, will flow across both the north and south of the lake. During the 1962 war, this was where China launched its main offensive.

### The ground reality



- **Only a third of the lake is controlled by India.**
- The lake, a **glacial melt**, has **mountain spurs of the Chang Chenmo range** jetting down referred to as **fingers**.
- The **Line of Actual Control (LAC)** is said to be **at finger 4 by the Chinese**. However, **India's perceived LAC is at finger number eight**. As a result, there are a lot of **disagreements** in the area.

### 21. Nari Shakthi Puraskar award is related to which of the following?

- A:) An Award conferred to recognize the special contribution of the children in the fields of social service
- B:) An award that recognises outstanding work in the fields of economic and social empowerment of women.
- C:) Scheme of National Awards to senior citizens
- D:) Award for bringing about a Social, Economic and Political transformation through Non-violence.

**Answer: B**

**Explanation**

- The Nari Shakti award **recognises outstanding work in the fields of economic and social empowerment of women.**
- The award is conferred by the **Ministry of Women and Child Development** on the occasion of International Women's Day on 8th of March every year.
- The Ministry confers Nari Shakti Puraskar every year to individuals and institutions in recognition of their service towards the cause of women empowerment. A certificate and two lakh rupees will be given to awardee.

**Why in News?**

- The Women and Child Development Ministry has invited nominations for the Nari Shakti Puraskar for the year 2021.

**22. Consider the following statements about Purchasing Managers' Index**

- 1) Purchasing Managers' Index is an economic indicator which indicates the business activity & economic health of both the manufacturing and service sectors.
- 2) While PMI >50 implies an expansion of business and economic activity, PMI <50 means contraction.
- 3) PMI of India is published by the Ministry of Commerce and Industry.

**Which of the statements given above is/are correct?**

- A:) 1 and 2 only
- B:) 2 and 3 only
- C:) 1 and 3 only
- D:) 1,2 and 3

**Answer: A**

**Explanation**

- Purchasing Managers' Index is an economic indicator which indicates the business activity & economic health of both the **manufacturing and service sectors.**
- PMI of India is published by Japanese firm **Nikkei** but compiled and constructed by **IHS Markit**, a London-based global information provider.

- PMI is an **investor sentiment tracking index** and is more dynamic in nature. They are derived from monthly surveys of about 400 private companies.
- Variables used for calculating the PMI are: Output, New Orders, Employment, Input Costs, Output Prices, Backlogs of Work, Export Orders, Quantity of Purchases, Suppliers' Delivery Times, Stocks of Purchases and Stocks of Finished Goods.
- PMI, which is usually released at the **start of the month**, serves as a leading indicator of economic activity. It comes before the official data on industrial output, core sector manufacturing and GDP growth.

#### **How to read PMI?**

- While PMI >50 implies an expansion of business and economic activity, PMI <50 means contraction.

#### **Why in News?**

- According to the latest Purchasing Managers' Index, India's services sector activity fell from 58.1 in November to a three-month low of 55.5 in December.

#### **23. Which of the following is/are functions of APEDA?**

- 1) Promotion of export oriented production and development of the Scheduled products;
- 2) Fixing of standards and specifications for the scheduled products for the purpose of exports
- 3) Carrying out inspection of meat and meat products in slaughterhouses for the purpose of ensuring the quality of such products

#### **Select the correct answer using the codes given below**

- A:) 1 only
- B:) 2 only
- C:) 1 and 2
- D:) 1,2 and 3

**Answer: D**

#### **Explanation**

- The Agricultural and Processed Food Products Export Development Authority (APEDA) was established by the Government of India under the Agricultural and Processed Food Products Export Development Authority Act, 1985.

- The Authority replaced the Processed Food Export Promotion Council (PFEPCC).
- It functions under the **Ministry of Commerce and Industry**.
- The Authority has its headquarters in **New Delhi**.

#### **Functions of APEDA**

- **Development of industries** relating to the scheduled products for export by way of providing financial assistance or otherwise for undertaking surveys and feasibility studies, participation in enquiry capital through joint ventures and other reliefs and subsidy schemes;
- **Registration of persons as exporters** of the scheduled products on payment of such fees as may be prescribed;
- **Fixing of standards and specifications** for the scheduled products for the purpose of exports;
- **Carrying out inspection** of meat and meat products in slaughterhouses, processing plants, storage premises, conveyances or other places where such products are kept or handled for the purpose of ensuring the quality of such products;
- **Improving of packaging** of the Scheduled products;
- **Improving of marketing** of the Scheduled products outside India;
- **Promotion of export oriented production and development** of the Scheduled products;

#### **Products monitored**

- APEDA is mandated with the responsibility of **export promotion and development** of the following scheduled products:
  - Fruits, Vegetables and their Products.
  - Meat and Meat Products.
  - Poultry and Poultry Products.
  - Dairy Products.
  - Confectionery, Biscuits and Bakery Products.
  - Honey, Jaggery and Sugar Products.
  - Cocoa and its products, chocolates of all kinds.
  - Alcoholic and Non-Alcoholic Beverages.
  - Cereal and Cereal Products.
  - Groundnuts, Peanuts and Walnuts.

- Pickles, Papads and Chutneys.
- Guar Gum.
- Floriculture and Floriculture Products.
- Herbal and Medicinal Plants.
- In addition to this, APEDA has been entrusted with the responsibility to monitor **import of sugar.**

#### **Why in News?**

- APEDA has been facilitating honey producers in accessing export markets besides availing government assistance under different schemes, quality certification and lab testing.
- APEDA is working with the exporters to deal with the challenges such as higher freight cost, limited availability of containers in peak honey export season, higher Nuclear Magnetic Resonance test costs and inadequate export incentives.
- India exported 59,999 metric tonnes (MT) of natural honey worth Rs. 716 crore (US \$ 96.77 million) during 2020-21, with the United States taking a major share at 44,881 MT. Saudi Arabia, United Arab Emirates, Bangladesh and Canada were the other top destinations for Indian honey.
- **India ranks 8<sup>th</sup> and 9<sup>th</sup> in the world in honey producing and exporting countries respectively.**

#### **24. Consider the following statements about Biological Diversity Act,2002**

- 1) It aims at the conservation of biological resources, managing its sustainable use and enabling fair and equitable sharing benefits.
- 2) The Act was enacted to meet the obligations under Convention on Biological Diversity (CBD), to which India is a party.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: C**

**Explanation**

- Biological Diversity Act was enacted in 2002 which aims at the **conservation of biological resources, managing its sustainable use and enabling fair and equitable sharing benefits** arising out of the use and knowledge of biological resources with the local communities.
- The Act was enacted to meet the **obligations under Convention on Biological Diversity (CBD)**, to which India is a party.

**Objectives**

- To protect India's rich biodiversity and associated knowledge against their use by foreign individuals and organizations without sharing the benefits arising out of such use.
- To check bio-piracy.

*Biopiracy describes a practice in which indigenous knowledge of nature, originating with indigenous peoples, is used by others for profit, without permission from and with little or no compensation or recognition to the indigenous people themselves*

**Salient features of the Act**

- The Act provides for setting up of a **National Biodiversity Authority (NBA)** (HQ in Chennai) **State Biodiversity Boards (SBBs)** and **Biodiversity Management Committees (BMCs)** in local bodies.
- The NBA deals with all matters relating to requests for access by foreign individuals, institutions or companies, and transfer of results of research to any foreigner. Its approval will be required before obtaining any intellectual property right on an invention based on a biological resource from India, or on its traditional knowledge.
- The State Biodiversity Boards (SBBs) constituted by the State Governments deal with all matters relating to access by Indians for commercial purposes

- The Act mandates the constitution of committees by local self-governments to manage local biodiversity called Biodiversity Management Committees (BMC).
- Penalty - If a person violates the provisions he will be "punishable with imprisonment for a term which may extend to five years, or with fine which may extend to ten lakh rupees and where the damage caused exceeds ten lakh rupees such fine may commensurate with the damage caused, or with both.
- Any offence under this Act is non-bailable and cognizable.

**25. Consider the following statements about UNESCO.**

1. UNESCO is a specialized agency of the United Nations.
2. Its purpose is to contribute to peace and security by promoting international collaboration through education, science, culture and communication.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: C**

**Explanation:**

- **Statement 1 is correct:** UNESCO was constituted as a **specialized agency** of the United Nations that was outlined in a constitution signed November 16, 1945. The constitution entered into force in 1946.
- **Statement 2 is correct:** Its purpose is to contribute to peace and security by promoting international collaboration through education, science, culture and communication.
- UNESCO has 193 member countries (including **India**) and it pursues its objectives through **five major programs:** education, natural sciences, social and human sciences, culture, and communication and information.
- The agency's permanent headquarters are in **Paris, France**.

## 26. Consider the following statements

- 1) It is a brackish water lagoon.
- 2) It was designated as the first Indian wetland of international importance under the Ramsar Convention.
- 3) It is home to the highly endangered Irrawaddy dolphin.
- 4) It is the largest wintering ground for migratory birds in the Indian subcontinent.
- 5) The Nalabana Island within the lake is notified as a Bird Sanctuary under Wildlife Protection) Act, 1972.

The above statements refer to which of the following?

- A:) Vembanad lake
- B:) Pulicat lake
- C:) Chilika lake
- D:) Loktak lake

**Answer: C**

### Explanation

- Chilika Lake is **Asia's largest brackish water lake** and a shallow lagoon with estuarine character spread across the districts of **Puri, Khurda and Ganjam in the state of Odisha** in eastern India.
- On account of its rich biodiversity, **Chilika lake** in 1981, was designated the **first Indian wetland of international importance under the Ramsar Convention.**
- A number of islands are present in the lagoon, prominent among which are **Krushnaprasad, Nalaban, Kalijai, Somolo and Birds Islands.**
- It is the **largest wintering ground for migratory waterfowl** found anywhere on the Indian sub-continent.
- It is home to the **highly endangered Irrawaddy dolphin.**
- The **Nalaban Island within the lake is notified as a Bird Sanctuary under Wildlife (Protection) Act, 1972.**
- It is also the **largest wintering ground for migratory birds** on the Indian sub-continent and supports some of the largest congregation of migratory birds from large parts of Asia, particularly during the winters that arrive from as far as the Caspian Sea, Lake Baikal, Aral

Sea, remote parts of Russia, Kirghiz steppes of Mongolia, Central and South East Asia, Ladakh and the Himalayas to feed and breed in its fertile waters.

**Ramsar convention:**

- The Ramsar Convention on Wetlands is an intergovernmental treaty that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.
- At the time of joining the Convention, each Contracting Party must designate at least one wetland site within their territory for inclusion in the List of Wetlands of International Importance (the Ramsar List).
- There are currently over 2,300 Ramsar sites all over the world.
- The Convention includes various measures to respond to threats to the ecological character of sites.
- **The 2nd of February each year is celebrated as World Wetlands Day**

**What's the news?**

- As per the **water bird status survey-2022** conducted in the Chilika, a total of 10,74,173 birds of the **107 water bird species** and 37,953 individuals of 76 wetland dependent species were counted at the entire lagoon.
- Bird census members reported rare sightings of the uncommon **Mongolian gull**.

**27. Consider the following statements about Kuno Palpur wildlife sanctuary**

- 1) It is located in the state of Madhya Pradesh
- 2) Kuno river which is a tributary of the Chambal river flows through the national park.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: C**

**Explanation:**

**Statement 1 is correct:**

- Kuno National Park is a **protected area in Madhya Pradesh** that received the status of national park in 2018. The protected area was established in 1981 as a wildlife sanctuary in the Sheopur and Morena districts. It was also known as Kuno-Palpur and Palpur-Kuno Wildlife Sanctuary. It is part of the Kathiawar-Gir dry deciduous forests ecoregion.

**Statement 2 is correct:**

- The Kuno River is one of the main tributaries of the Chambal River. It flows through the Kuno National Park from south to north, draining the other rivulets and Tributaries into the Chambal River in Morena at MP-Rajasthan border. It is 180 km long and originates from the Shivpuri Plateau.

**Why in the news?**

- According to an '**Action Plan for Introduction of Cheetah in India**', released by the environment ministry during the 19th meeting of National Tiger Conservation Authority, a cohort of around **12 to 14 cheetahs will be imported from South Africa or Namibia** and each of them will be fitted with a satellite-GPS-very high frequency radio-collar.

**News in detail**

- **International transportation** will be done by either a commercial airline or by a chartered flight following which the wild cats will be transported to **Kuno Palpur National Park (KNP) in Madhya Pradesh**.
- According to officials, the **world's fastest land animal** was expected to be reintroduced into the country in November 2021 but the plan got derailed due to the Covid-19 pandemic.
- As per the plan, the Union government, along with the ministry of environment and the Cheetah Task Force, will create a **formal framework** to collaborate with governments of Namibia and/or South Africa, through the ministry of external affairs.

**28. Consider the following statements with reference to Corporate Social Responsibility (CSR)**

- 1) The CSR provision is applicable to companies with an annual turnover of 1,000 crore and more, or a net worth of Rs. 500 crore and more, or a net profit of Rs. 5 crore and more.
- 2) Non-compliance to the CSR rules and obligations will be treated as a criminal offence.

**Which of the above statements is/are incorrect?**

- A:) 1 only  
B:) 2 only  
C:) Both 1 and 2  
D:) Neither 1 nor 2

**Answer: B**

**Explanation:**

**What is CSR?**

- Corporate Social Responsibility (CSR) is a business philosophy that dictates that companies around the globe should deviate from the narrow path of chasing only financial gains and wealth buildup and embark on a journey of **sustainable development**.
- It includes community welfare, ethical corporate conduct, climate action, defending the socio-economic rights of marginalised sections of society, among other aspects.

**CSR in India**

- India harbours one of the earliest and richest traditions of CSR in the world in the form of philanthropy.
- We can find **Chanakya**, also called Kautilya, the cardinal force behind Mauryan Imperialism, commenting and emphasising on the importance of observing ethical practices and principles while conducting commercial activities.
- Our scriptures have also repeatedly echoed the importance of sharing business earnings with the deprived segments of the society.
- In modern India, CSR was attributed with a whole new dimension with the “**Trusteeship Theory**” of **Mahatma Gandhi**, which considered the businessmen of India as trustees of trusts that looked after public welfare.

**Legal Provisions**

- **India is the first country** in the world to make CSR **mandatory**, following an amendment to The Company Act, 2013 in 2014.
- Any company that has a **net worth of at least Rs 500 crore, a turnover of Rs 1,000 crore or a net profit of Rs 5 crore** is obliged to spend **2% of its average profits** over the last three years on CSR.
- Businesses can invest their profits in areas such as education, poverty, gender equality, and hunger as part of their CSR compliance, as regulated by the law.

### **Latest Amendments**

- In January 2021, the Ministry of Corporate Affairs amended the rules of CSR.
- According to the new rules, non-compliance to the CSR rules and obligations **will no longer be treated as a criminal offence**. These will now be treated as civil wrongs.
- A company may engage **International Organisations** for designing, monitoring and evaluation of the CSR projects and for capacity building of their own personnel for CSR.
- Any **surplus income** being generated through a company's CSR activities can not form part of the company's profit. The surplus shall be reinvested into the same project or shall be transferred to the Unspent CSR Account.
- Any CSR expenditure that exceeds the required amount can be carried **forward to the next three years**.

### **Why in News?**

- IndianOil, an Indian government corporation, has committed to support the **National TB elimination Program (NTEP)** in India by providing an enabling environment through integrated and prioritised intervention with City Coordination Committees, District Health Societies, Technical support groups, etc., under its Corporate Social Responsibility programme.

### **Tuberculosis (TB) in India**

- TB continues to be one of India's severest health challenges. India has a large number of **'missing' cases** every year that are not detected or reported.
- In 2018, the Government of India started a holistic initiative to **End TB in India by 2025**, five years ahead of the Sustainable Development Goal (SDG) target of 2030.
- The government provisions a good amount of budget annually for the TB programme. However, considering its enormity, the efforts of the Government need to be supplemented by augmenting the existing resources, service delivery mechanism and infrastructure for identification of numerous missing TB patients every year.

### **29. Consider the following statements about PRASHAD scheme**

- 1) It was launched by the Ministry of Culture.
- 2) The objective of the scheme is integrated development of identified pilgrimage and heritage destinations.

**Which of the statements given above is/are correct?**

A:) 1 only

B:) 2 only

C:) Both 1 and 2

D:) Neither 1 nor 2

**Answer: B**

**Explanation**

- The 'National Mission on Pilgrimage Rejuvenation and Spiritual, Heritage Augmentation Drive' (PRASHAD) was launched by the **Ministry of Tourism** in the year 2014-15 with the objective of **integrated development of identified pilgrimage and heritage destinations**.
- The scheme aimed at infrastructure development such as entry points (Road, Rail and Water Transport), last mile connectivity, basic tourism facilities like Information/ Interpretation Centers, ATM/ Money exchange, eco-friendly modes of transport, area Lighting and illumination with renewable sources of energy, parking, drinking water, toilets, etc.

**Objectives**

- **Rejuvenation and spiritual augmentation** of important national/ global pilgrimage destinations;
- **Enhance tourism attractiveness** of identified pilgrimage destinations and heritage cities under integrated tourism development of heritage city in planned, prioritized and sustainable manner by providing world class tourism projects in them;
- Follow community-based development through **'Pro-Poor' tourism concept and 'responsible tourism' initiatives**;
- Assure active involvement of local communities through **employment generation**;
- **Creating awareness** among the local communities about the importance of tourism for them in terms of increase in sources of income, improved living standards and overall development of the area;
- **Promote heritage** in the form of heritage structures especially under integrated tourism development of heritage city, local arts, culture, handicrafts, cuisine, etc., to generate livelihood in the identified places;
- Strengthen the mechanism for **bridging the infrastructural gaps** at identified pilgrimage destinations and throughout heritage cities.

### Implementation Agency

- The projects identified under this scheme shall be implemented through the identified agencies by the **respective State/ Union Territory Government**.

### Why in News?

- Union Tourism Minister G. Kishan Reddy virtually inaugurated PRASHAD projects in Mathura, Uttar Pradesh

### 30. Consider the following statements regarding the Swadesh Darshan

1. It is coordinated by the Ministry of Jal Shakti under the Swachh Bharat Mission
2. It aims to develop theme-based tourist circuits in the country on the principles of competitiveness and sustainability in an integrated manner

### Which of the statements given above is/are correct?

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: B**

### Explanation

#### Swadesh Darshan scheme

- It is one among the flagship schemes of the **Ministry of Tourism** for **integrated development of theme based tourist circuits** in the country.
- Tourist Circuit is defined as a route having at least three major tourist destinations which are distinct and apart.
- Launched in 2014-15, the Scheme is **100% centrally funded** and efforts are made to achieve convergence with other schemes of Central and State Governments and also to leverage the voluntary funding available for Corporate Social Responsibility (CSR) initiatives of Central Public Sector Undertakings and Corporate Sector.
- Projects under the scheme shall be under the following identified themes; **Eco-tourism, Wildlife, Buddhist, Desert, Spiritual, Ramayana, Krishna, Coastal, Northeast, Rural, Himalayan, Tribal and Heritage**.

**31. The government has unveiled the e-shram portal with the main objective of**

- A:) Integrate ration card portability between states
- B:) Register unorganised workers in India
- C:) Postal ballot voter registration
- D:) Promote digital learning among marginalised sections of the society

**Answer: B**

**Explanation**

- In August 2021, the **Ministry of Labour and Employment** unveiled the e-shram portal which aims to **register 38 crore unorganised workers**, such as construction labourers, migrant workforce, street vendors and domestic workers, among others.
- The workers will be issued an **e-Shram card containing a 12 digit unique number**, which will help in including them in social security schemes.
- The portal would lead to the creation of a **national database of unorganised workers**.
- Apart from being **Aadhaar-linked**, it will collect **details of the name, occupation, address, educational qualification, skill types and family of the registered workers**.
- The portal was developed by the Ministry of Labour & Employment, in technical collaboration with the **National Informatics Centre** (an attached office under the Ministry of Electronics and Information Technology).
- The portal is open to workers engaged in the **unorganised sector** and **aged between 16 and 59**.

**Why in News?**

- 20 crore unorganised workers have registered on E-shram portal.

**32. With reference to the Pravasi Bharatiya Divas (PBD) Convention, consider the following statements.**

1. It is held annually by the Ministry of External Affairs.
2. It is celebrated on January 9 which marks the return of Mahatma Gandhi from South Africa to Mumbai.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: B**

**Explanation**

- Pravasi Bharatiya Divas (PBD) Convention is the flagship event of the **Ministry of External Affairs** and provides an important platform to engage and connect with the **overseas Indians**.
- **Statement 1 is incorrect:** It is **celebrated on January 9 once in every two years** to strengthen the engagement of the overseas Indian community with the Government of India and reconnect them with their roots.
- **Statement 2 is correct:** The day commemorates the return of **Mahatma Gandhi** from South Africa to Mumbai on 9 January 1915.
- The first Pravasi Bharatiya Divas was organized in 2003.

**Pravasi Bharatiya Samman Award**

- The Pravasi Bharatiya Samman Award (PBSA) is the highest honour conferred on overseas Indians.
- PBSA is conferred by the **President of India** as a part of the Pravasi Bharatiya Divas Conventions.

**Why in News?**

- The Prime Minister, Narendra Modi has greeted everyone, especially the Indian diaspora on Pravasi Bharatiya Diwas.

**33. Consider the following statements about Guru Gobind Singh**

- 1) Guru Gobind Singh was the first Sikh Guru who became the leader of the Sikhs at the age of 9.
- 2) He established the Sikh warrior community called Khalsa.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: B**

### **Explanation**

#### **About**

- Guru Gobind Singh was the tenth and last Sikh Guru who became the leader of the Sikhs at the age of 9 after Guru Tegh Bahadur was beheaded.
- He was a spiritual master, warrior, poet and philosopher.
- In 1699, he established the Sikh warrior community called Khalsa.
- Guru Gobind Singh started the tradition of the Five K's for the Khalsa. The Five K's are kesh (uncut hair), kanga (wooden comb), kara (iron or steel bracelet), kirpan (dagger) and kacchera (short breeches)
- His literary contributions include the Jaap Sahib, Benti Chaupai, Amrit Savaiye, etc.
- Chandi di Var was his famous composition in Punjabi.
- In 1708, he declared that Guru Granth Sahib will be the holy scripture of Sikhism and will be the permanent Guru of Sikhs.

#### **Why in news?**

- The 355th birth anniversary of Guru Gobind Singh, the 10th and last Sikh guru was celebrated recently.

### **34. Pancheshwar Multipurpose Project (PMP) is a bi-national hydropower project between**

- A:) India and Bhutan
- B:) India and Nepal
- C:) India and Myanmar
- D:) China and Nepal

**Answer: B**

### **Explanation**

- The Pancheshwar multipurpose project — first envisaged 24 years ago as part of the **Mahakali treaty** that India and Nepal signed in 1996 — includes setting up of two hydroelectric plants with a total installed capacity of 5,040 MW and a 315 metre-high dam to meet the power and irrigation requirements of the two countries.
- It is a bi-national hydropower project to be developed in **Mahakali River** bordering **Nepal and India**.
- It straddles Uttarakhand in India and the Far Western Development Region of Nepal. According to India, the river draws its waters from the Mahakali river (known as Sarada in India), which originates at Kalapani, one of the disputed sites in Uttarakhand that Nepal has now claimed as its own.

**35. With reference to pollutants, Which of the following pairs is/correctly matched?**

A:) Carbon Monoxide (CO)- Carcinogenic

B:) Hydrocarbon- causes stiffness of flower buds which eventually fall off from plants

C:) Nitrogen dioxide (NO<sub>2</sub>)- causes acute respiratory disease in children

D:) Sulphur Dioxide (SO<sub>2</sub>)- blocks the delivery of oxygen to the organs and tissues

**Answer: C**

**Explanation:**

- 1) **Carbon monoxide (CO)** is one of the most serious air pollutants. It is a colourless and odourless gas, highly poisonous to living beings because of its ability **to block the delivery of oxygen to the organs and tissues**. It is produced as a result of incomplete combustion of carbon. Carbon monoxide is mainly released into the air by automobile exhaust.
- 2) **Hydrocarbons** are composed of hydrogen and carbon only and are formed by the incomplete combustion of fuel used in automobiles. **Hydrocarbons are carcinogenic**, *i.e.*, they cause cancer. They harm plants by causing ageing, breakdown of tissues and shedding of leaves, flowers and twigs.
- 3) Oxides of sulphur are produced when sulphur containing fossil fuel is burnt. The most common species, **sulphur dioxide is** a gas that is poisonous to both animals and plants. It has been reported that even a low concentration of sulphur dioxide causes respiratory

diseases, e.g., asthma, bronchitis, emphysema in human beings. Sulphur dioxide causes irritation to the eyes, resulting in tears and redness. **High concentration of SO<sub>2</sub> leads to stiffness of flower buds which eventually fall off from plants.** Uncatalysed oxidation of sulphur dioxide is slow.

4) Dinitrogen and dioxygen are the main constituents of air. These gases do not react with each other at a normal temperature. At high altitudes when lightning strikes, they combine to form oxides of nitrogen. NO<sub>2</sub> is oxidised to nitrate ion, NO<sub>3</sub><sup>-</sup> which is washed into the soil, where it serves as a fertilizer.

In an automobile engine, (at high temperature) when fossil fuel is burnt, dinitrogen and dioxygen combine to yield significant quantities of nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>). The irritant red haze in the traffic and congested places is due to oxides of nitrogen. Higher concentrations of NO<sub>2</sub> damage the leaves of plants and retard the rate of photosynthesis. **Nitrogen dioxide is a lung irritant that can lead to an acute respiratory disease in children.** It is toxic to living tissues also. Nitrogen dioxide is also harmful to various textile fibres and metals.

### **36. Consider the following statements about Citizenship (Amendment) Act, 2019**

- 1) The Citizenship (Amendment) Act 2019 makes it clear that immigrants belonging to Hindu, Sikh, Christian, Buddhist, Jain and Parsi communities from the Muslim-majority nations (Pakistan, Bangladesh and Afghanistan) are not treated as illegal.
- 2) The amendment act relaxes the requirements for citizenship by naturalization from 11 year to five years for persons belonging to these six religions from these three countries.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: C**

**Explanation**

**How is citizenship acquired in India?**

- In India, citizenship is regulated by the **Citizenship Act, 1955**.
- The Act specifies that citizenship may be acquired in India through **five methods** – by birth in India, by descent, through registration, by naturalisation (extended residence in India), and by incorporation of territory into India.

#### **Can illegal migrants acquire citizenship?**

- An illegal migrant is prohibited from acquiring Indian citizenship.
- An illegal migrant is a foreigner who: (i) enters the country without valid travel documents, like a passport and visa, or (ii) enters with valid documents, but stays beyond the permitted time period.
- Illegal migrants may be imprisoned or deported under the **Foreigners Act, 1946** and the **Passport (Entry into India) Act, 1920**.

#### **How does the 2019 Act seek to change the criteria for determining citizenship?**

- **Statement 1 is correct.** The Citizenship (Amendment) Act 2019 makes it clear that immigrants belonging to **Hindu, Sikh, Christian, Buddhist, Jain and Parsi communities** from the Muslim-majority nations (**Pakistan, Bangladesh and Afghanistan**) will not be treated as illegal.
- They will also be eligible to get naturalised citizenship.
- **Statement 2 is Correct:** One of the requirements for citizenship by **naturalization** under the 1955 Act is that the applicant must have resided in India during the last 12 months, and for 11 of the previous 14 years.
- The amendment act **relaxes this 11-year requirement to five years** for persons belonging to these six religions from these three countries.
- They will also no longer be deported or jailed under the Foreigners Act of 1946 and the Passport (Entry into India) Act of 1920.
- The cut-off date for citizenship is **December 31, 2014** which means the applicant should have entered India on or before that date.

#### **Rationale of the Law**

- The Statement of Objects and Reasons in the amendment Act (SoR) states that India has had historic migration of people from Afghanistan, Pakistan and Bangladesh, and these countries have a state religion, which has resulted in **religious persecution** of minority groups.

#### **Are the provisions of the Act applicable across the country?**

- The Act clarifies that the amendments will not apply to certain areas. These are:
  - the tribal areas of Assam, Meghalaya, Mizoram, and Tripura, as included in the **Sixth Schedule to the Constitution**. These tribal areas include Karbi Anglong (in Assam), Garo Hills (in Meghalaya), Chakma District (in Mizoram), and Tripura Tribal Areas District.
  - the **states regulated by the “Inner Line” permit** under the Bengal Eastern Frontier Regulation 1873.

#### **How does the Act change the regulations for Overseas Citizens of India?**

- The Act also amends the provisions on registration of Overseas Citizens of India (OCI).
- OCI cardholders are foreigners who are persons of Indian origin.
- The government may cancel a person’s OCI registration on various grounds specified in the 1955 Act.
- The 2019 amendment **adds another ground for cancelling OCI registration** — violation of any law notified by the central government.

#### **Why in News?**

- The Ministry of Home Affairs (MHA) did not notify the Citizenship (Amendment) Act, 2019 rules till January 9, the third extended deadline after the Act was passed.
- January 9 was the last day of an extension the ministry sought from the two parliamentary committees in the Lok Sabha and the Rajya Sabha to frame the rules.

#### **37. Consider the following statements about Inner Line Permit**

- 1) The Inner Line Permit (ILP) is an official travel document that allows Indian citizens to stay in an area under the ILP system.
- 2) The ILP is issued by the concerned state government.
- 3) The document is currently required by visitors to all the north eastern states.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 and 3 only
- C:) 1 and 3 only
- D:) 1 and 2 only

**Answer: D**

**Explanation**

- **Statement 1 is correct:** The Inner Line Permit (ILP) is an official travel document that allows Indian citizens to stay in an area under the ILP system.
- **Statement 3 is incorrect:** The document is currently required by visitors to **Arunachal Pradesh, Manipur, Nagaland and Mizoram.**
- **Statement 2 is correct:** The ILP is issued by the **concerned state government.** The permits issued are mostly of different kinds, provided separately for tourists, tenants and for other purposes.
- The main objective of the ILP system is to prevent settlement of other Indian nationals in the notified states in order to **protect the indigenous population.** It also offers protection for the locals with regards to lands, jobs and other facilities.

#### **History of ILP**

- Under the **Bengal Eastern Frontier Regulation Act, 1873**, the British framed regulations restricting the entry and regulating the stay of outsiders in designated areas.
- This was to protect the Crown's own commercial interests by preventing "British subjects" (Indians) from trading within these regions.
- In 1950, the Indian government replaced "British subjects" with "Citizen of India". This was to address local concerns about protecting the interests of the indigenous people from outsiders belonging to other Indian states.

**38. With reference to the Global Innovation Index (GII) 2021, consider the following statements.**

1. GII is published annually by the World Economic Forum.
2. India entered the top 50 innovating countries for the first time in 2021 since the inception of the GII.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: D**

**Explanation**

- **Statement 1 is incorrect:** Global Innovation Index (GII) is co-published annually by **Cornell University, INSEAD Business School, and the World Intellectual Property Organization (WIPO)**, a specialized agency of the United Nations.
- **GII ranks global economies according to their innovation capabilities**, using roughly 80 indicators, grouped into **innovation inputs and outputs**.
- The metrics include institutions, human capital and research, infrastructure, market sophistication and business sophistication, knowledge and technology outputs and creative outputs.
- Over the years, the **GII has established itself as a policy tool for various governments and helped them to reflect upon the existing status quo.**

### Global Innovation Index 2021

- The Global Innovation Index 2021 was released recently.

### TOP THREE INNOVATION ECONOMIES BY INCOME GROUP

| Incomes             | Countries (top three)      |
|---------------------|----------------------------|
| High income         | Switzerland, Sweden, USA   |
| Upper middle income | China, Bulgaria, Malaysia  |
| Lower middle income | Vietnam, India, Ukraine    |
| Low income          | Rwanda, Tajikistan, Malawi |

Source: Global Innovation Index 2021 by World Intellectual Property Organization

### Highlights of the Index

- **Statement 2 is incorrect:** **India** has climbed two spots and has been **ranked 46th** in the Global Innovation Index 2021 rankings (48 in GII 2020).
- India has been on a rising trajectory over the past several years in the GII and **rose from a rank of 81 in 2015 to 46 in 2021.**
- **India ranks second among 34 lower middle-income group economies and first among the 10 economies in Central and Southern Asia.**
- The consistent improvement in the GII ranking is owing to the immense knowledge capital, the vibrant startup ecosystem and the work done by the public and the private research organisations.

- The Scientific Departments like the Department of Atomic Energy; the Department of Science and Technology; the Department of Biotechnology and the Department of Space have played a pivotal role in enriching the National Innovation Ecosystem.
- **Switzerland, Sweden, U.S., and U.K.** continue to lead the innovation ranking, and have all ranked in the top 5 in the past three years.

#### **Why in News?**

- The Minister of Commerce and Industry Piyush Goyal has called upon stakeholders in the innovation ecosystem to strive to take India to the top 25 in the Global Innovation Index.
- India's startups are the key reason behind the country's rise in Global Innovation Index from 76 in 2014 to 46 in 2021.

#### **39. Consider the following statements about Asian Infrastructure Investment Bank**

- 1) India is the largest shareholder with 26.6 per cent voting shares in the bank.
- 2) India has been the largest borrower of AIIB.

#### **Which of the statements given above is/are incorrect?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: A**

#### **Explanation**

- The Asian Infrastructure Investment Bank (AIIB) is an international development bank that provides financing for infrastructure projects in Asia.
- Headquartered in **Beijing**, it began operations in 2016.
- It includes more than 100 members worldwide (**India** is a founder member of AIIB). AIIB consists of two classes of membership: **regional and non-regional members**.
- **Statement 1 is incorrect: China** is the largest shareholder with 26.6 per cent voting shares in the bank. **India** is the second largest shareholder with 7.6 per cent voting shares followed by **Russia** 6.0 per cent.
- **Statement 2 is correct: India** has been the largest borrower of AIIB.



### Why in News?

- Former Reserve Bank of India (RBI) governor Urjit Patel has been appointed as a vice-president of the Asian Infrastructure Investment Bank.
- India has emerged as AIIB's biggest beneficiary by obtaining \$6.8 billion funding for 29 projects. Indonesia, Turkey, Bangladesh and China are the next four borrowers from the bank with over \$7 billion investment.

### 40. The de-jure head of a State Government is

- A:) Chief Minister of the State.
- B:) Chief Minister and Council of Ministers.
- C:) Governor of the State.
- D:) Chief Justice of the High Court.

**Answer: C**

### Explanation

- The Governor is the chief executive head of the state. But, like the President, he is a **nominal executive head (de-jure or titular or Constitutional head)**.
- The Governor also acts as an agent of the central Government.
- Therefore, the office of Governor has a dual role and the Chief Minister is the real executive authority (*de facto* executive). **Hence option C is correct.**

**41. Consider the following statements about PM GatiShakti**

- 1) It is a digital platform that connects 16 ministries with a view to ensuring holistic planning and execution of infrastructure projects.
- 2) This Portal is a Mission Mode Project under the National E-Governance Plan,
- 3) It is owned, designed and developed by National Informatics Centre (NIC), Ministry of Electronics & Information Technology, Government of India.

**Which of the statements given above is/are correct?**

- A:) 1 only  
B:) 2 and 3 only  
C:) 1 and 2 only  
D:) 1,2 and 3

**Answer: D**

**Explanation**

**About PM GatiShakti**

- Recently, Prime Minister Narendra Modi has **launched the “PM GatiShakti — National Master Plan”** for infrastructure development aimed at boosting multimodal connectivity and driving down logistics costs.

**About the project**

- **Statement 1 is correct:** PM GatiShakti is a **digital platform that connects 16 ministries** — including Roads and Highways, Railways, Shipping, Petroleum and Gas, Power, Telecom, Shipping, and Aviation- with a view to **ensuring holistic planning and execution of infrastructure projects.**
- **Statement 2 is correct:** This Portal is a Mission Mode Project under the National E-Governance Plan,
- **Statement 3 is correct:** It is owned, designed and developed by National Informatics Centre (NIC), Ministry of Electronics & Information Technology, Government of India.
- The portal will offer **200 layers of geospatial data**, including on existing infrastructure such as roads, highways, railways, and toll plazas, as well as **geographic information about forests, rivers and district boundaries to aid in planning and obtaining clearances.**

- The portal will also allow various government departments to track, in real time and at one centralised place, the progress of various projects, especially those with multi-sectoral and multi-regional impact.
- The objective is to **ensure that each and every department now has visibility of each other's activities providing critical data while planning and execution of projects in a comprehensive manner.**
- The GatiShakti platform aims to **prevent such situations by addressing the issue of government departments working in silos.**
- The government expects the platform to enable various government departments to synchronise their efforts into a multi-modal network. It will also offer satellite imagery for monitoring of projects. It is also expected to help state governments give commitments to investors regarding timeframes for the creation of infrastructure.

#### **How will the platform help bring down logistics costs?**

- Studies estimate that **logistics costs in India are about 13-14% of GDP as against about 7-8% of GDP in developed economies.**
- High logistics costs impact cost structures within the economy, and also make it more expensive for exporters to ship merchandise to buyers.
- By incorporating infrastructure schemes under various ministries and state governments, and economic zones such as textile and pharmaceutical clusters and electronics parks, the GatiShakti platform aims to boost last-mile connectivity and bring down logistics costs with integrated planning and reducing implementation overlap.

#### **Why in News?**

- The government has organized a workshop on Gati Shakti.

#### **42. "Special and Differential Treatment" (S&D) provisions of WTO give developing countries special rights. In this context, which of the following constitutes S&D provisions?**

- 1) Longer time periods for implementing agreements and commitments
- 2) Provisions requiring all WTO members to safeguard the trade interests of developing countries
- 3) Support to help developing countries build the capacity to carry out WTO work, handle

disputes, and implement technical standards.

**Select the correct answer using the codes given below**

A:) 1 and 3 only

B:) 2 and 3 only

C:) 3 only

D:) 1,2 and 3

**Answer: D**

**Explanation**

**Special and Differential Treatment (S&D)**

- The WTO Agreements contain **provisions which give developing countries special rights**. These are called “**special and differential treatment**” provisions.
- The Ministers in **Doha**, at the 4th WTO Ministerial Conference **mandated the Committee on Trade and Development** to examine these special and differential treatment provisions. The **Bali Ministerial Conference** in December 2013 established a mechanism to **review and analyse** the implementation of special and differential treatment provisions.
- The WTO Agreements contain special provisions which give developing countries special rights and which give developed countries the possibility to **treat developing countries more favourably** than other WTO Members.
- The **special provisions** include
  - longer time periods for implementing Agreements and commitments
  - **measures to increase trading opportunities** for developing countries
  - provisions requiring all WTO members to **safeguard the trade interests** of developing countries
  - support to **help developing countries build the capacity** to carry out WTO work, handle disputes, and **implement technical standards**, and provisions related to least-developed country (LDC) Members
  - provisions related to **least-developed country (LDC) Members**

**43. Consider the following statements about World Trade Organization (WTO).**

1. The primary purpose of the WTO is to foster global monetary cooperation.
2. The topmost decision-making body of the WTO is the Ministerial Conference, which usually meets every year.

**Which of the statements given above is/are correct?**

- A:) 1 only  
B:) 2 only  
C:) Both 1 and 2  
D:) Neither 1 nor 2

**Answer: D**

**Explanation:**

- The World Trade Organization (WTO) is an intergovernmental organization that is concerned with the regulation of international trade between nations.
- The WTO officially commenced on **1 January 1995** under the **Marrakesh Agreement**, replacing the **General Agreement on Tariffs and Trade (GATT)**, which commenced in 1948.
- It is the largest international economic organization in the world.
- The WTO deals with **regulation of trade in goods, services and intellectual property** between participating countries by providing a framework for negotiating trade agreements and a dispute resolution process aimed at enforcing participants' adherence to WTO agreements, which are signed by representatives of member governments ratified by their parliaments.

**Objectives**

- **Statement 1 is incorrect:** The primary purpose of the WTO is to **open trade for the benefit of all**. It functions to ensure that trade flows as smoothly, predictably and freely as possible.
- Fostering global monetary cooperation is a major objective of the **International Monetary Fund (IMF)**.
- The WTO is essentially an **alternative dispute or mediation entity** that upholds the international rules of trade among nations. The organization provides a platform that allows member governments to negotiate and resolve trade issues with other members.

- The WTO **prohibits discrimination between trading partners**, but provides exceptions for environmental protection, national security, and other important goals.
- At present, the WTO has over 160 members representing 98 per cent of world trade.
- **India** has been a WTO member since 1 January 1995 and a member of GATT since 8 July 1948.

### WTO Structure

#### Ministerial Conference

- **Statement 2 is incorrect:** The topmost decision-making body of the WTO is the Ministerial Conference, which usually meets **every two years**.
- It brings together all members of the WTO, all of which are countries or customs unions.
- The Ministerial Conference can take decisions on all matters under any of the multilateral trade agreements.

#### General Council

- The General Council comprises the representatives of all member countries and acts as the representative of the Ministerial Conference when it comes to daily operations. Its job is to carry out the implementation and monitoring function of the WTO.

#### Dispute Settlement Body

- The Dispute Settlement Body (DSB) is a **part of the General Council** and is responsible for settling trade disputes between member states.
- According to the procedure established by the WTO, the first step to resolve a trade dispute is engaging in the **consultation process**.
- If two trading partners having a dispute could not resolve at that level, one of them can ask for a settlement of **DSB** for hearing. The General Council of the WTO convenes as the DSB.
- The DSB's ruling can be challenged at the **appellate body**, the highest court for global trade disputes.

#### Appellate Body

- The Appellate Body is a standing committee of **seven members** that presides over appeals against judgments passed in trade-related disputes brought by WTO members.
- Members of the Appellate Body have **four-year terms**. In the selection process, WTO members follow the **consensus principle**, which means that the nomination of the Appellate Body members can only proceed smoothly with the agreement of all the members of WTO.

- The Appellate Body **must have at least three sitting members** to hear an appeal.

**44. Which of the following islands are located in African continent?**

- 1) Comoros
- 2) Seychelles
- 3) Mauritius
- 4) Cocos
- 5) Madagascar

**Select the correct answer using the codes given below**

- A:) 1,2,3 and 5 only  
B:) 2,3,4 and 5 only  
C:) 1,3 and 5 only  
D:) 3,4,5 only

**Answer: A**

**Explanation**

**Comoros**

- The Comoros is an island country in the Indian Ocean located at the **northern end of the Mozambique Channel off the eastern coast of Africa** between northeastern Mozambique, the French region of Mayotte, and northwestern Madagascar. The capital and largest city in Comoros is Moroni. Comoros is the **fourth-smallest African nation by area**.

**Seychelles**

- Seychelles is an **archipelagic island country** country in the Indian Ocean. Comprised of 115 islands, its capital and largest city, Victoria, lies 1,500 kilometres east of mainland Africa. With a population of roughly 94,367, it has the **smallest population of any sovereign African country**



### Mauritius

- Mauritius is **part of the African continent** geographically and is located in the Indian Ocean. It is an **island nation in the Indian Ocean** about 2,000 kilometres off the southeast coast of the African continent. The country includes the islands of Mauritius, Rodrigues, Agaléga and St. Brandon. It is one of the most competitive and **developed economies in the African region**

### Madagascar

- The island of Madagascar in the Indian Ocean is part of the **continent of Africa**. It is an island country in the Indian Ocean, approximately 400 kilometres off the coast of East Africa

### Cocos Island

- Cocos Island is an island in the **Pacific Ocean administered by Costa Rica**. Cocos Island was declared a Costa Rican National Park by means of Executive Decree in 1978 and designated a **World Heritage Site by UNESCO** in 1997. It is the southernmost point on the North American continent

**45. Consider the following pairs regarding the mountain passes and the states in which they are located**

**LIST I      LIST II**

1. Shipki La    -Sikkim
2. Nathu La    -Himachal Pradesh
3. Zoji La      -Jammu and Kashmir

**Which of the above given pairs is/are correctly matched?**

- A:) 2 only
- B:) 2 and 3 only
- C:) 1 and 2 only
- D:) 3 only

**Answer: D**

**Explanation**

**Zoji La (Pass):** It is in the **Zaskar range of Jammu & Kashmir**. The road route from Srinagar to Leh goes through this pass. It has been created by the Indus River.

**Shipki La (Pass):** It is in **Himachal Pradesh**. The road from Shimla to Tibet goes through this pass. The Satluj River flows through this pass.

**Nathu La** is a mountain pass in the **Himalayas connecting Sikkim with Chumbi Valley** of the Tibetan Plateau in China. It is one of the three open trading border posts between China and India; the others being Shipkila in Himachal Pradesh and Lipulekh at the trisection point of Uttarakhand–India, Nepal and China.

Nathu La pass was re-opened in 2006 to shorten the travel distance to important Hindu and Buddhist pilgrimage sites in the region and give a boost to Indo-China trade. It is also one of the five officially agreed Border Personnel Meeting points between the Indian Army and the People's Liberation Army of China for regular consultations and interactions between the two armies to improve relations

**46. Which one of the following issues the 'Global Economic Prospects' report periodically?**

- A:) World Economic Forum
- B:) United Nations Conference on Trade and Development
- C:) International Monetary Fund
- D:) World Bank

**Answer: D**

**Explanation**

- Global Economic Prospects is a **World Bank Group** flagship report that examines global economic developments and prospects, with a special focus on emerging markets and developing economies.
- It is issued **twice a year**, in January and June.

**What's in the news?**

- World Bank has said that Indian economy is expected to grow at 8.3 percent in the current financial year. It has upgraded India's GDP growth for the next fiscal to 8.7 percent, reflecting higher investment from the private sector and in infrastructure, and dividends from ongoing reforms.
- In its latest Global Economic Prospects, World Bank said, the growth outlook will also be supported by ongoing structural reforms, a better-than-expected financial sector recovery, and measures to resolve financial sector challenges despite ongoing risks.
- It said, global economic growth will dip to 4.1 percent in current financial year and 3.2 percent in the next fiscal.

**47. Consider the following statements regarding the National Legal Services Authority (NALSA)**

- 1) It was created by an act of parliament to provide free and competent legal services to all the people of India without any discrimination
- 2) The Chief Justice of India is the Patron-in-Chief of NALSA

**Which of the statements given above is/are correct?**

- A:) 1 only  
B:) 2 only  
C:) Both 1 and 2  
D:) Neither 1 nor 2

**Answer: B**

**Explanation**

- **Statement 1 is incorrect:** In 1987, the **Legal Services Authorities Act** was enacted by the **Parliament**, which came into force on 9th November, 1995 to establish a **nationwide uniform network for providing free and competent legal services to the weaker sections of the society (not to all the people of India)**
- The National Legal Services Authority (NALSA) has been constituted under the Legal Services Authorities Act, 1987 to provide free Legal Services to the weaker sections of the society.
- **Statement 2 is correct: The Chief Justice of India is the Patron-in-Chief** and the Senior most Hon'ble Judge, Supreme Court of India is the Executive Chairman of the Authority.
- Public awareness, equal opportunity and **deliverable justice are the cornerstones** on which the edifice of NALSA is based.
- The principal objective of NALSA is to **provide free and competent legal services to the weaker sections of the society** and to ensure that opportunities for securing justice are not denied to any citizen by reason of economic or other disabilities, and **to organize Lok Adalats** for amicable settlement of disputes
- Apart from the above mentioned, functions of NALSA include **spreading legal literacy and awareness**, undertaking social justice litigations etc.
- NALSA works in **close coordination with the various State Legal Services Authorities**, District Legal Services Authorities and other agencies for a regular exchange of relevant information, monitoring and updating on the implementation and progress of the various schemes in vogue and fostering a strategic and coordinated approach to ensure smooth and streamlined functioning of the various agencies and stakeholders.

**48. Consider the following statements about Lok Adalat**

- 1) It is a forum where disputes or cases pending in the court of law or at the pre-litigation stage are settled amicably.
- 2) Lok Adalats have been given statutory status under the Legal Services Authorities Act, 1987.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: C**

**Explanation**

- Lok Adalat (people's courts) is a body established by the government to settle disputes through **conciliation and compromise**.
  - **Statement 1 is correct:** Lok Adalat is an **alternative method of dispute resolution**. It is a forum where **disputes or cases pending in the court of law or at the pre-litigation stage** are settled amicably.
  - **Statement 2 is correct:** Lok Adalats have been given **statutory status** under the **Legal Services Authorities Act, 1987**.
  - Under the Act, the **award made by the Lok Adalats is deemed to be a decree of a civil court** and is **final and binding** on all parties and **no appeal lies against such an award** before any court of law.
  - If the parties are not satisfied with the award of the Lok Adalat, though there is **no provision for an appeal against such an award**, they are **free to initiate litigation** by approaching the court of appropriate jurisdiction by filing a case by following the required procedure, in exercise of their right to litigate.
- No judicial role
- The persons deciding the cases in the Lok Adalats are called the **Members of the Lok Adalats**, they have the **role of statutory conciliators** only and **do not have any judicial role**; therefore they can only persuade the parties to come to a conclusion for settling the

dispute outside the court in the Lok Adalat and shall not pressurize or coerce any of the parties to compromise or settle cases or matters either directly or indirectly.

- The Lok Adalat **shall not decide the matter so referred at its own instance**, instead the same would be decided on the basis of the compromise or settlement between the parties. The members shall assist the parties in an independent and impartial manner in their attempt to reach amicable settlement of their dispute.

Nature of Cases to be Referred to Lok Adalat

- Any case pending before any court.
- Any dispute which has not been brought before any court and is likely to be filed before the court.
- Provided that any matter relating to an **offence not compoundable** under the law **shall not be settled in Lok Adalat**.
- *Compoundable offences are those that can be compromised, i.e. the complainant can agree to take back the charges levied against the accused, whereas, non – compoundable offences are the more serious offences in which the parties cannot compromise.*

How to Get the Case Referred to the Lok Adalat for Settlement?

- The **State Legal Services Authority or District Legal Services Authority** as the case may be on receipt of an application from any one of the parties at a pre-litigation stage may refer such matter to the Lok Adalat for amicable settlement of the dispute for which notice would then be issued to the other party.

Composition of Lok Adalats

- The Lok Adalat is **presided over by a sitting or retired judicial officer as the chairman, with two other members, usually a lawyer and a social worker.**
- The **National Legal Services Authority (NALSA)** along with other Legal Services Institutions (such as State Legal Services Authority, District Legal Services Authority, Taluk Legal Services Committee) conducts Lok Adalats at different levels.

National Lok Adalat

- National Level Lok Adalats are held for at regular intervals where on a single day Lok Adalats are held throughout the country, in all the courts right from the Supreme Court till the Taluk Levels wherein cases are disposed off in huge numbers.

Permanent & Mobile Lok Adalat

- **Permanent Lok Adalats** have been set up as permanent bodies with a **Chairman and two members** for providing compulsory pre-litigative mechanism for conciliation and settlement of cases **relating to Public Utility Services** like transport, postal, telegraph etc.
- **Mobile Lok Adalats** are also organized in various parts of the country which travel from one location to another to resolve disputes in order to facilitate the resolution of disputes through this mechanism.

**49. Consider the following statements about NATO**

- 1) NATO is a security alliance of all the members of the United Nations.
- 2) It was formed in 1949 with the signing of the Washington Treaty.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: B**

**Explanation**

**About NATO**

- **Statement 1 is incorrect and statement 2 is correct:** Formed in **1949** with the signing of the **Washington Treaty**, NATO is a **security alliance of 30 countries from North America and Europe**.
- Established in the **Cold War** as a bulwark against Soviet aggression, NATO's fundamental goal is to safeguard the Allies' freedom and security by political and military means.
- **Article 5 of the Washington Treaty** states that an attack against one Ally is an attack against all — is at the core of the Alliance, a promise of collective defence.
- **Article 4** of the treaty ensures consultations among Allies on security matters of common interest, which have expanded from a narrowly defined Soviet threat to the critical mission in Afghanistan, as well as new threats to security such as cyber attacks, and global threats such as terrorism and piracy that affect the Alliance and its global network of partners.
- A "**NATO decision**" is the expression of the collective will of all 30 member countries since all decisions are taken by **consensus**.

- At present, NATO has **30 members**. In 1949, there were **12 founding members** of the Alliance: Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom and the United States. The other member countries are: Greece and Turkey (1952), Germany (1955), Spain (1982), the Czech Republic, Hungary and Poland (1999), Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia and Slovenia (2004), Albania and Croatia (2009), Montenegro (2017) and North Macedonia (2020).

- NATO's Headquarters are located in **Brussels, Belgium**.

#### **Why in News?**

- Representatives from the U.S. and Russia met in Geneva amid fears of a Russian invasion of its pro-Western neighbour Ukraine.
- Moscow said that ties between Russia and NATO had reached a “moment of truth”.
- Russia has demanded wide-ranging concessions from Washington and its NATO allies, which in turn have threatened severe sanctions for any attack.
- In December, Russia unveiled proposals to contain the United States and NATO in the former Soviet Union and Eastern Europe, saying that the U.S.-led alliance should not admit Ukraine or Georgia as new members.

#### **50. With respect to BrahMos Missile, consider the following statements.**

- 1) The name BrahMos is formed from names of two rivers i.e. Indian river Brahmaputra and the Moskva River of Myanmar.
- 2) The medium-range ramjet supersonic cruise missile has a strike range of about 9000 km.

#### **Which of the above statements is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: D**

#### **Explanation:**

- **Both the statements are incorrect**
- The BrahMos is a ramjet supersonic cruise missile of a short range developed by Defence Research and Development Organization (DRDO) and the Russian Federation.

- The missile can be launched from land, aircraft, ships and submarines.
- The medium-range ramjet supersonic cruise missile has a strike range of about 290 km.

**51. Consider the following statements about National Clean Air Program**

1) It aims to reduce particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>) pollution by 20-30% in 122 cities by 2024, with 2017 as the base year for comparison.

2) The Central Pollution Control Board (CPCB) executes this programme.

**Which of the statements given above is/are correct?**

A:) 1 only

B:) 2 only

C:) Both 1 and 2

D:) Neither 1 nor 2

**Answer: C**

**Explanation**

**About NCAP**

- NCAP is a pollution control initiative that was launched by the **Ministry of Environment, Forest and Climate Change** in January 2019. This is the first ever effort in the country to frame a national framework for air quality management with a time-bound reduction target.
- **Statement 1 is correct:** It aims to reduce particulate matter (**PM<sub>2.5</sub> and PM<sub>10</sub>**) pollution by **20-30% in 122 cities by 2024**, with 2017 as the base year for comparison.
- **Statement 2 is correct:** The **Central Pollution Control Board (CPCB)** executes this programme.

**Implementation**

- Under NCAP, **122 non-attainment cities** have been identified across the country based on the **Air Quality data from 2014-2018**.
- Apart from experts from the industry and academia, the programme is a collaboration between the Ministry of Road Transport and Highways, Ministry of Petroleum and Natural Gas, Ministry of New and Renewable Energy, Ministry of Heavy Industry, Ministry of Housing and Urban Affairs, Ministry of Agriculture, Ministry of Health, NITI Aayog, and Central Pollution Control Board.

- **City specific action plans** have been prepared which include measures for strengthening the monitoring network, reducing vehicular/industrial emissions, increasing public awareness etc.
- Implementation of the city specific action plans are regularly monitored by Committees at Central and State level namely Steering Committee, Monitoring Committee and Implementation Committee.
- Air quality of cities is monitored by **State Pollution Control Boards** which publishes their results from time to time.

#### **Why in news?**

- The analysis by NCAP Tracker, a joint project by news portal *Carbon Copy* and a Maharashtra-based start-up 'Respirer Living Sciences', designed to track India's progress in achieving the clean air targets, ranked **Ghaziabad in Uttar Pradesh as the most polluted city** out of the 132 non-attainment cities with highest levels of **PM 2.5 and PM 10**.

#### **News in detail**

- According to the analysis, Delhi and most of the other non-attainment cities under the National Clean Air Programme (NCAP) have shown **only a marginal improvement**.
- **Delhi was the second most polluted city** in the list of cities with the highest **PM 2.5 level** and **fourth in cities with the highest PM 10 level**.
- According to the three-year comparative analysis, Ghaziabad, with annual PM 2.5 level above 100, remained at the top of the table in the most polluted cities, except **in 2020, when Lucknow ranked first with an annual PM 2.5 level of 116**.

#### **52. Consider the following statements about the levels of Economic Integration**

- 1) A customs union is defined as a type of trade block which is composed of a free trade area with no tariffs among members and with a common external tariff.
- 2) An economic union has the same features as a customs union, but, in addition, factors of production are mobile among members.

#### **Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: A**

**Explanation**

- Economic integration takes the form of the Preferential Trade Area, Free Trade Area, Customs Union, Common Market and Economic Union.
- A **preferential trade area (PTA)** is a trading bloc that gives preferential access to certain products from the participating countries. This is done by reducing tariffs but not by abolishing them completely. A PTA can be established through a trade pact. It is the first stage of economic integration.
- A **free trade area** is the region encompassing a trade bloc whose member countries have signed a free-trade agreement (FTA). Such agreements involve cooperation between at least two countries to reduce/abolish trade barriers. e.g. South Asian Free Trade Area (SAFTA).
- **Statement 1 is correct:** A **customs union** is defined as a type of trade block which is composed of a free trade area with no tariffs among members and (zero tariffs among members) with a **common external tariff**. e.g. BENELUX (Belgium, Netherlands and Luxembourg).
- **Statement 2 is incorrect:** A **common market** has the same features as a customs union, but, in addition, factors of production (labour, capital and technology) are mobile among members. Restrictions on immigration and cross-border investment are abolished. e.g. European Common Market (ECM).
- An **economic union** is the last step in an economic integration process. In addition to free movement of goods, services and production factors, it also requires integration of economic policies, both monetary and fiscal. Under an economic union members harmonized monetary policies, taxation and government spending. (e.g. European Economic Union).

**Why in News?**

- India and the UK have formally launched negotiations for a Free Trade Agreement between two countries.

**53. Which of the following indices can be used to understand the rising health care costs in the country?**

- A:) Purchasing Managers' Index (PMI)
- B:) Producer Price Index (PPI)
- C:) Wholesale Price Index (WPI)
- D:) Consumer Price Index (CPI)

**Answer: D**

**Explanation:**

- CPI is an index which measures the weighted average of prices of a basket of consumer goods and services such as transportation, food and medical care.
- It is calculated by measuring price changes for each item in the predetermined basket of goods & services and averaging them.
- It is released by the Central Statistical Organisation (CSO) under the Ministry of Statistics and Program Implementation.
- The base year used to calculate CPI in India is 2011-2012.

**What's in the news?**

- Retail inflation rose to 5.59 % in December, mainly due to an uptick in food prices.
- The Consumer Price Index (CPI) based retail inflation was 4.91 % in November 2021 and 4.59 % in December 2020.
- As per the data released by the **National Statistical Office (NSO)**, food inflation rose to 4.05 % in December this fiscal compared to 1.87 % in the preceding month.
- The Reserve Bank, which mainly factors in the retail inflation while arriving at its bi-monthly monetary policy, expects the inflation print to be somewhat higher over the rest of the year as base effects turn adverse.

**54. Which of the following pairs are correctly matched?**

| <b>Missile/Missile system</b> | <b>Country</b> |
|-------------------------------|----------------|
| 1. THAAD                      | : USA          |
| 2. S-400                      | : Russia       |
| 3. NAG                        | : Bangladesh   |

**Select the correct answer using the codes given below**

- A:) 1 and 3 only  
B:) 2 and 3 only  
C:) 1 and 2 only  
D:) 1, 2 and 3

**Answer: C**

### **Explanation**

#### **Terminal High Altitude Area Defense (THAAD)**

- It is an **anti-ballistic missile defense system** developed by the **USA**. It is a missile defence system that is designed to **intercept and destroy short and medium-range ballistic missiles** in their final flight phase. The THAAD cannot be used as a form of attack against an enemy. Its role, by use of a powerful radar, is to simply **track and destroy missiles** before they are launched.

#### **S-400 Triumph**

- The S-400 Triumph is a modern **long-range surface-to-air missile (MLR SAM) system developed by Russia**. First used in 2007, the S-400 is an upgrade of the S-300 series of missile systems put in place for the defence of Moscow. It is considered **way ahead of the American THAAD** (Terminal High Altitude Area Defense) system though both are different weapon systems.
- The missile system **integrates a multifunction radar, autonomous detection** and targeting systems, anti-aircraft missile systems, launchers, and command and control centre. It can provide a layered defence as it is capable of firing three types of missiles.
- The S-400 Triumph can engage **all types of aerial targets** such as aircraft, ballistic and cruise missiles, unmanned aerial vehicles (UAV) which are within the range of 400km, at an altitude of up to 30km

#### **Nag**

- Nag is a **third-generation, fire-and-forget, anti-tank guided missile** developed by India's state-owned **Defence Research and Development Organisation (DRDO)**

- One of the world's finest in its class, the **all-weather missile** with day and night capabilities comes in **four variants** that can be launched from land and air.
- **Nag variants (Range)**
  - **Prospina, the land version** meant for infantry, can be launched from a tracking-cum-launch vehicle known as **NAMICA (Nag Missile Carrier)**
  - **HeliNa is a helicopter-launched version** of NAG with an extended range. The launch system is mounted on HAL "Rudra" helicopter. The launch system is used by both Indian Army and Air Force
  - **Man Portable Anti-tank Guided Missile (MPATGM):** This version is lighter in comparison to other variants and can be launched from the shoulder. It has a strike range of 2.5 km.

**55. Which of the following is/are the tributaries of river Krishna?**

- 1) Bhima
- 2) Kosi
- 3) Tungabhadra
- 4) Malaprabha

**Select the correct answer using the codes given below**

- A:) 1,3 and 4 only
- B:) 2 and 4 only
- C:) 2,3 and 4 only
- D:) 1,2,3 and 4

**Answer: A**

**Explanation**

- Krishna river originates near **Mahabaleshwar (Satara)** in Maharashtra. It is the second biggest river in peninsular India after the Godavari River.
- It runs from four states Maharashtra (303 km), North Karnataka (480 km) and the rest of its 1300 km journey in Telangana and Andhra Pradesh before it empties into the Bay of Bengal.
- **Tributaries:** Tungabhadra, Mallaprabha, Koyna, Bhima, Ghataprabha, Yerla, Warna, Dindi, Musi and Dudhganga.
- Kosi is the tributary of river Ganga.

**56.** This glacier is located in the eastern Karakoram range in the Himalayas at an altitude of 5753 m above the sea level. It is the second longest glacier in the world's non-polar regions. It is situated just northeast of the point NJ9842 where the Line of Control between India and Pakistan ends. India launched Operation Meghdoot to establish control over this glacier.

The above description refers to

- A:) Baltoro glacier
- B:) Zemu glacier
- C:) Siachen glacier
- D:) Milam glacier

Answer: C

Explanation

Why in News?

Army Chief of India said that demilitarization of Siachen Glacier is not possible due to the Ladakh standoff

About Siachen Glacier:

- The Siachen Glacier is located in the Himalayas' Eastern Karakoram range, slightly northeast of Point NJ9842, where the Line of Control between India and Pakistan terminates.
- It is the world's second-longest glacier in non-polar locations.
- The Siachen Glacier is located just south of the major drainage divide that divides the Eurasian Plate from the Indian subcontinent in the heavily glaciated section of the Karakoram known as the "Third Pole."
- The Siachen Glacier is located in Ladakh, which has recently been designated as a Union Territory.
- The Siachen Glacier is also the highest battleground in the world.
- Operation Meghdoot -1984, was the first attack undertaken in the world's highest battlefield, resulting in Indian soldiers capturing control of the whole Siachen Glacier.

57. Consider the following statements about currency swap arrangement

- 1) In the swap arrangement, generally a country provides dollars to a foreign central bank, which, at the same time, provides the equivalent funds in its currency to the former, based on the market exchange rate at the time of the transaction.
- 2) It usually carry no exchange rate risk, as transaction terms are set in advance.

Which of the statements given above is/are *correct*?

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

Answer: C

Explanation

What are currency swap arrangements?

- In the swap arrangement, generally a country provides dollars to a foreign central bank, which, at the same time, provides the equivalent funds in its currency to the former, based on the market exchange rate at the time of the transaction.
- The parties agree to swap back these quantities of their two currencies at a specified date in the future, which could be the next day or even two years later, using the same exchange rate as in the first transaction.

Advantages of such arrangements

- These swap operations usually carry no exchange rate risk, as transaction terms are set in advance. The absence of an exchange rate risk is one of the major benefits of such a facility.
- This facility provides the country, which is getting the dollars, with the flexibility to use these reserves at any time in order to maintain an appropriate level of balance of payments or short-term liquidity.

What's in the news?

- India has confirmed a \$400 million currency swap with Sri Lanka while deferring another \$500 million due for settlement to the Asian Clearing Union (ACU), in a move aimed at helping the island nation witnessing an unprecedented economic crisis.

**58.** Consider the following statements about Alternative Investment Fund

- 1) It is a privately pooled investment fund established in India from either Indian or foreign sources
- 2) Venture capital fund and hedge funds are examples of Alternative Investment Fund

Which of the statements given above is/are correct?

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

Answer: C

Explanation

- In India, alternative investment funds (AIFs) are defined in Regulation 2(1)(b) of Securities and Exchange Board of India (Alternative Investment Funds) Regulations, 2012.
- Statement 1 is correct: Alternative Investment Fund or AIF means any fund established or incorporated in India which is a privately pooled investment vehicle which collects funds from sophisticated investors, whether Indian or foreign, for investing it in accordance with a defined investment policy for the benefit of its investors
- It refers to any privately pooled investment fund, (whether from Indian or foreign sources), in the form of a trust or a company or a body corporate or a Limited Liability Partnership (LLP) which are not presently covered by any Regulation of SEBI governing fund management (like, Regulations governing Mutual Fund or Collective Investment Scheme) nor coming under the direct regulation of any other sectoral regulators in India-IRDA, PFRDA, RBI
- Hence, in India, AIFs are private funds which are otherwise not coming under the jurisdiction of any regulatory agency in India
- Statement 2 is correct: Thus, the definition of AIFs includes venture Capital Fund, hedge funds, private equity funds, commodity funds, Debt Funds, infrastructure funds, etc.

Types of AIFs

AIFs are categorized into the following three categories, based on their impact on the economy and the regulatory regime intended for them

- Category I AIF are those AIFs with positive spillover effects on the economy, for which certain incentives or concessions might be considered by SEBI or Government of India. Such funds generally invest in start-ups or early stage ventures or social ventures or SMEs or infrastructure or other sectors which the government or regulators consider as socially or economically desirable.
- Category II AIF are those AIFs for which no specific incentives or concessions are given. They do not undertake leverage or borrowing other than to meet the permitted day to day operational requirements, as is specified for Category I AIFs
- Category III AIF are funds that are considered to have some potential negative externalities in certain situations and which undertake leverage to a great extent; These funds trade with a view to make short term returns. These funds are allowed to invest in Category I and II AIF also. They receive no specific incentives or concessions from the government or any other Regulator

**59.** Which of the following statements about Swayam portal is/are INCORRECT?

- 1) SWAYAM platform is developed by the Ministry of Human Resource Development (MHRD)
- 2) It does not cover all higher education subjects and skill sector courses.
- 3) Annual Refresher Programme in Teaching (ARPIT) uses SWAYAM portal for online professional development.

Select the correct answer using the codes given below

- A:) 1 and 2 only
- B:) 2 only
- C:) 3 only
- D:) 1, 2 and 3

Answer: B

Explanation:

- Study Webs of Active Learning for Young Aspiring Minds' (SWAYAM), which will provide one integrated platform and portal for online courses.
- This covers all higher education subjects and skill sector courses. Hence statement 2 is incorrect.

- The objective is to ensure that the every student in our country has access to the best quality higher education at the affordable cost.
- Academicians from hundreds of institutions throughout the country are involved in developing & delivering MOOCs through SWAYAM in almost all disciplines from senior schooling to Post Graduation wherein it is intended to develop world class content.
- Swayam portal is World's Largest Online Free E-Learning Platform Portal designed to achieve the three cardinal principles of Education Policy viz., Access, Equity and Quality by covering School/Vocational, Under-Graduate, Post Graduate, Engineering and Other Professional Courses.
- It is developed by the Ministry of Human Resource Development (MHRD) Hence statement 1 is correct.
- Objective: Taking best teaching learning resources to all, including the most disadvantaged by bridging the digital divide of students who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy
- Annual Refresher Programme In Teaching (ARPIT) is a major and unique initiative of online professional development of 1.5 million higher education faculty using platform SWAYAM. Hence statement 3 is correct.

**60.** Consider the following statements about Kathak

- 1) Kathak as a dance form evolved during the Bhakti movement and is now one of the classical dances.
- 2) Kathak incorporates Folk dance and themes of Radha Krishna enacted into plays called Ras lila.
- 3) It has two major Gharanas- one in Lucknow and the other in Hyderabad.

Which of the statements given above is/are correct?

- A:) 1 and 2 only  
 B:) 2 and 3 only  
 C:) 1 and 3 only  
 D:) 1,2 and 3

Answer A

Explanation

- The kathaks were originally a caste of story-tellers in temples of north India, who embellished their performances with gestures and songs.
- Kathak began evolving into a distinct mode of dance in the fifteenth and sixteenth centuries with the spread of the bhakti movement.
- The legends of Radha-Krishna were enacted in folk plays called rasa lila, which combined folk dance with the basic gestures of the kathak story-tellers. Statements 1 and 2 are correct.
- It developed in two traditions or gharanas: one in the courts of Rajasthan (Jaipur) and the other in Lucknow. Under the patronage of Wajid Ali Shah, the last Nawab of Awadh, it grew into a major art form. Statement 3 is incorrect. Emphasis was laid on intricate and rapid footwork, elaborate costumes, as well as on the enactment of stories. The Dance form survived and continued to be performed by courtesans, and was recognised as one of six “classical” forms of dance in the country after independence.

**61.** Consider the following pairs of festivals and the states in which they are celebrated

- | List I                     | List II          |
|----------------------------|------------------|
| 1) Bhogali Bihu            | - Assam          |
| 2) Makaravilakku festival- | Kerala           |
| 3) Lokrang                 | - Madhya Pradesh |
| 4) Nongkrem                | - Meghalaya      |

Which of the pairs given above is/are correctly matched?

- A:) 1 and 2 only
- B:) 2 and 3 only
- C:) 1,3 and 4 only
- D:) 1,2,3 and 4

Answer: D

Explanation:

- Bhogali Bihu- Bhogali Bihu (mid-January, also called Magh Bihu) comes from the word Bhog that is eating and enjoyment. It is a harvest festival of Assam and marks the end of harvesting season. Since the granaries are full, there is a lot of feasting and eating during this period. On the eve of the day called uruka, i.e., the last day of pausa, menfolk, more particularly young

men go to the field, preferably near a river, build a makeshift cottage called Bhelaghar with the hay of the harvest fields and the bonfire or Meji, the most important thing for the night.

- Lokrang festival - The Lokrang festival of Madhya Pradesh which commences on the republic day 26<sup>th</sup> January every year is a five-day long festival of Lokrang, Bhopal. The major features of this festival are classical dances, tribal and folk dances, presentation and exhibition of art and craft, performing art form, and cultural presentations from foreign countries. Since India is a land of diversities, with each state having its own background and cultural heritages, the Lokrang festival attempts to speculate each of these.
- Nongkrem Dance Festival- Nongkrem Dance Festival is celebrated by the indigenous Khasi tribe of Meghalaya. Prayers are offered for a good harvest, peace and prosperity. 'Goat sacrifice' also forms an important part of the customs. Five days long religious festival devoted to appeasing the Goddess Ka Blei Synshar for a rich bumper harvest and prosperity of the people.
- Makaravilakku is an annual festival held on Makar Sankranti in Kerala, India at the shrine of Sabarimala. The festival includes the Thiruvabharanam procession and a congregation at the hill shrine of Sabarimala.

**62.** Consider the following statements about millimeter wave band

- 1) Millimetre Wave band or mmWave is a particular segment of radio frequency spectrum that ranges between 24 GHz and 100 GHz.
- 2) This spectrum has a long wavelength, and is apt to deliver greater speeds and lower latencies.

Which of the statements given above is/are correct?

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

Answer: A

Explanation

What is a millimeter Wave band?

- Statement 1 is correct and statement 2 is incorrect: Millimetre Wave band or mmWave is a particular segment of radio frequency spectrum that ranges between 24 GHz and 100 GHz. This spectrum, as the name suggests, has a short wavelength, and is apt to deliver greater speeds and lower latencies.
- This in turn makes data transfer efficient and seamless as the current available networks work optimally only on lower frequency bandwidths.
- 5G services can be deployed using lower frequency bands. They can cover greater distances and are proven to work efficiently even in urban environments, which are prone to interference. But, when it comes to data speeds, these bands fail to hit peak potential needed for a true 5G experience. So, mmWave is an important piece in the 5G jigsaw puzzle for mobile service providers.

Why in News?

- The Satcom Industry Association-India (SIA), An industry body that represents interests of the communication satellite ecosystem in India has voiced concerns over the Government's plan to include the mmWave bands in the 5G spectrum auction.

**63.** Consider the following statements about Chips to Startup (C2S) Programme

- 1) The Chips to Startup (C2S) Programme aims to train 85,000 numbers of high-quality and qualified engineers in the area of Very large-scale integration (VLSI) and Embedded System Design over a period of 5 years.
- 2) C-DAC (Centre for Development of Advanced Computing) under the Ministry of Electronics and Information Technology will serve as the nodal agency for the programme.

Which of the statements given above is/are correct?

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

Answer: C

Explanation

- In line with Prime Minister Narendra Modi's plan to transform India into the next semiconductor hub, the Ministry of Electronics and Information (MeitY) has sought

applications from 100 academia, R&D organisations, start-ups and MSMEs under its Chips to Startup (C2S) Programme.

- Statement 1 is correct: The Chips to Startup (C2S) Programme aims to train 85,000 number of high-quality and qualified engineers in the area of Very large-scale integration (VLSI) and Embedded System Design as well as result in development of 175 ASICs (Application Specific Integrated Circuits), Working Prototypes of 20 System on Chips (SoC) and IP Core repository over a period of 5 years.
- This will be a step towards leapfrogging in the Electronics System Design & Manufacturing (ESDM) space by way of inculcating the culture of SoC/ System Level Design at Bachelors, Masters and Research level and act as a catalyst for growth of Start-ups involved in fabless design.
- Statement 2 is correct: C-DAC (Centre for Development of Advanced Computing), a scientific society operating under MeitY, will serve as the nodal agency for the programme.
- The programme would be implemented at about 100 academic institutions/R&D organisations across the Country (including IITs, NITs, IIITs, Government/Private Colleges and R&D Organisations). Startups and MSMEs can also participate in the programme by submitting their proposals under Academia- Industry Collaborative Project, Grand Challenge/ /Hackathons/RFP for development of System/SoC/IP Core(s).
- The C2S Programme addresses each entity of the value chain in electronics viz. quality manpower training, research and development, hardware IPs design, System design, application-oriented R&D, Prototype design and deployment with the help of academia, industry, start-ups and R&D establishments.
- Under the Programme, based on the Institutions' expertise, Technology Readiness Level (TRL) and design experience acquired during earlier SMDP Programmes, proposals are invited in three different categories, i.e., Design and Development of Systems/SoCs/ASICs/Reusable IP Core(s), Development of Application Oriented Working Prototype of IPs/ASICs/SoCs, and Proof of Concept oriented Research and Development of ASICs/FPGAs.

**64.** Consider the following statements about the 5G technology.

1. 5G uses the Massive MIMO technology that uses multiple targeted beams to spotlight and follow users around a cell site, improving coverage, speed and capacity.

2. The 5G network signals do not travel very far and struggle to move through hard surfaces.

Which of the statements given above is/are correct?

A:) 1 only

B:) 2 only

C:) Both 1 and 2

D:) Neither 1 nor 2

Answer: C

Explanation:

- 5G or fifth generation is the latest upgrade in the long-term evolution (LTE) mobile broadband networks.
- Statement 1 is correct: 5G uses a new digital technology called Massive MIMO, which stands for multiple input multiple output, that uses multiple targeted beams to spotlight and follow users around a cell site, improving coverage, speed and capacity.
- The three major benefits offered by 5G are higher speeds, higher bandwidth and lower latency.

Speed

- Speed is one of the most highly anticipated elements of the 5G network which is expected to be nearly 100 times faster than 4G.
- Such high speeds are possible because most 5G networks are to be built on super-high-frequency airwaves, also known as high-band spectrum.
- The higher frequencies can transmit much more data, much faster than on 4G.

Capacity

- The 5G network is expected to have significantly more capacity than 4G.
- This is because 5G will have greater bandwidth, meaning it can handle many more connected devices than previous networks.
- It will bring in an "internet of things" era, filled with connected toothbrushes, kitchen appliances, street lamps and more.

Latency

- Latency is the time it takes for devices to communicate with each other or with the server that's sending them information.
- Latency is already low with 4G, but 5G will make it virtually zero.
- It will be essential for technologies such as self-driving cars which require instant communication of huge data to ensure safety of its passengers.

How is latency different from speed?

- A small but significant difference exists between speed and latency.
- Speed is the amount of time it takes to download the contents of a webpage.
- Latency is the time between when a text is sent to another phone and when that receiver's phone registers that it has received a new message.

Are there any drawbacks?

- Statement 2 is correct: The high-band network signals don't travel very far and struggle to move through hard surfaces.
- In order to compensate for those challenges, wireless carriers building high-band 5G networks are installing tons of small cell sites (about the size of pizza boxes) to light poles, walls or towers, often in relatively small proximity to one another. For that reason, most carriers are deploying 5G city by city.
- Significant adoption of 5G is going to take years — industry trade group GSMA estimates that by 2025, around half of mobile connections will be 5G (the rest will be older tech, like 4G and 3G).
- There are also concerns among regulators and others about the security of 5G, especially since crucial technologies such as self-driving cars and healthcare systems will be built on top of the network.

AS ACADEMY

|   |               | 3G                   | 4G                 | 5G               |
|---|---------------|----------------------|--------------------|------------------|
|  | Deployment    | 2004-05              | 2006-10            | 2020             |
|  | Bandwidth     | 2mbps                | 200mbps            | >1gbps           |
|  | Latency       | 100-500 milliseconds | 20-30 milliseconds | <10 milliseconds |
|  | Average Speed | 144 kbps             | 25 mbps            | 200-400 mbps     |

65. Which of the following pairs is incorrectly matched?

- A:) Meteoroids- A small piece of rocks moving in the solar system that would become a meteor if it entered the earth's atmosphere.
- B:) Satellite- A celestial body that moves around the planets in the same way as the planets move around the sun.
- C:) Asteroid-Tiny bodies which move around the sun between the orbits of Mars and Jupiter.
- D:) None of the above

Answer: D

Explanation

- A Satellite is a celestial body that moves around the planets in the same way as the planets move around the sun
- Apart from the stars, planets and satellites, there are numerous tiny bodies which also move around the sun. These bodies are called asteroids. They are found between the orbits of Mars and Jupiter
- The small pieces of rocks which move around the sun are called meteoroids. Sometimes these meteoroids come near the earth and tend to drop upon it. During this process due to friction with the air they get heated up and burn causing a flash of light known as Meteor. But if a meteoroid enters the Earth's atmosphere and hits the ground, it is called a meteorite.

66. Consider the following pairs with respect to Nuclear power plants in India and the states they are located

LIST I

LIST II

- |              |   |               |
|--------------|---|---------------|
| 1. Narora    | - | Rajasthan     |
| 2. Tarapur   | - | Maharashtra   |
| 3. Kaiga     | - | Uttar Pradesh |
| 4. Kalpakkam | - | Tamil Nadu    |

Which of the above given pairs is/are correctly matched?

- A:) 1 and 4 only  
B:) 2, 3 and 4 only  
C:) 4 only  
D:) 2 and 4 only

Answer : D

Explanation

- Nuclear power is obtained from energy stored in the nuclei of atoms of naturally occurring radio active elements like uranium and thorium.
- These fuels undergo nuclear fission in nuclear reactors and emit power. The greatest producers of nuclear power are USA and Europe.
- The nuclear power stations in India are located in
  - Kalpakkam in Tamilnadu
  - Tarapur in Maharashtra
  - Ranapratap Sagar near Kota in Rajasthan
  - Narora in Uttar Pradesh and
  - Kaiga in Karnataka.

67. Consider the following statements about the National Commission for Protection of Child Rights (NCPCR).

1. It is a constitutional body.
2. The commission is mandated to monitor the implementation of the Protection of Children from Sexual Offences (POCSO) Act.

Which of the statements given above is/are correct?

A:) 1 only

B:) 2 only

C:) Both 1 and 2

D:) Neither 1 nor 2

Answer: B

Explanation

- Statement 1 is incorrect: The National Commission for Protection of Child Rights (NCPCR) is a statutory body established under the Commission for Protection of Child Rights Act, 2005.
- The commission works under the aegis of the Ministry of Women and Child development.
- Statement 2 is correct: NCPCR is mandated to function for the protection and promotion of child rights. It is also mandated to monitor the implementation of the Protection of Children from Sexual Offences (POCSO) Act.
- The Commission may inquire into complaints and take *suo motu* notice of matters relating to-
  - Deprivation and violation of child rights;
  - Non-implementation of laws providing for protection and development of children;
  - Non-compliance of policy decisions, guidelines or instructions aimed at mitigating hardships to and ensuring welfare of the children and to provide relief to such children;

Constitution

- The commission consist of the following members namely:-
  - A chairperson who, is a person of eminence and has done a outstanding work for promoting the welfare of children; and
  - Six members, out of which at least two are women, are appointed by the Central Government from amongst persons of eminence, ability, integrity, standing and experience in Education; Child health, care or related fields.

**68.** Consider the following statements regarding the provisions of Epidemic Diseases Act of 1897

1. It empowers state governments/UTs to take special measures for containing the outbreak of diseases
2. The act empowers only the Central government to prescribe regulations to be observed by the public as it paves way for uniform regulations throughout the country

3. It gives legal protection to the implementing officers acting under the Act

Which of the statements given above is/are correct?

A:) 3 only

B:) 1 and 3 only

C:) 2 and 3 only

D:) 1, 2 and 3

Answer : B

Explanation

Epidemic Diseases Act of 1897

- It is routinely enforced across the country for dealing with outbreaks of diseases such as swine flu, dengue, and cholera. It was introduced by colonial government to tackle the epidemic of bubonic plague that had spread in the erstwhile Bombay Presidency in the 1890s
- Historians have criticised the Act for its potential for abuse. Using powers conferred by the Act, colonies authorities would search suspected plague cases in homes and among passengers, with forcible segregations, evacuations, and demolitions of infected places.
- In 1897, the year the law was enforced, freedom fighter Bal Gangadhar Tilak was punished with 18 months rigorous imprisonment after his newspapers Kesari and Mahratta admonished imperial authorities for their handling of the plague epidemic

Provisions of the 1897 Epidemic Diseases Act

- Statement 1 is correct: It empowers state governments/UTs to take special measures and formulate regulations for containing the outbreak.
- Statement 2 is incorrect: It also empowers state to prescribe such temporary regulations to be observed by the public or by any person or class of persons as it shall deem necessary to prevent the outbreak of such disease or the spread thereof
- The state may determine in what manner and by whom any expenses incurred (including compensation if any) shall be defrayed.
- The State Government may take measures and prescribe regulations for the inspection of persons travelling by railway or otherwise, and the segregation, in hospital, temporary accommodation or otherwise, of persons suspected by the inspecting officer of being infected with any such disease.

- It also provides penalties for disobeying any regulation or order made under the Act. These are according to section 188 of the Indian Penal Code (Disobedience to order duly promulgated by public servant).
- Statement 3 is correct: It also gives legal protection to the implementing officers acting under the Act.

**69.** Consider the following statements about rare earth elements (REE).

1. REE are a set of seventeen metallic elements.
2. They are found in very little quantities in Earth's crust, hence named rare earth elements.
3. India has the world's fifth-largest reserves of rare earth elements.

Which of the statements given above is/are correct?

- A:) 1 and 2 only
- B:) 2 and 3 only
- C:) 1 and 3 only
- D:) 1, 2 and 3

Answer: C

Explanation:

- Statement 1 is correct: The rare earth elements (REE) are a set of seventeen metallic elements. They are called 'rare earth' because earlier it was difficult to extract them from their oxides forms technologically.
- They are an essential part of many high-tech devices. The 17 Rare Earths are cerium (Ce), dysprosium (Dy), erbium (Er), europium (Eu), gadolinium (Gd), holmium (Ho), lanthanum (La), lutetium (Lu), neodymium (Nd), praseodymium (Pr), promethium (Pm), samarium (Sm), scandium (Sc), terbium (Tb), thulium (Tm), ytterbium (Yb), and yttrium (Y).
- Statement 2 is incorrect: Despite their name, rare-earth elements are not rare. All the metals except radioactive promethium are actually more abundant in Earth's crust than silver, gold, and platinum.

Why are they important?

- These elements are important in technologies of consumer electronics, computers and networks, communications, clean energy, advanced transportation, healthcare, environmental mitigation, and national defence, among others.

- Rare earth minerals are crucial to the manufacture of magnets used in industries of the future, such as wind turbines and electric cars.
- REEs are needed in high-temperature superconductivity, safe storage and transport of hydrogen for a post-hydrocarbon economy, reduce sulphur oxide emissions and hence it has abundant value.
- According to the Rare Earth Technology Alliance (RETA), the estimated size of the Rare Earth sector is between \$10 billion and \$15 billion. About 100,000-110,000 tonnes of Rare Earth elements are produced annually around the world.

Who is the top producer?

- China has over time acquired global domination of rare earths. At one point, China produced 90 per cent of the rare earths the world needs.
- Today, however, it has come down to 60 per cent. The remaining is produced by other countries.

What is India's position?

- Statement 3 is correct: India has the world's fifth-largest reserves of rare earth elements, but it imports most of its rare earth needs in finished form from China.
- With adjustments to the existing policy, India could emerge as a rare earths supplier to the world and use these resources to power a high-end manufacturing economy.

India's Current Policy on Rare Earths

- India has granted government corporations such as Indian Rare Earths Limited (IREL) a monopoly over the primary mineral that contains REEs: monazite beach sand, found in many coastal states.
- IREL produces rare earth oxides (low-cost, low-reward "upstream processes"), selling these to foreign firms that extract the metals and manufacture end products (high-cost, high-reward "downstream processes") elsewhere.

**70.** 'Ghoomar' is the traditional folk dance prevalent in which of the following state?

- A:) Karnataka
- B:) Rajasthan
- C:) Gujarat
- D:) Uttar Pradesh

Answer: B

Explanation

- Ghoomar is a traditional folk dance of Rajasthan. It was Bhil tribe who performed it to worship Goddess Sarasvati which was later embraced by other Rajasthani communities. The dance is chiefly performed by veiled women who wear flowing dresses called ghaghara
- Ghoomar is performed by women in colourful swirling ghagharas. The beauty of this dance is in the stunning pirouetting which go on to reveal the various gorgeous colours of the swirling skirts. The steps of a Ghoomar dance are carefully measured, and paired with graceful inclination
- The women also clap and snap their fingers while dancing, at particular parts during the song. The dance is performed in honour of the Goddess Saraswati, the Goddess of wealth.

71. Consider the following statements regarding the Enforcement Directorate

1. It is mandated with the task of enforcing the provisions of Prevention of Money Laundering Act, 2002 (PMLA).
  2. The administrative control of the Directorate is under the Ministry of Home affairs
- Which of the statements given above is/are correct?

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

Answer: A

Explanation

- Statement 1 is correct: It is a Multi Disciplinary Organization mandated with the task of enforcing the provisions of two special fiscal laws – Foreign Exchange Management Act, 1999 (FEMA) and Prevention of Money Laundering Act, 2002 (PMLA)
- The origin of this Directorate goes back to 1st May, 1956, when an ‘Enforcement Unit’ was formed, in Department of Economic Affairs, for handling Exchange Control Laws violations under Foreign Exchange Regulation Act, 1947

- Statement 2 is incorrect: The administrative control of the Directorate was transferred from Department of Economic Affairs to Department of Revenue, Ministry of Finance (not Home ministry) in 1960 Functions
- Processing cases of fugitives from India under Fugitive Economic Offenders Act, 2018.
- Sponsor cases of preventive detention under Conservation of Foreign Exchange and Prevention of Smuggling Activities Act, 1974(COFEPOSA) in regard to contraventions of FEMA

The Directorate enforces two laws

- FEMA, a Civil Law having quasi judicial powers, for investigating suspected contraventions of the Exchange Control Laws and Regulations with the powers to impose penalties on those adjudged guilty
- PMLA, a Criminal Law whereby the Officers are empowered to conduct enquiries to locate, provisionally attach/confiscate assets derived from acts of Schedules Offences besides arresting and prosecuting the Money Launderers.

**72.** Consider the following statements about the Monetary Policy Committee (MPC).

1. It is a 6-member body entrusted with the task of fixing policy interest rate required to achieve the inflation target.
2. The decisions of MPC are taken by simple majority.
3. It is headed by the Finance Minister who enjoys a casting vote.

Which of the statements given above is/are correct?

- A:) 1, 2 and 3
- B:) 1 only
- C:) 1 and 2 only
- D:) 2 and 3 only

Answer: C

Explanation:

About MPC

- Statement 1 is correct: The Monetary Policy Committee (MPC) is a committee of the RBI, headed by its Governor, which is entrusted with the task of fixing the benchmark policy interest rate (repo rate) to contain inflation within the specified target level.

- The MPC has six members
- RBI Governor (Chairperson), RBI Deputy Governor in charge of monetary policy, one official nominated by the RBI Board and remaining 3 members would represent the Government.
- Statement 2 is correct: The MPC takes decisions based on majority vote.
- Statement 3 is incorrect: In case of a tie, the RBI governor will have a second or casting vote.

73. Which of the following pairs is/are correctly matched?

Ethnic communities- Region associated

- 1) Ahmadians - Pakistans
- 2) Kurds - Turkey
- 3) Houthis- Yemen
- 4) Uyghurs- China

Select the correct answer using the codes given below

- A:) 1 and 2 only
- B:) 1,2 and 3 only
- C:) 2 and 3 only
- D:) 1,2,3 and 4

Answer: D

Explanation:

Ahmadians

- There are an estimated 10 million Ahmadis around the world, living in more than 200 countries.
- Of this, about 40 lakh live in Pakistan and 1.5 lakh in India.
- Ahmadis from Pakistan have steadily moved to the West, fleeing persecution, seeking refuge in countries such as the UK, Germany and Canada.

Khurds

- Iranian ethnic group native to a mountainous region of Western Asia known as Kurdistan, which spans southeastern Turkey, northwestern Iran, northern Iraq, and northern Syria.
- About 20 million Kurds, a quarter of Turkey's population live in the underdeveloped south-east. By subsuming Kurdish sub-national identity, Turkish nationalism resulted in politico-economic discontent among Kurds.

- It fuelled a Kurdish insurgency led by the Kurdistan Workers' Party (PKK), which Turkey calls a terrorist organisation.
- Although most Kurds have conformed to their respective nationalities, aspiration for a unified homeland, Kurdistan, remains.

#### Houthis

- The Houthi movement, named after the family it is associated with, emerged from Yemen's northern province Saada.



- Saudi Arabia backed Yemeni government and Houthis supported by Iran has been locked in an increasingly complex war.

#### Uyghurs

- Uyghurs (or Uighurs, Uygurs) are ethnically and culturally a Turkic people living in the areas of Central Asia commonly known as East Turkistan.
- The largest population live in China's autonomous Xinjiang region, in the country's north-west.
- Today, Uyghurs practice a moderate form of Islam and lead predominantly secular lives.
- There are an estimated 20 million Uyghurs living in East Turkistan and abroad, though Chinese sources put the number at 11.65 million.
- Under decades of repressive rule, the existence of the Uyghur nation is under threat as the Chinese government continues to carry out deliberate policies opposing centuries-old tradition, culture & religion.

74. The United Arab Emirates(UAE) is not bordered by which of the following countries?

- A:) Oman
- B:) Saudi Arabia
- C:) Iran
- D:) All the above

Answer: C

Explanation

- The United Arab Emirates (UAE) is a federation of seven states: Abu Dhabi, Dubai, Sharjah, Umm al-Qaiwain, Fujairah, Ajman and Ra's al-Khaimah.
- Four-fifths of the UAE is desert.
- Each emirate is governed by a ruler; together, they jointly form the Federal Supreme Council. One of the rulers serves as the President of the UAE.
- The UAE also has the distinction of hosting the largest number of Indian migrants at 3.31 million.



**75.** Consider the following statements about National Commission for Women

- 1) It was set up in 2020 by an executive resolution of the Government of India.
- 2) One of the objectives of the commission is to review the Constitutional and Legal safeguards for women.

Which of the statements given above is/are correct?

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

Answer: B

Explanation

- Statement 1 is incorrect: The National Commission for Women was set up as a statutory body in January 1992 under the National Commission for Women Act, 1990.
- Statement 2 is correct: The objective of the commission is to
  - review the Constitutional and Legal safeguards for women ;
  - recommend remedial legislative measures ;
  - facilitate redressal of grievances and
  - advise the Government on all policy matters affecting women.

**76.** Consider the following statements about National Commission for Safai Karamcharis

- 1) It is a constitutional body under the Ministry of Social Justice and Empowerment.
- 2) It has the authority to examine complaints and welfare measures regarding socially and educationally backward classes.

Which of the statements given above is/are correct?

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

Answer: C

Explanation

- Both the statements are incorrect: The National Commission for Safai Karamcharis (NCSK) was established in 1993 as per the provisions of the National Commission for Safai Karamcharis Act, 1993, initially for the period upto March 31,1997. Later the validity of the Act was extended for five years and then again for two years i.e up to February 29, 2004.
- After that it was lapsed and the tenure of the commission was extended as a non-statutory body under the Ministry of Social Justice and Empowerment. The tenure of the Commission was being extended from time to time through government resolutions. The present tenure is valid upto March 31, 2022.
- The major beneficiaries under the commission are the Safai Karamcharis and identified manual scavengers in the country. According to the government data, there were 58,098 manual scavengers identified in the country as on December 31, 2021.
- *Safai Karamchari means a person engaged in, or employed for any sanitation work and includes his/her dependents.*

#### Functions

- The NCSK has been giving its recommendations to the Government regarding specific programmes for welfare of Safai Karamcharis, study and evaluate the existing welfare programmes for Safai Karamcharis, investigate cases of specific grievances etc.
- Also as per the provisions of the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013, the NCSK has been assigned the work to monitor the implementation of the Act, tender advice for its effective implementation to the Centre and State Governments and enquire into complaints regarding contravention/non-implementation of the provisions of the Act.

#### Why in News?

- The union cabinet has approved the extension of the National Commission for Safai Karamcharis (NCSK) for three years with effect from April 1, 2022.

#### Significance

- Though the Government has taken many steps for the upliftment of the Safai Karamcharis, the deprivation suffered by them in socio-economic and educational terms is still far from being eliminated.

- Although manual scavenging has been almost eradicated, sporadic instances do occur. Hazardous cleaning of sewer/septic tanks continues to be an area of the highest priority for the Government.
- Hence, the Government feels that there is a continued need to monitor the various interventions and initiatives of the Government for welfare of Safai Karamcharis and to achieve the goal of complete mechanization of sewer/septic tanks cleaning in the country and rehabilitation of manual scavengers.

77. Consider the following statements about Indian Renewable Energy Development Agency (IREDA)

- 1) It engages in extending financial assistance for setting up projects relating to new and renewable sources of energy and energy efficiency/conservation.
- 2) It is a Government of India Enterprise under the administrative control of the 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

Answer: A

Explanation

- Indian Renewable Energy Development Agency Limited (IREDA) is a Government of India Enterprise under the administrative control of Ministry of New and Renewable Energy (MNRE).
- IREDA was established as a Non-Banking Financial Institution in 1987.
- It engages in promoting, developing and extending financial assistance for setting up projects relating to new and renewable sources of energy and energy efficiency/conservation.

Why in News?

- The Cabinet Committee on Economic Affairs, chaired by the Prime Minister Narendra Modi has approved the equity infusion of Rs.1500 crore in Indian Renewable Energy Development Agency Limited.

- This equity infusion will help in employment generation of approximately 10200 jobs-year and CO2 equivalent emission reduction of approximately 7.49 Million Tonnes CO2/year.
- Additional equity infusion will enable IREDA to enhance its network which will help it in additional Renewable Energy financing, thus contributing better to the Government of India targets for Renewable Energy.

**78.** Consider the following statements about

Pradhan Mantri Gram Sadak Yojana

- 1) The spirit and the objective of the scheme is to provide good all-weather road connectivity to unconnected Habitations.
- 2) The PMGSY shall cover only the rural areas.

Which of the statements given above is/are correct?

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

Answer: C

Explanation

- The Pradhan Mantri Gram Sadak Yojana (PMGSY), was launched in 2000 as centrally sponsored scheme to provide connectivity to unconnected habitations of designated population size (500+ in plain areas and 250+ in North-East, hill, tribal and desert areas as per Census, 2001) as part of a poverty reduction strategy.
- The Ministry of Rural Development along with state governments is responsible for the implementation of PMGSY.
- Phase III of PMGSY was approved by the Union Cabinet in 2019. It involves the consolidation of Through Routes and Major Rural Links connecting habitations to Gramin Agricultural Markets (GrAMs), Higher Secondary Schools and Hospitals.

Guiding Principles of PMGSY

- Statement 1 is correct: The spirit and the objective of the scheme is to provide good all-weather road connectivity to unconnected Habitations. A habitation which was earlier

provided all-weather connectivity would not be eligible even if the present condition of the road is bad.

- The unit for this Programme is a Habitation and not a Revenue village or a Panchayat. A Habitation is a cluster of population, living in an area, the location of which does not change over time.
- Statement 2 is correct: The PMGSY shall cover only the rural areas. Urban roads are excluded from the purview of this Programme.

Funding pattern

- The Union Government bears 90% of the project cost in respect of projects sanctioned under the scheme in North-Eastern and Himalayan States, whereas for other states the Union Government bears 60% of the cost.

Initiatives related to PMGSY

- Road Connectivity Project for Left Wing Extremism affected Areas (RCPLWEA): It was launched in 2016 as a separate vertical under PMGSY to provide all-weather road connectivity with necessary culverts and cross-drainage structures in 44 districts (35 are worst LWE affected districts and 09 are adjoining districts), which are critical from security and communication point of view.
- Meri Sadak mobile app: It was launched to enable citizens to register complaints regarding the quality and pace of construction of PMGSY roads.

Why in News?

- The Ministry of Rural Development conducted a nationwide review of the Pradhan Mantri Gram Sadak Yojana.

**79.** Consider the following statements about National Disaster Response Force

- 1) The National Disaster Management Authority (NDMA) is the parent body of National Disaster Response Force.
- 2) The role of the NDRF is disaster management and community awareness for Disaster Risk Reduction (DRR) in India.

Which of the statements given above is/are incorrect?

A:) 1 only

B:) 2 only

C:) Both 1 and 2

D:) Neither 1 nor 2

Answer: D

Explanation

What's in the news?

- The National Disaster Response Force (NDRF) Raising Day was marked on January 19. The NDRF was formed on this day in 2006.

About NDRF

- The National Disaster Response Force is a specialised, multi-skilled, humanitarian force in India, which has been playing a crucial role in the country's disaster management and community awareness for Disaster Risk Reduction (DRR).

Formation

- The successive natural calamities from 1990 to 2004 led to the enactment of the Disaster Management Act on December 26, 2005. The result was the formation of the National Disaster Response Force. This was set up to lay down the plans, policies, and guidelines for disaster management.

Structure

- Statement 1 is correct: The National Disaster Management Authority (NDMA) is the parent body of NDRF, which currently consists of 15 battalions from the Border Security Force (BSF), Central Reserve Police Force (CRPF), Central Industrial Security Force (CISF), Indo Tibetan Border Police (ITBP), Sashastra Seema Bal (SSB) and Assam Rifles.
- With more than 13,000 personnel, the battalions of the NDRF have been equipped to respond to natural as well as man-made disasters. They are also trained to respond during chemical, biological, radiological and nuclear (CBRN) emergencies.

Roles

- Statement 2 is correct: The role of the NDRF is disaster management and community awareness for Disaster Risk Reduction (DRR) in India.
- The personnel in NDRF are trained in flood rescue, rope rescue, collapsed structure search and rescue, and other activities to support people during any calamities.

80. Consider the following pairs of regions sometimes mentioned in news vs country:

1. Yongbyon: North Korea
2. Davos: Switzerland
3. Kulhudhuffushi : Sri Lanka

Which of the pairs given above are correctly matched ?

- A:) 1, 2 and 3  
B:) 2 and 3 only  
C:) 2 only  
D:) 1 and 2 only

Answer: D

Explanation:

- Yongbyon is a city of nuclear reactor site in North Korea, which is predicted to produce

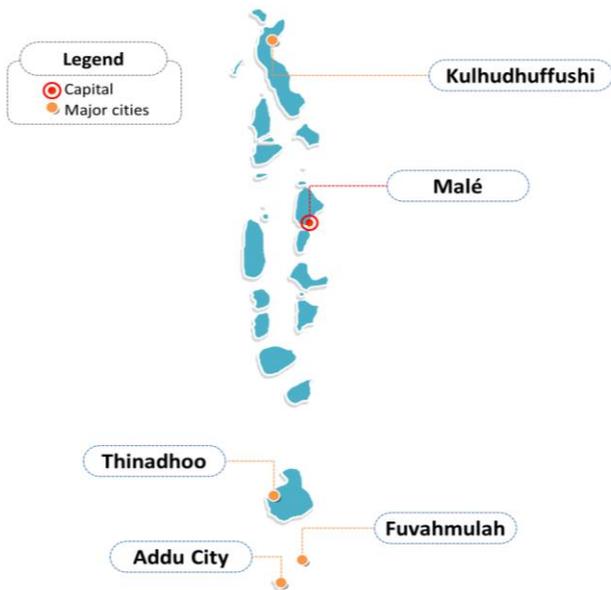


material for nuclear arms.

- Davos is a city in Switzerland which hosts the World Economic Forum annual meetings.



- Kulhudhuffushi is an atoll in the Maldives (not in Sri Lanka).



81. Kaziranga national park is located in which of the following states?

- A:) Assam
- B:) Arunachal pradesh
- C:) Nagaland
- D:) Tripura

Answer: A

Explanation:



What's the news?

- According to a survey, the population of the vulnerable eastern swamp deer, extinct elsewhere in South Asia, has dipped in the Kaziranga National Park and Tiger Reserve.

About Kaziranga National Park

- Formed in 1908 on the recommendation of Mary Curzon (wife of Lord Curzon), the Kaziranga national park is located in Assam.
- In 1985, the park was declared as a World Heritage Site by UNESCO.
- Kaziranga was declared as Tiger Reserve in 2006 and it is also recognised as an Important Bird Area by Birdlife International for conservation of avifaunal organisms.
- In the park one can see four types of vegetation like alluvial inundated grasslands, alluvial savanna woodlands, tropical moist mixed deciduous forests, and tropical semi-evergreen forests.
- The park is famous for its One-horned Rhinoceros; about 2200 rhinoceros exist in this park, which is half of the world's one-horned rhino population.
- The park also harbors significant populations of other threatened species including tigers, elephants, wild water buffalo and bears as well as aquatic species including the Ganges River dolphin.
- River Brahmaputra flows adjacent to the park. River fluctuations by the Brahmaputra system result in spectacular examples of riverine and fluvial processes.

**82.** With reference to the India Meteorological Department (IMD), consider the following statements.

1. It is the National Meteorological Service of the country and the principal government agency in all matters relating to meteorology, seismology and allied subjects.
2. MAUSAM mobile app is an initiative of the IMD to provide seamless and user-friendly access to different weather products.

Which of the statements given above is/are correct?

A:) 1 only

B:) 2 only

C:) Both 1 and 2

D:) Neither 1 nor 2

Answer: C

Explanation:

- Statement 1 is correct: The India Meteorological Department (IMD) was established in 1875. It is the National Meteorological Service of the country and the principal government agency in all matters relating to meteorology, seismology and allied subjects.
- It is an agency of the Ministry of Earth Sciences.
- IMD is headquartered in Delhi and operates hundreds of observation stations across India and Antarctica. Regional offices are at Mumbai, Kolkata, Nagpur and Pune.
- IMD is also one of the six Regional Specialised Meteorological Centers of the World Meteorological Organization.

Main Functions of IMD

- To take meteorological observations and to provide current and forecast meteorological information for optimum operation of weather-sensitive activities like agriculture, irrigation, shipping, aviation, offshore oil explorations, etc.
- To warn against severe weather phenomena like tropical cyclones, norwesters, dust storms, heavy rains and snow, cold and heat waves, etc., which cause destruction of life and property.
- To provide meteorological statistics required for agriculture, water resource management, industries, oil exploration and other nation-building activities.
- To conduct and promote research in meteorology and allied disciplines.
- To detect and locate earthquakes and to evaluate seismicity in different parts of the country for development projects.

Various mobile apps launched by IMD

Damini for lightning forecast

- Damini Lightning Alert app, developed by the Indian Institute of Tropical Meteorology (IITM), is for giving warning to the user about the lightning on the basis of user location.

MAUSAM for weather forecast

- Statement 2 is correct: The MAUSAM mobile App, designed and developed jointly by the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), IITM and IMD, has the following 5 services:

- Current Weather: Current temperature, humidity, wind speed and direction for 200 cities updated 8 times a day. Information on Sunrise/ sunset and moonrise/ moonset are also given.
- Nowcast: Three hourly warnings of localized weather phenomena and their intensity issued for about 800 stations, and districts of India by State Meteorological Centres of IMD. In case of severe weather, its impact also is included in the warning.
- City Forecast: Past 24 hours and 7 day forecast of weather conditions around 450 cities in India.
- Warnings: Alerts issued twice a day for all districts for the next five days in colour code (Red, Orange and Yellow) to warn citizens of approaching dangerous weather. The colour code Red is the most severe category urging authorities to take action, Orange code prompts authorities and public to be alert and Yellow code prompts authorities and public to keep them updated.
- Radar products: Latest Station wise radar products updated every 10 minutes.  
Meghdoot for agrometeorological advisories
- The Meghdoot app is a joint initiative of the IMD and IITM and the Indian Council of Agricultural Research (ICAR).
- It provides forecasts relating to temperature, rainfall, humidity, and wind speed and direction, which play critical roles in agricultural operations and advisories to the farmers on how to take care of their crops and livestock. The information would be updated twice a week on Tuesdays and Fridays.

**83.** Consider the following statements about Swamp Deer or Barasingha

- 1) It is found now only in India.
- 2) Dudhwa National Park has the largest number of barasingha in the country.

Which of the statements given above is/are correct?

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

Answer: B

Explanation



- Swamp deer is the state animal of Uttar Pradesh and Madhya Pradesh.
- The swamp deer differs from all other Indian deer species in that the antlers carry more than three times (spikes). Because of this distinctive character it is designated “bārah-singgā”, meaning "twelve-horned".
- Statement 1 is incorrect: Swamp deer are already extinct in Pakistan and Bangladesh. It is now found only in South- Western Nepal and Central and North-Eastern India.
- There are three subspecies of swamp deer found in the Indian Subcontinent.
  - Western swamp deer (*Rucervus duvaucelii*) found in Nepal,
  - Southern swamp deer (*Rucervus duvaucelii branderi*) found in Central and North India and
  - Eastern swamp deer (*Rucervus duvaucelii ranjitsinhi*) found in the Kaziranga and Dudhwa National Parks.
- Statement 2 is correct: With their numbers estimated at over 3,000, Dudhwa National Park has the largest number of barasingha in the country. They are also found in significant numbers in Kanha National Park in Madhya Pradesh.
- Protection Status: IUCN Red List: Vulnerable; CITES: Appendix I; Wildlife Protection Act (1972): Schedule I.

Conservation Issues

- The swamp deer populations outside protected areas and seasonally migrating populations are threatened by poaching for antlers and meat, which are sold in local markets.
- Swamp deer lost most of its former range because wetlands were converted and used for agriculture so that suitable habitat was reduced to small and isolated fragments.

**84.** Consider the following statements about India State of Forest Report(ISFR)

1) The ISFR is a biennial publication of the Forest Survey of India under the Ministry of Environment, Forests and Climate Change which has been mandated to assess the forest and tree resources of the country.

2) In ISFR 2021, the FSI has for the first time assessed forest cover in tiger reserves, tiger corridors and the Gir forest which houses the Asiatic lion.

Which of the statements given above is/are correct?

A:) 1 only

B:) 2 only

C:) Both 1 and 2

D:) Neither 1 nor 2

Answer: C

Explanation

About India State of Forest Report(ISFR)

- Statement 1 is correct: The ISFR is a biennial publication of the Forest Survey of India under the Ministry of Environment, Forests and Climate Change which has been mandated to assess the forest and tree resources of the country.
- The first survey was published in 1987, and ISFR 2021 is the 17th.
- With data computed through wall-to-wall mapping of India's forest cover through remote sensing techniques, the ISFR is used in planning and formulation of policies in forest management as well as forestry and agroforestry sectors.
- Forest cover is defined as an area more than one hectare in extent and having tree canopy density of 10% and above, irrespective of the species and type of land.
- Tree cover includes land covered by individual trees less than one hectare in extent outside the forests.
- Green cover is a combination of both.

New features of ISFR 2021

- The ISFR-2021 provides information on forest cover, tree cover, mangrove cover, growing stock, carbon stock in India's forests, forest fire monitoring, forest cover in tiger reserve

areas, above ground estimates of biomass using SAR data & climate change hotspots in Indian forests.

- Statement 2 is correct: In ISFR 2021, the FSI has for the first time assessed forest cover in tiger reserves, tiger corridors and the Gir forest which houses the Asiatic lion.
- The forest cover in tiger corridors has increased by 37.15 sq km (0.32%) between 2011-2021, but decreased by 22.6 sq km (0.04%) in tiger reserves.
- Forest cover has increased in 20 tiger reserves in these 10 years, and decreased in 32.
- Eg: Buxa, Anamalai and Indravati reserves have shown an increase in forest cover while the highest losses have been found in Kawal, Bhadra and the Sundarbans reserves.
- Pakke Tiger Reserve in Arunachal Pradesh has the highest forest cover, at nearly 97%.
- A new initiative of FSI has also been documented where the 'Above Ground Biomass' has been estimated. Estimate of Impact of Climate Change
- The report estimates that by 2030, 45-64% of forests in India will experience the effects of climate change and rising temperatures, and forests in all states (except Assam, Meghalaya, Tripura and Nagaland) will be highly vulnerable climate hot spots.
- Ladakh (forest cover 0.1-0.2%) is likely to be the most affected.
- India's forests are already showing shifting trends of vegetation types, such as Sikkim which has shown a shift in its vegetation pattern for 124 endemic species.
- In 2019-20, 1.2 lakh forest fire hotspots were detected by the SNPP\_VIIRS sensor, which increased to 3.4 lakh in 2020-21. The highest numbers of fires were detected in Odisha, Madhya Pradesh and Chhattisgarh.

**85.** As per the India State of Forest Report (ISFR), 2021 which of the following states has the highest forest cover with respect to percentage of its geographical area?

- A:) Mizoram
- B:) Goa
- C:) Sikkim
- D:) Arunachal Pradesh

Answer: A

## Explanation

What's the news?

- According to the 17th India State of Forest Report-2021, Forest and tree cover in the country has increased by 2,261 square kms since the last assessment in 2019.

## Key Findings

- The Environment Ministry highlighted that the total forest and tree cover was 80.9 million hectares, which accounted for 24.62% of the geographical area of the country.
- The report found that there had been a 1,540 sq. km increase in forest cover and 721 sq. km increase in tree cover since the last report in 2019.
- The report states that 17 States and Union Territories had more than 33% of their area under forest cover
- Out of 17 states and UT's, five states/UTs namely Lakshadweep, Mizoram, Andaman & Nicobar Islands, Arunachal Pradesh and Meghalaya have more than 75 percent forest cover while 12 states/UTs namely Manipur, Nagaland, Tripura, Goa, Kerala, Sikkim, Uttarakhand, Chhattisgarh, Dadra & Nagar Haveli and Daman & Diu, Assam, Odisha, have forest cover between 33 percent to 75 percent.
- Total mangrove cover in the country is 4,992 sq km. An increase of 17 sq Km in mangrove cover has been observed as compared to the previous assessment of 2019.
- Top three states showing mangrove cover increase are Odisha (8 sq km) followed by Maharashtra (4 sq km) and Karnataka (3 sq km).
- Total carbon stock in the country's forest is estimated to be 7,204 million tonnes and there is an increase of 79.4 million tonnes in the carbon stock of the country as compared to the last assessment of 2019. The annual increase in the carbon stock is 39.7 million tonnes.
- The survey has found that 35.46 % of the forest cover is prone to forest fires. Out of this, 2.81 % is extremely prone, 7.85% is very highly prone and 11.51 % is highly prone.
- Bamboo forests have grown from 13,882 million culms (stems) in 2019 to 53,336 million culms in 2021.

## Top States

- The report observed an increase in forest cover in open forest followed by very dense forest.
- Top three States showing an increase in forest cover are Andhra Pradesh (647 sq. km) followed by Telangana (632 sq. km) and Odisha (537 sq. km), Karnataka (155 sq km) and Jharkhand (110 sq km.)
- Area-wise Madhya Pradesh had the largest forest cover, followed by Arunachal Pradesh,
- Chhattisgarh, Odisha and Maharashtra.
- The top five States in terms of forest cover as a percentage of their total geographical area were Mizoram (84.53%), Arunachal Pradesh (79.33%), Meghalaya (76%), Manipur (74.34%) and Nagaland (73.90%).

**86.** Consider the following statements about St. Petersburg Tiger Summit

- 1) It was the first global summit to protect tigers from extinction.
- 2) They adopted a Global Tiger Recovery Program with the aim of Tx2- doubling the number of wild Tigers by 2022.
- 3) It also encourages trans-boundary collaboration between countries for tiger conservation.

Which of the statements given above is/are correct?

- A:) 1 and 2 only
- B:) 2 only
- C:) 2 and 3 only
- D:) 1,2 and 3

Answer: D

Explanation

What's in the news?

- Minister for Environment, Forest and Climate Change Bhupender Yadav participated in the 4th Asia Ministerial Conference on tiger conservation, an important event for reviewing progress towards the Global Tiger Recovery Programme and commitments to tiger conservation.

- Stating that India has achieved the remarkable feat of doubling the tiger population in 2018 itself, 4 years ahead of the targeted year 2022, he informed that the model of success of India's tiger governance is now being replicated for other wildlife like the Lion, Dolphin, Leopard, Snow Leopard and other small wild cats, while the country is on the threshold of introducing Cheetah in its historical range.
- The tiger is classified into nine subspecies, three of which (Javan, Caspian, and Bali) are extinct. A fourth, the South-China subspecies, is most likely extinct in the wild, with no signs of its existence in the last decade. The existing subspecies are Bengal, Indochinese, Sumatran, Siberian, and Malayan.
- Tigers are globally listed as "Endangered" on the IUCN Red List of Threatened Species. The Malayan and Sumatran sub-species are listed as "Critically Endangered."
- Tigers are found mainly in the forests of tropical Asia, although they historically occurred more widely in drier and colder climes. Some species are also found in cold regions (Siberian Tigers of Russia) as well as marshy lands (Bengal tigers in Sundarbans).
- Tiger has been protected under Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) since 1975 which means commercial international trade in tiger is prohibited.

#### St. Petersburg Tiger Summit

- Statement 1 is correct: It was the first global summit to protect tigers from extinction. It was hosted in 2010.
- 13 tiger range countries namely India, Laos, China, Vietnam, Russia, Nepal, Bhutan, Myanmar, Cambodia, Indonesia, Bangladesh, Thailand and Malaysia participated in this event.
- Statement 2 is correct: They adopted a Global Tiger Recovery Program with the aim of Tx2-doubling the number of wild Tigers by 2022, through combating threats, engaging with local communities and improving tiger habitat management.
- Statement 3 is correct: It also encourages trans-boundary collaboration between countries for tiger conservation.
- *Note:* According to the All India Tiger Estimation Report 2018, India has achieved its target of doubling the number of tigers two years before the committed date of 2022. The tiger population in India now stands at almost 2,970 tigers.

**87.** Consider the following statements

- 1) Project Tiger is a Centrally Sponsored Scheme of Government of India which was launched in 1973 for in-situ conservation of wild tigers in designated tiger reserves.
- 2) Madhya Pradesh hosts most of the tigers as a state while Jim Corbett National Park in UttarPradesh houses the most number of tigers in any protected area.

Which of the statements given above is/are correct?

- A:) 1 only  
B:) 2 only  
C:) Both 1 and 2  
D:) Neither 1 nor 2

Answer: A

Explanation

- India today is home to 70 per cent of the world's tiger population.
- Tigers are indicators of the ecological wellness of planet earth. Being the dominant predators of the ecosystem, they ensure that the numbers of herbivores like deer are kept balanced. A steep fall in tiger population could lead to a rise in herbivore population, which could potentially destroy forests by consuming the trees and plants.
- Statement 2 is incorrect: Madhya Pradesh hosts most of the tigers as a state while Jim Corbett National Park in Uttarakhand houses the most number of tigers in any protected area.
- India started Project Tiger in 1973 with 9 Tiger reserves in the country and today we have 50 tiger reserves in the country.

Project Tiger





- Statement 1 is correct: Project Tiger is a Centrally Sponsored Scheme of Government of India which was launched in 1973 for in-situ conservation of wild tigers in designated tiger reserves.
- Broadly, the strategy involves exclusive tiger agenda in the core/critical tiger habitat, inclusive people-wildlife agenda in the outer buffer, besides fostering the latter agenda in the corridors.
- This strategy is reflected in a tiger reserve specific Tiger Conservation Plan for each reserve prepared under the Wildlife (Protection) Act, 1972.
- The initiative is administered under the Ministry of Environment, Forests and Climate Change (MoEFCC). National Tiger Conservation Authority, a statutory body under MoEFCC, is the immediate supervising agency.
- It was launched from the Jim Corbett National Park of Uttarakhand.
- At present, there are a total of 53 Tiger Reserves in India governed by Project Tiger.

**88.** Which of the following is true regarding payments banks?

1. They cannot undertake lending activities
2. They cannot set up subsidiaries to undertake non-banking financial services activities
3. They are not eligible to accept NRI deposits
4. They cannot accept demand deposits

Which of the statements given above is/are correct?

- A:) 1 and 2 only  
 B:) 1, 2 and 3 only  
 C:) 2, 3 and 4 only  
 D:) 1, 2, 3 and 4

Answer: B

Explanation

- Payments banks are the new age banks with limited facilities. These banks mostly operate through the small vendors and shopkeepers. It exists in between the mobile wallet and regular banks.

- Payments banks are permitted to set up their own outlets such as branches, Automated Teller Machines (ATMs), Business Correspondents (BCs), etc. to undertake only certain restricted activities permitted to banks under the Banking Regulation Act, 1949.
- A payments bank provides following services to its customers:
  - Accept demand deposits
  - Remittance services
  - Mobile payments
  - Fund transfers
  - Debit card and associated services
  - Net Banking services
  - Sell third-party financial products like insurance and mutual funds
- However, payments banks cannot undertake the following activities:
  - They cannot undertake lending activities
  - They cannot set up subsidiaries to undertake non-banking financial services activities
  - They are not eligible to accept NRI deposits.

#### Objectives

- The main objective of payments banks is to widen the spread of payment and financial services to small business, low-income households, and the migrant labour workforce in a secured technology-driven environment.
- With payments banks, RBI seeks to increase the penetration level of financial services to the remote areas of the country.
- The Reserve Bank expects payments banks to target India's migrant labourers, low-income households and small businesses, offering savings accounts and remittance services with a low transaction cost.

#### Eligible promoters

- Existing non-bank Pre-paid Payment Instrument (PPI) issuers authorised under the Payment and Settlement Systems Act, 2007
- Other entities such as individuals / professionals; Non-Banking Finance Companies (NBFCs), corporate Business Correspondents (BCs), mobile telephone companies, supermarket chains, companies, real sector cooperatives; that are owned and controlled by residents; and public sector entities may apply to set up payments banks.

## Regulations

- Payments banks are registered as a public limited company under the Companies Act, 2013, and licensed under Section 22 of the Banking Regulation Act, 1949.
- Deposits mobilised by the payments bank are covered under the deposit insurance scheme of the Deposit Insurance and Credit Guarantee Corporation of India (DICGC).
- Apart from amounts maintained as Cash Reserve Ratio (CRR) with RBI on its outside demand and time liabilities, Payments banks are required to invest minimum 75 per cent of its "demand deposit balances" in Government securities/Treasury Bills with maturity up to one year that are recognized by RBI as eligible securities for maintenance of Statutory Liquidity Ratio (SLR) and hold maximum 25 per cent in current and time / fixed deposits with other scheduled commercial banks for operational purposes and liquidity management.
- The minimum paid-up equity capital for payments banks shall be Rs. 100 crore, of which the promoter's contribution would be minimum 40 percent of paid-up equity capital for the first 5 years of commencement of the business.
- The foreign shareholding in the payments bank would be as per the Foreign Direct Investment (FDI) policy for private sector banks as amended from time to time. As per the current FDI policy, the aggregate foreign investment in a private sector bank from all sources will be allowed upto a maximum of 74 per cent of the paid-up capital of the bank.

## Why in News?

- India Post Payments Bank, IPPB, has crossed the five-crore customer mark in just 3 years of commencement of its operations to become one of the fastest growing digital payments banks in the country.
- The bank said that it has opened up these five crore accounts in digital and paperless mode through its one lakh 36 thousand Post Offices. Out of these post offices, one lakh 20 thousand are in rural areas.

**89.** Consider the following statements.

1. India is the world's largest cultivator of bamboo.
2. One of the Objectives of the National Bamboo Mission is to increase the area under bamboo plantation in non forest Government and private lands.

Which of the above statements is/are correct?

A:) 1 only

B:) 2 only

C:) Both 1 and 2

D:) Neither 1 nor 2

Answer: B

Explanation:

- India is the world's second largest cultivator of bamboo after China. Hence, statement 1 is incorrect.

About National Bamboo Mission:

- In October 2006, the Government of India (GOI) launched the National Bamboo Mission (NBM) on the basis of the National Mission on Bamboo Technology and Trade Development Report, 2003.
- The NBM's key objective was to address issues relating to the development of the bamboo industry in the country, provide a new impetus and direction and enable the realisation of India's considerable potential in bamboo production.

Main Objectives:

- Statement 2 is correct: To increase the area under bamboo plantation in non forest Government and private lands to supplement farm income and contribute towards resilience to climate change as well as availability of quality raw material for industries.
- To improve post-harvest management through establishment of innovative primary processing units near the source of production, primary treatment and seasoning plants, preservation technologies and market infrastructure.
- To promote product development keeping in view market demand, by assisting R&D, entrepreneurship & business models at micro, small and medium levels and feed bigger industries.
- To rejuvenate the underdeveloped bamboo industry in India.
- To promote skill development, capacity building, awareness generation for development of bamboo sector from production to market demand.
- To realign efforts so as to reduce dependency on import of bamboo and bamboo products by way of improved productivity and suitability of domestic raw material for industry, so as to enhance income of the primary producers.

Why in News?

- The Ministry of Development of North-East Region conducted an awareness program about the National Bamboo Mission for addressing Livelihood Concerns of Tribal Communities.

**90.** Consider the following statements about E-Shram Portal

1) The portal is open to workers engaged in the unorganised sector and aged between 16 and 59.

2) Under the scheme, the workers will be issued an e-Shram card containing a 12 digit unique number, which will help in including them in social security schemes.

Which of the statements given above is/are correct?

A:) 1 only

B:) 2 only

C:) Both 1 and 2

D:) Neither 1 nor 2

Answer: C

Explanation

About the Portal

- In August 2021, the Ministry of Labour and Employment unveiled the e-shram portal which aims to register 38 crore unorganised workers, such as construction labourers, migrant workforce, street vendors and domestic workers, among others.
- Statement 2 is correct: The workers will be issued an e-Shram card containing a 12 digit unique number, which will help in including them in social security schemes.
- The portal would lead to the creation of a national database of unorganised workers.
- Apart from being Aadhaar-linked, it will collect details of the name, occupation, address, educational qualification, skill types and family of the registered workers.
- The portal was developed by the Ministry of Labour & Employment, in technical collaboration with the National Informatics Centre (an attached office under the Ministry of Electronics and Information Technology).
- Statement 1 is correct: The portal is open to workers engaged in the unorganised sector and aged between 16 and 59.

Why in News?

- Union Labour and Employment Minister Bhupender Yadav announced that special camps would be organised to register brick kiln, plantation, forestry and other unorganised sector workers on the Centre's e-Shram portal.
- The portal, which was launched in August 2021, has over 23 crore registrations so far and is eventually meant to lead to the creation of a national database of unorganised workers to be used to roll-out welfare schemes.

**91. Consider the following statements**

- 1) Nearly 95% production of the world's gherkin requirement is grown in India.
- 2) Recently, India has emerged as the largest exporter of gherkins in the world.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: B**

**Explanation**

**What's in the news?**

- **Statement 2 is correct:** India has emerged as the largest exporter of gherkins in the world. India has exported cucumber and gherkins to the tune of 1,23,846 Metric Tonnes with a value of USD 114 million during April-October, 2021.
- India has crossed the USD 200 million mark of export of agricultural processed product, - pickling cucumber, which is globally referred as gherkins or cornichons, in the last financial year.
- In 2020-21, India had shipped 2,23,515 Metric Tonnes of cucumber and gherkins with a value of USD 223 million.
- Gherkins are exported under two categories -- cucumbers and gherkins, which are prepared and preserved by vinegar or acetic acid and cucumbers and gherkins, which are provisionally preserved.

- Gherkin cultivation, processing and exports started in India during the early 1990s with a modest beginning in Karnataka and later extended to the neighbouring states of Tamil Nadu, Andhra Pradesh and Telangana.
- **Statement 1 is incorrect:** Nearly 15% production of the world's gherkin requirement is grown in India.
- Apart from its export potential, the gherkin industry plays a key role in the creation of rural employment. In India, cultivation of gherkins is carried out under contract farming by around 90,000 small and marginal farmers with an annual production area of 65,000 acres.

**92. Consider the following statements about Pradhan Mantri Rashtriya Bal**

**Puraskar award**

- 1) It is a scheme of awards instituted by the Ministry of Social Justice & Empowerment.
- 2) It is a National Award, given for institutions involved in rendering distinguished service for the cause of elderly persons.

**Which of the statements given above is/ are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: D**

**Explanation**

**What's in the news?**

- Prime Minister Narendra Modi is set to interact with Pradhan Mantri Rashtriya Bal Puraskar awardees.
- **Both the statements are incorrect:** The Government has been conferring the Pradhan Mantri Rashtriya Bal Puraskar award to **children for their exceptional achievement in six categories.**
- These are **Innovation, Social Service, Scholastic, Sports, Art and Culture and Bravery.**
- The awards are conferred on children **between the age of 5 to 18 years.**

**93. With reference to the Right to Information (Amendment) Act, 2019, consider the following statements.**

1. The amendment sets the term of the central Chief Information Commissioner and Information Commissioners at five years.
2. According to the amendment, the salaries, allowances and other terms of service of the Chief Information Commissioner and Information Commissioners shall be equivalent to that of the Chief Election Commissioner and Election Commissioners respectively.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: D**

**Explanation**

**About RTI Act, 2005**

- Under the Right to Information Act, 2005, **Public Authorities** are required to make disclosures on various aspects of their structure and functioning.
- This includes: (i) disclosure on their organisation, functions, and structure, (ii) powers and duties of its officers and employees, and (iii) financial information.
- The intent of such *suo moto* disclosures is that the public should need minimum recourse through the Act to obtain such information. If such information is not made available, citizens have the right to request for it from the Authorities.
- This may include information in the **form of documents, files, or electronic records** under the control of the Public Authority. The intent behind the enactment of the Act is to **promote transparency and accountability** in the working of Public Authorities.

**Who is included in the ambit of 'Public Authorities'?**

- The RTI Act defines "public authorities" in **Section 2(h)**.
- A "public authority" means any authority or body or institution of self- government established or constituted
  - by or under the Constitution;
  - by any other law made by Parliament;

- by any other law made by State Legislature;
- by notification issued or order made by the appropriate Government, and includes any –
- body owned, controlled or substantially financed;
- Non-Government organization substantially financed, directly or indirectly by funds provided by the appropriate Government.

### **Section 8 of the RTI**

- This provides for **exemption from disclosure of information** that are more valid in reasons
  - Which would affect the sovereignty and integrity of India, the security, strategic, scientific or economic interests of the State;
  - Which has been expressly forbidden to be published by any court of law or tribunal;
  - Which would cause a breach of privilege of Parliament or the State Legislature;
  - Information including commercial confidence, trade secrets or intellectual property;
  - Information received in confidence from foreign government;
  - Information which would endanger the life or physical safety of any person; etc.

### **How is the right to information enforced under the Act?**

- The Act has established a **three tier structure** for enforcing the right to information guaranteed under the Act.
- The first request for information goes to the **Central/State Assistant Public Information Officer** and **Central/State Public Information Officer**, designated by the Public Authorities. These Officers are required to provide information to an RTI applicant **within 30 days** of the request.
- Appeals from their decisions go to an **Appellate Authority**.
- Appeals against the order of the Appellate Authority go to the **State Information Commission or the Central Information Commission**. These Information Commissions consist of a **Chief Information Commissioner, and up to 10 Information Commissioners**.

### **Right to Information (Amendment) Act, 2019**

- The Act amended Sections 13 and 16 of the RTI Act, 2005.
- **Statement 1 is incorrect:** Section 13 of the original Act sets the term of the central Chief Information Commissioner and Information Commissioners at **five years** (or until the **age of 65**, whichever is earlier). The amendment changed that the appointment will be for such

term as may be **prescribed by the Central Government**. In 2019, the Central Government reduced the tenure of central and state information commissioners from five to three years under the amendment act.

- **Statement 2 is incorrect:** According to the amendment act, the salaries, allowances and other terms of service of the Chief Information Commissioner and Information Commissioners **shall be such as may be prescribed by the Central Government**. Previously it was equivalent to that of the Chief Election Commissioner and Election Commissioners respectively.
- The government said that the amendment was required because the election commission is a Constitutional body while the information commission, formed under the Right to Information Act, is a **statutory one**.

**94. Consider the following statements.**

1. Dark matter does not interact with the electromagnetic force.
2. Dark matter accounts for roughly 68 percent of the universe's total mass and energy.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: A**

**Explanation**

- Dark Matter refers to the hypothetical matter that scientists have not been able to locate in the universe - either through telescopes or using any other technological method.
- Dark matter works like an **attractive force** — a kind of cosmic cement that holds our universe together. This is because dark matter does interact with gravity, but it doesn't reflect, absorb or emit light.
- **Statement 1 is correct:** Unlike normal matter, **dark matter does not interact with the electromagnetic force**. As a result, it **does not absorb, reflect or emit light**, making it extremely hard to spot.

- In fact, researchers have been able to infer the existence of dark matter only from the gravitational effect it seems to have on visible matter.
- In the 1930s, astronomer **Fritz Zwicky** speculated the presence of “dark matter” for the first time.

### **Dark energy**

- Dark energy is a **repulsive force** — a sort of anti-gravity — hypothesised to be responsible for the accelerated expansion of the Universe.
- Like Dark Matter, Dark Energy is **not directly observed**, but rather inferred from observations of gravitational interactions between astronomical objects.
- **Statement 2 is incorrect:** Dark energy is the far more dominant force of the two, accounting for roughly **68 percent** of the universe’s total mass and energy. **Dark matter makes up 27 percent.** And the rest — a measly 5 percent — is all the regular matter we see and interact with every day.
- Current hypotheses propose dark energy might emerge from the bubbling of empty space, a small effect that is also widespread, making it powerful enough to drag apart clusters of galaxies without ripping them apart from within.

### **95. The Chagos Islands is a disputed territory between**

- A:) China and Philippines
- B:) China and Japan
- C:) Mauritius and the United Kingdom
- D:) Kenya and Somalia

**Answer: C**

**Explanation:**

### What is the Chagos Islands dispute about?



- Chagos Islands is a **disputed territory between Mauritius and the United Kingdom.**

### 96. Consider the following statements about Competition Commission of India (CCI)

- 1) The Competition Commission of India (CCI) is a statutory body established under the Competition Act, 2002.
- 2) To protect the interests of consumers and to ensure freedom of trade are some of the objectives of CCI.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: C**

**Explanation**

### About CCI

- **Statement 1 is correct:** The Competition Commission of India (CCI) is a **statutory body** established under the **Competition Act, 2002** for the administration, implementation and enforcement of the Act.
- CCI consists of a **Chairperson and 6 Members** appointed by the Central Government.
- **Statement 2 is correct:** The following are the objectives of the Commission.
  - To prevent practices having adverse effects on competition
  - To promote and sustain competition in markets
  - To protect the interests of consumers and
  - To ensure freedom of trade.
- The Commission is also required to give opinion on competition issues on a reference received from a statutory authority established under any law and to undertake competition advocacy, create public awareness and impart training on competition issues.

### Competition Act, 2002

- The Competition Act, 2002, as amended by the Competition (Amendment) Act, 2007, prohibits anti-competitive agreements, abuse of dominant position by enterprises and regulates combinations (acquisition, acquiring of control and Mergers and acquisitions), which causes or likely to cause an appreciable adverse effect on competition within India.
- The objectives of the Act are sought to be achieved through the **Competition Commission of India**, which has been established by the Central Government in 2003.

### Why in News?

- The Competition Commission of India passed a final order against four maritime transport companies for indulging in cartelisation in the provision of maritime motor vehicle transport services to automobile Original Equipment Manufacturers (OEMs) for various trade routes.

### 97. Consider the following statements about One District One Product Scheme

- 1) The objective is to convert each District of the country into an Export Hub by identifying products with export potential in the District.
- 2) It was launched by the Ministry of Commerce and Industry.

**Which of the statements given above is/are incorrect?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: D**

### **Explanation**

#### **About the scheme**

- **Both the statements are correct.** One District One Product One District One Product (ODOP) scheme was launched by the **Ministry of Commerce and Industry**.
- The objective is to **convert each District of the country into an Export Hub** by
  - Identifying products with export potential in the District,
  - Addressing bottlenecks for exporting these products,
  - Supporting local exporters/manufacturers to scale up manufacturing, and
  - Find potential buyers outside India with the aim of promoting exports,
  - Promoting the manufacturing & services industry in the District and generating employment in the District.
- The programme aims to **promote local indigenous specialised products and the crafts of each district** through various development initiatives, including providing loans to local production units, artisans, and farmers; establishing common facility centres; helping market these products at a global level; etc.
- Under the initial phase of the ODOP programme, **106 Products have been identified from 103 districts across 27 States**.
- There may be more than one cluster of ODOP products in one district. There may be a cluster of ODOP products consisting of more than one adjacent district in a State.

#### **Significance of the initiative**

- ODOP is seen as a transformational step forward towards realizing the true potential of a district, fuel economic growth and generate employment and rural entrepreneurship, taking us to the goal of AtmaNirbhar Bharat.
- It will increase income and local employment at the bottom of the value chain and can empower the craftsmen, artisans, and farmers to improve their product quality and attain newer skills to produce better products.

### Why in News?

- As a major boost to Centre and State collaboration in promoting products under the One District One Product (ODOP) Initiative – a State Conference was held recently by the Department for Promotion of Industry and Internal Trade, Ministry of Commerce & Industry.

### 98. Consider the following statements about Sub-Mission on Agricultural Mechanization

- 1) Under the scheme, subsidy is provided for purchase of various types of Agricultural implements and machinery.
- 2) It is a sub mission under the National Action Plan on Climate Change(NAPCC).

Which of the statements given above is/are correct?

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

Answer: A

### Explanation

#### About the scheme

- The Ministry of Agriculture and Farmers' Welfare launched the Sub-Mission on Agricultural Mechanization (SMAM) in 2014-15.
- **Statement 1 is correct:** Under the scheme, **subsidy is provided for purchase of various types of Agricultural implements and machinery** used for tillage, sowing, planting, harvesting, reaping, threshing, plant protection, inter cultivation and residue management.
- **Statement 2 is incorrect:** It is a sub mission under the umbrella scheme of 'Green Revolution– Krishonnati Yojana'.

#### Aim

- To **increase the reach of farm mechanization** to small and marginal farmers and to the regions & difficult areas where farm power availability is low.

#### Objectives

- To **promote ‘Custom Hiring Centres’ and ‘Hi-tech Hubs of High-Value Machines’** to offset the adverse economies of scale arising due to small and fragmented landholding and high cost of individual ownership;
- **Creating awareness among stakeholders** through demonstration and capacity building activities;
- **Ensuring performance testing and certification** of agricultural machines at designated testing centres located all over the country.

#### **Significance of farm mechanisation**

- To boost up mechanization in the agriculture sector, improved agricultural implements and machinery are essential inputs for modern agriculture that will **enhance the productivity** of crops besides **reducing human drudgery and cost of cultivation**.
- Mechanization also helps in **improving the utilization efficiency of other inputs** therefore considered to be one of the most important segments of the agriculture sector to **boost the income of farmers and growth of the agricultural economy**.
- The impact evaluation studies highlight the overall positive impact of mechanisation on farming as it was reported that mechanisation helped in overall increase of **17.9% in productivity** and 14.1% in seed germination.
- Mechanisation also helped in saving nearly 1/3rd of the time of operations, 30% reduction in labour requirements, 11% reduction in seed rate, 26.6% reduction in weed instances, 22.4% reduction in diesel consumption and 12.7% reduction in fertiliser requirements.

#### **Why in news?**

- Recently, the Ministry of Agriculture and Farmers Welfare has issued revised guidelines of the “Sub-Mission on Agricultural Mechanization” (SMAM) scheme in a move aimed at making drones more accessible to the farmers.

#### **99. Which of the following missions come under the Krishonnati Yojana?**

- 1) National Mission on Oilseeds and Oil Palm (NMOOP)
- 2) Integrated Scheme on Agricultural Census, Economics and Statistics
- 3) National e-Governance Plan in Agriculture (NeGP-A).
- 4) National Food Security Mission (NFSM)

**Select the correct answer using the codes given below**

- A:) 1 and 4 only  
B:) 2 and 4 only  
C:) 1,2 and 3 only  
D:) 1,2,3 and 4

**Answer: D**

**Explanation**

- It is an Umbrella Scheme comprising both Central Sector as well as Centrally Sponsored Schemes/Missions.
- These schemes look to **develop the agriculture and allied sector in a holistic and scientific manner** to increase the income of farmers by enhancing production, productivity and better returns on produce.
- This Umbrella Scheme has the following 12 Schemes/Missions:
  1. Mission for Integrated Development of Horticulture (MIDH)
  2. National Mission on Oilseeds and Oil Palm (NMOOP)
  3. National Food Security Mission (NFSM)
  4. National Mission for Sustainable Agriculture (NMSA)
  5. Sub-Mission on Agriculture Extension (SMAE)
  6. Sub-Mission on Seeds & Planting Material (SMSP)
  7. Sub-Mission on Agricultural Mechanization (SMAM)
  8. Sub-Mission on Plant Protection and Plant Quarantine (SMPPQ)
  9. Integrated Scheme on Agricultural Census, Economics and Statistics
  10. Integrated Scheme on Agricultural Cooperation
  11. Integrated Scheme on Agricultural Marketing (ISAM)
  12. National e-Governance Plan in Agriculture (NeGP-A).

**100. Consider the following statements about adoption laws in India.**

1. Central Social Welfare Board functions as the nodal body for adoption of Indian children and is mandated to monitor and regulate in-country and inter-country adoptions.
2. The Juvenile Justice (Care and Protection) Act of 2015 allows secular adoption without any reference to the community or religious persuasions of the parents or the child concerned.

**Which of the statements given above is/are correct?**

A:) 1 only

B:) 2 only

C:) Both 1 and 2

D:) Neither 1 nor 2

**Answer: B**

**Explanation:**

- Central Adoption Resource Authority (CARA) is a **statutory body of the Ministry of Women & Child Development** established in 1990.
- **Statement 1 is incorrect:** It functions as the nodal body for adoption of Indian children and is mandated to monitor and regulate **in-country and inter-country adoptions**.
- CARA is designated as the Central Authority to deal with inter-country adoptions in accordance with the provisions of the **Hague Convention on Intercountry Adoption, 1993**, ratified by India in 2003.
- CARA primarily deals with adoption of orphan, abandoned and surrendered children through its associated /recognised adoption agencies.

**Adoption laws in India**

- Indian citizens can adopt in India under three major legislations
  - **The Hindu Adoption and Maintenance Act of 1956** which is applicable to Hindus, Buddhists, Jains and Sikhs.
  - **The Guardian and Wards Act of 1890** assist other religions i.e. Muslim, Parsi, Christian and Jews in adoption as there are no concrete provisions under their personal laws.
  - **The Juvenile Justice (Care and Protection) Act of 2015** covers the rehabilitation and social reintegration for orphan children and also allows **secular adoption** without any reference to the community or religious persuasions of the parents or the child concerned.

**Hence, statement 2 is correct.**

**101. Which of the following is/are objectives of Beti Bachao Beti Padhao?**

- 1) Address declining Child Sex Ratio (CSR) by preventing gender biased sex selective elimination
- 2) Ensuring survival and protection of the girl child and
- 3) Ensuring education and participation of the girl child.

**Select the correct answer using the codes given below**

- A:) 1 only  
B:) 2 and 3 only  
C:) 1 and 2 only  
D:) 1,2 and 3 only

**Answer: D**

**Explanation**

**About Beti Bachao Beti Padhao (BBBP) scheme**

- It is a **tri-ministerial initiative** of Ministries of Women and Child Development, Health & Family Welfare and Education with a focus on awareness and advocacy campaign for changing mindsets, multi-sectoral action in select districts, **enabling girls' education and effective enforcement of Pre-Conception & Pre Natal Diagnostic Techniques (PC&PNDT) Act.**
- The specific objectives of the scheme is to
  - **address declining Child Sex Ratio (CSR)** by preventing gender biased sex selective elimination;
  - ensuring survival and protection of the girl child and
  - ensuring education and participation of the girl child.

**Why in News?**

- The Ministry of Women and Child Development organised celebrations across the country under the BBBP scheme to commemorate the National Girl Child Day (24<sup>th</sup> January, 2022).
- In view of COVID-19 situation in the country, the programmes were organised on virtual/online mode across the nation to promote awareness about the rights of the Girl Child and to celebrate their achievements in various fields.

**102. Consider the following statements about National Commission for Minorities**

- 1) It's a constitutional body set up under article 338 of the Indian constitution.
- 2) It's objective is **to safeguard and protect the interests of minorities** as provided in the Constitution of India and laws enacted by the Parliament.

**Which of the statements given above is/are correct?**

- A:) 1 only  
B:) 2 only  
C:) Both 1 and 2  
D:) Neither 1 nor 2

**Answer: B**

**Explanation**

**About NCM**

- **Statement 1 is incorrect:** The Union Government set up the National Commission for Minorities (NCM) as a **statutory body** under the **National Commission for Minorities Act, 1992**.
- Initially five religious communities, viz., **Muslims, Christians, Sikhs, Buddhists and Zoroastrians (Parsis)** were notified as minority communities by the Union Government. Further in 2014, **Jains** were also notified as another minority community.
- **Statement 2 is correct:** It's objective is **to safeguard and protect the interests of minorities** as provided in the Constitution of India and laws enacted by the Parliament.
- The functions of NCM broadly include:
  - (a) **evaluate the progress of the development** of minorities under the Union and States;
  - (b) **monitor the working of the safeguards** provided in the Constitution and in laws enacted by Parliament and the State Legislatures;
  - (c) **make recommendations for the effective implementation of safeguards** for the protection of the interests of minorities by the Central Government or the State Governments;
  - (d) **look into specific complaints** regarding deprivation of rights and safeguards of the minorities and take up such matters with the appropriate authorities;
  - (e) **conduct studies, research and analysis** on the issues relating to socio-economic and educational development of minorities;

(f) **make periodical or special reports** to the Central Government on any matter pertaining to minorities and in particular difficulties confronted by them; and

(g) any other matter which may be referred to it by the Central Government.

- The NCM receives petitions/grievances from the aggrieved persons and the said petitions/grievances being received by Commission are dealt with by calling for reports from the concerned authorities under the Union and State Governments.
- On receipt of the reports, the Commission makes **appropriate recommendations** to the respective authorities for redressal of the grievances.

**Why in News?**

- The National Commission for Minorities has taken cognizance of a complaint received regarding illegal mining in the Ropar District in Punjab.

**103. With reference to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), consider the following statements.**

1. It is an international treaty which aims to further the goal of achieving nuclear disarmament.
2. Full compliance with the obligations of the NPT is a membership criteria to join the Nuclear Suppliers Group.
3. India is yet to sign the NPT.

**Which of the statements given above is/are correct?**

- A:) 1 and 2 only
- B:) 2 and 3 only
- C:) 1 and 3 only
- D:) 1, 2 and 3

**Answer: D**

**Explanation:**

- **Statement 1 is correct:** The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) aims to prevent the spread of nuclear weapons and weapons technology, to foster the peaceful uses of nuclear energy, and to further the goal of disarmament.
- It entered into force in 1970.

- Its 190 states-parties are classified into two categories: **nuclear-weapon states (NWS)**—consisting of the United States, Russia, China, France, and the United Kingdom—and **non-nuclear-weapon states (NNWS)**.
- Under the treaty, the five NWS commit to pursue general and complete disarmament, while the NNWS agree to forgo developing or acquiring nuclear weapons.
- **Statement 3 is correct:** Only four countries (South Sudan, **India**, Israel, and Pakistan) have not signed the treaty, and one country (North Korea) has signed and then withdrawn from the treaty.

#### **Why didn't India join?**

- The Treaty defines nuclear weapon states as those that had manufactured and detonated a nuclear explosive device prior to 1 January 1967.
- Thus, the spirit of the NPT creates a divide between countries that did develop nuclear power before 1967 and those that didn't develop nuclear power before 1967.
- Being a signatory to NPT means that the party state will cease all development of nuclear weapons and will open doors for inspection of its nuclear facilities by the **International Atomic Energy Agency**.
- The NPT, in India's opinion, doesn't explain the need for this distinction and loss of national sovereignty.

#### **Nuclear Suppliers Group**

- Established in 1975, the Nuclear Suppliers Group (NSG) comprises 48 states that have voluntarily agreed to coordinate their export controls to non-nuclear-weapon states.
- The NSG governs the transfers of civilian nuclear material and nuclear-related equipment and technology.
- **Statement 2 is correct:** Full compliance with the obligations of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) is a **membership criteria** to join NSG.

#### **China's blockade**

- India has been trying, since 2008, to join the NSG, which would give India access to more sophisticated nuclear technology.
- However, China has repeatedly blocked India's entry into NSG as India is not a signatory to the NPT.
- It should be noted that members are admitted to NSG only by **consensus**.

**104. With reference to the National Green Tribunal (NGT), consider the following statements.**

1. It is a statutory body established under the National Green Tribunal Act, 2010.
2. NGT's jurisdiction includes Wildlife (Protection) Act, 1972 and Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006.
3. The Tribunal shall not be bound by the procedure laid down under the Code of Civil Procedure, 1908, but shall be guided by principles of natural justice.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 3 only
- C:) 1 and 3 only
- D:) 1, 2 and 3

**Answer: C**

**Explanation**

- **Statement 1 is correct:** The National Green Tribunal (NGT) is a **statutory body** established in 2010 under the National Green Tribunal Act 2010.
- It is a specialized body equipped with the necessary expertise to **handle environmental disputes** involving multi-disciplinary issues.
- **Statement 3 is correct:** The Tribunal shall not be bound by the procedure laid down under the Code of Civil Procedure, 1908, but shall be **guided by principles of natural justice.**
- The Tribunal is vested with the **powers of a civil court** under the Code of Civil Procedure for discharging its functions but it can make its own rules.
- It provides speedy environmental justice and helps reduce the burden of litigation in the higher courts.

**What is the Tribunal's composition?**

- The Tribunal has a presence in **five zones**- North, Central, East, South and West. The Principal Bench is situated in the North Zone, headquartered in **Delhi.**
- The Central zone bench is situated in Bhopal, East zone in Kolkata, South zone in Chennai and West zone in Pune.

- The Tribunal is headed by the **Chairperson** who sits in the Principal Bench and has **at least ten but not more than twenty judicial members** and **at least ten but not more than twenty expert members**.

### **Tribunal's Jurisdiction**

- The NGT deals with civil cases under the seven laws related to the environment, these include
  - The Water (Prevention and Control of Pollution) Act, 1974
  - The Water (Prevention and Control of Pollution) Cess Act, 1977
  - The Forest (Conservation) Act, 1980
  - The Air (Prevention and Control of Pollution) Act, 1981
  - The Environment (Protection) Act, 1986
  - The Public Liability Insurance Act, 1991 and
  - The Biological Diversity Act, 2002
- **Statement 2 is incorrect:** Two important acts - **Wildlife (Protection) Act, 1972** and **Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006** have been kept out of NGT's jurisdiction.
- The Tribunal has jurisdiction **over all civil cases involving a substantial question relating to the environment**. Additionally, any person aggrieved by an order/direction of any of the Appellate Authorities under the legislations mentioned above can also challenge them before the National Green Tribunal.

### **Are decisions of the Court binding?**

- **Yes**, decisions of the Tribunal are binding. The Tribunal's orders are enforceable as the powers vested are the same as in a civil court under the Code of Civil Procedure, 1908.

### **Are decisions of the Tribunal final?**

- The Tribunal has powers to review its own decisions. If this fails, the decision can be challenged before the **Supreme Court within ninety days**.

### **Why in the news?**

- Recently, the National Green Tribunal (NGT) has directed Delhi and Haryana to enforce the Environment Management Plan (EMP) that the two governments have prepared for the rejuvenation and protection of the Najafgarh Jheel, a transboundary wetland.

**105. Najafgarh Jheel wetland is situated in which of?**

- A:) Odisha
- B:) West Bengal
- C:) Karnataka
- D:) Delhi

**Answer: D**

**Explanation**

- Najafgarh Jheel is the second largest water body in Delhi-NCR after the Yamuna is a transboundary wetland as notified by centre recently.
- Once spread over 226 sq km, the water body straddling Delhi and Gurugram has shrunk to just seven sq km due to rampant encroachment.

**106. Which of the following are tiger range countries?**

- 1) Bhutan
- 2) China
- 3) Indonesia
- 4) India
- 5) Vietnam

**Select the correct answer using the codes given below**

- A:) 1,3 and 5 only
- B:) 2,4 and 5 only
- C:) 1,2,3 and 4 only
- D:) 1,2,3,4 and 5

**Answer: D**

**Explanation**

- There are currently 13 tiger range countries Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Russia, Thailand and Vietnam.

**107. Consider the following statements about Zero Defect and Zero Effect Scheme**

- 1) Under the scheme, MSMEs are assessed for their process in achieving Zero defects in their products and processes.
- 2) One of the objectives of the scheme is to make MSMEs adapt Quality tools and systems, thus promoting energy-efficient manufacturing.

**Which of the statements given above is/are correct?**

- A:) 1 only  
B:) 2 only  
C:) Both 1 and 2  
D:) Neither 1 nor 2

**Answer: C**

**Explanation**

- **Statement 1 is correct:** Zero Defect and Zero Effect (ZED) is a **certification scheme**. Under the scheme, **MSMEs are assessed for their process in achieving Zero defects in their products and processes**. Similarly the process which they adopt for production **should not affect the environment**.
- There are **three stages of assessment** based on which the MSMEs will be graded for certification under **five categories** as **Bronze, Silver, Gold, Diamond and Platinum**.
- The cost of certification in grading shall be **subsidized by Government of India up to 80% of the expenditure** and **financial assistance** is provided for interested MSMEs for Gap analysis, Handholding and consultancy for improving their rating and adopting measures for moving towards zero effect.

**Objectives**

- The scheme endeavours to attain the following key goals:
  - To promote and encompass ZED manufacturing processes in the MSMEs;
  - Encourage to attain a continuous momentum in improving the sector that contributes to the success of Make in India initiative;
  - **Statement 2 is correct:** Reassure to adapt Quality tools and systems, thus promote energy-efficient manufacturing;
  - Make sure that the MSMEs are constantly upgrading their tools and processes to obtain better products;

- Most importantly, the acclimatization to ZED protocol to have a minimalist impact on the environment.

### **Why in News?**

- The Ministry of Micro, Small and Medium Enterprises has invited applications for the Zero Defect Zero Effect Scheme.

### **108. Consider the following statements about Krishi UDAN Scheme**

- 1) It aims to assist farmers in transporting agricultural products on international and national routes so that it improves their value realisation.
- 2) It is an initiative of the Ministry of Agriculture and Farmers Welfare.

### **Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: A**

### **Explanation**

- **Statement 1 is correct:** The Krishi Ude Desh Ka Aam Naagrik (Krishi Udan) scheme was launched in 2020 to **assist farmers in transporting agricultural products on international and national routes so that it improves their value realisation.**
- **Statement 2 is incorrect:** It is an initiative of the **Ministry of Civil Aviation (MoCA).**
- The objectives are to **increase the share of air in the modal mix for transportation of Agri-produce**, which includes horticulture, fishery, livestock & processed products.

### **Krishi UDAN 2.0**

- In a bid aimed at facilitating and incentivising the movement of agricultural produce through air transportation, especially biodegradable food products from hilly areas, north-eastern States and tribal regions, MoCA launched the **Krishi Udan 2.0 scheme** recently.
- Krishi UDAN 2.0, too, will focus on bringing about a **convergence between the agriculture and aviation sectors (A2A: Agriculture to Aviation).**

- Krishi UDAN 2.0 will be implemented at 53 airports across the country, **primarily focussing on the north-eastern States and tribal regions**, and is expected to benefit farmers, freight forwarders and airlines.
- Under the scheme, the Ministry will be providing a full waiver on landing, parking, terminal navigation and route navigation facilities charges for all domestic airlines.

#### **Why in News?**

- The Ministry Of Civil Aviation has conducted a review of the Krishi UDAN 2.0 scheme.

**109.** It was declared a tiger reserve in 2013 and is an important link between the Nilgiris and Eastern Ghats landscape.

**The above description refers to which of the following?**

- A:) Kanha National Park
- B:) Panna Biosphere Reserve
- C:) KeibulLamjao National Park
- D:) Sathyamangalam Wildlife Sanctuary

**Answer: D**

#### **Explanation**

- Sathyamangalam wildlife sanctuary was declared a **tiger reserve in 2013** and the reserve that spread across 1,411.60 sq km is an important link between the **Nilgiris and Eastern Ghats landscape**.
- It is the **fourth tiger reserve** located in Erode district of Tamil Nadu as a part of **Project Tiger** and is the third largest tiger reserve in Tamil Nadu.
- The Nilgiri biosphere landscape that this reserve is part of is currently the home to the largest tiger population in the world.
- It is connected to other well-established tiger habitats like **Mudumalai Tiger Reserve, Bandipur Tiger Reserve and BR Hills Tiger Reserve**.

**110. Consider the following statements with respect to Sendai Framework for Disaster Risk Reduction**

**2015-2030:**

1. The framework is a binding agreement with a time frame of 15 years.
2. It recognizes that the state has the primary role to reduce disaster risks
3. It calls for adopting integrated and inclusive institutional measures for preventing vulnerability to disaster, increase preparedness for response and recovery and strengthen resilience.

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

- A:) 1 and 2 only
- B:) 2 and 3 only
- C:) 1 and 3 only
- D:) 1, 2 and 3

**Answer: B**

**Explanation**

- SFDRR is an international Treaty that was approved by UN member states in March 2015 at Third World Conference on Disaster Risk Reduction held in Sendai, Japan. It is voluntary and non-binding treaty. **Hence statement 1 is incorrect**
- It recognizes that the state has the primary role to reduce disaster risk, but that responsibility should be shared with other stakeholders including local government, the private sector and other stake holders. **Hence, statement 2 is correct**
- It calls for adopting integrated and inclusive institutional measures for preventing vulnerability to disaster, increase preparedness for response and recovery and strengthen resilience. **Hence statement 3 is correct.**

**111. Consider the following statements about the Production linked incentive (PLI) scheme.**

1. Its objective is to boost domestic manufacturing and attract large investments in the Indian manufacturing sector.
2. At present, the scheme is restricted for Large Scale Electronics Manufacturing in India.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: A**

**Explanation**

- In April last year, the central government had for the first time notified the Production Linked Incentive (PLI) scheme for **mobile phones and allied component manufacturing**.
- Under the scheme, 4% to 6% incentive will be provided on incremental sales of goods manufactured in India. These incentives will be offered for a period of 5 years.
- **Statement 2 is incorrect:** In November, the PLI scheme was **expanded to include 12 more sectors** such as automobile and automobile components, pharmaceutical drugs, textile products, food products, high efficiency solar photo-voltaic modules, white goods such as air conditioners and LED bulbs, and speciality steel products.
- **Statement 1 is correct:** Its objective is to boost domestic manufacturing and attract large investments in the manufacturing sector in the country.

**112. Consider the following statements.**

1. An anti-dumping duty is a protectionist tariff that a domestic government imposes on foreign imports that it believes are priced below fair market value.
2. The World Trade Organization plays a critical role in the regulation of anti-dumping measures.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: C**

**Explanation**

- Dumping is the practice of selling a product in a foreign market at an **unfairly low price** (a price that is lower than the cost in the home market, or which is lower than the cost of production) in order **to gain a competitive advantage over other suppliers**.
- Dumping is done to gain access to the foreign market and eliminate competition. It creates a **monopoly** in the market.
- Dumping enables consumers in the importing country to obtain access to goods at an **affordable price**. However, it can also destroy the local market of the importing country, which can result in layoffs and the closure of businesses.

### **Anti-dumping duty**

- **Statement 1 is correct:** An anti-dumping duty is a protectionist tariff that a **domestic government imposes on foreign imports** when it believes that the goods are being “dumped” – through the low pricing – in the domestic market.
- Anti-dumping duty is imposed **to protect local businesses and markets** from unfair competition by foreign imports.

### **Ill effects of such duties**

- While the intention of anti-dumping duties is to save domestic jobs, these tariffs can also lead to **higher prices for domestic consumers**.
- In the long-term, anti-dumping duties can **reduce the international competition of domestic companies** producing similar goods.

### **Dumping and WTO**

- **Statement 2 is correct:** The **World Trade Organization (WTO)** plays a critical role in the regulation of anti-dumping measures.
- The **WTO Anti-Dumping Agreement** allows the government of the affected country to take legal action against the dumping country as long as there is **evidence of genuine material injury to industries in the domestic market**.
- The government must show that dumping took place, the extent of the dumping in terms of costs, and the injury or threat to cause injury to the domestic market.
- In other cases, the WTO intervenes to prevent anti-dumping measures.

### **Why in News?**

- India has initiated an anti-dumping probe against imports of a certain type of tiles, used for covering the floors in residential and commercial buildings, from China, Taiwan and Vietnam following a complaint by domestic players.
- If it is established that the dumping has caused material injury to the domestic players, commerce ministry's investigation arm **Directorate General of Trade Remedies (DGTR)** would recommend the imposition of anti-dumping duty on these imports. The **finance ministry** takes the final decision to impose the duties.
- Countries start anti-dumping probes to determine whether their domestic industries have been hurt because of a surge in cheap imports.
- As a countermeasure, they impose these duties under the multilateral regime of the Geneva-based World Trade Organisation (WTO). The duty is aimed at ensuring fair trading practices and creating a level-playing field for domestic producers vis-a-vis foreign producers and exporters.
- India has already imposed anti-dumping duty on several products to tackle cheap imports from various countries, including China.

**113. Consider the following statements about United Nations Security Council**

- 1) It is the only UN body with the authority to issue binding resolutions to member states.
- 2) Each year the 193-member UN General Assembly (UNGA) elects five non-permanent members for a two-year term.
- 3) Permanent members can veto any substantive Security Council resolutions, excluding those on the admission of new member states.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 and 3 only
- C:) 1 and 2 only
- D:) 1,2 and 3

**Answer: C**

**Explanation**

## About UNSC

- The United Nations Security Council (UNSC) was established in **1946** as **one of the six principal organs of the UN**. It is generally viewed as the apex of the UN system.
- It is responsible for the **maintenance of international peace and security**.
- Its powers include the establishment of peacekeeping operations, the establishment of international sanctions, and the authorization of military action through Security Council resolutions.
- **Statement 1 is correct:** It is the only UN body with the authority to issue **binding resolutions** to member states.

## Membership

- UNSC consists of 15 Members.
- The council has **five permanent members** (P-5) United States, Russia, China, United Kingdom and France.
- **Statement 3 is incorrect:** These permanent members can **veto** any substantive Security Council resolutions, including those on the admission of new member states.
- The Security Council also has **10 non-permanent members**, elected on a **regional basis** as follows:
  - five for African and Asian States;
  - one for Eastern European States;
  - two for the Latin American and Caribbean States; and
  - two for Western European and other States.
- **Statement 2 is correct:** Each year the 193-member UN General Assembly (UNGA) elects five non-permanent members for a **two-year term**.
- The body's presidency rotates monthly among its members.

## Vote and Majority Required

- Each member of the Security Council shall have **one vote**.
- Decisions of the Security Council on **procedural matters** shall be made by an **affirmative vote of nine members**.
- Decisions of the Security Council on **all other matters** shall be made by an **affirmative vote of nine members including the concurring votes of the permanent members**.

- However, any member, whether permanent or nonpermanent, must abstain from voting in any decision concerning the peaceful settlement of a dispute to which it is a party.

#### **Why in News?**

- Perpetrators of the heinous 26/11 Mumbai terror attacks continue to enjoy Pakistan's patronage, India has told the UN Security Council, saying that most terrorist attacks around the world have their origin, in some form or the other, in that country.

#### **114. Consider the following statements.**

1. A recognised political party shall either be a National party or a State party if it meets certain laid down conditions in the Election Symbols (Reservation and Allotment) Order, 1968.
2. The Representation of the People Act, 1951 empowers the Election Commission of India to deregister political parties violating the model code of conduct.

#### **Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: A**

#### **Explanation:**

#### **Unrecognised political parties**

- Either newly registered parties or those which have not secured enough percentage of votes in Assembly or General Elections to become a State party or those which have never contested in elections since being registered are considered **unrecognised parties**. Such parties don't enjoy all the benefits extended to the recognised parties.
- There are 2,360 political parties registered with the Election Commission of India and 2,301 or 97.50% of them are unrecognised.

#### **Provisions for recognised party status**

- **Statement 1 is correct:** A recognised political party shall either be a **National party or a State party** if it meets certain laid down conditions.

- The **Election Symbols (Reservation and Allotment) Order, 1968**, lays down the criteria for declaring any registered political party as a national party or a state party.

### **National Party**

- As per the Election symbols order, a registered political party needs to **fulfil at least one of the following three conditions** to be recognised as a national party:
  - It needs to win a minimum **two percent** of seats in the Lok Sabha (11 seats) from at least three different states.
  - It needs to get **at least six percent of votes in four states** in Lok Sabha and Assembly elections, in addition to **winning four Lok Sabha seats**.
  - It needs to get **recognised as a state party in four or more states**.

### **State Party**

- In order to be recognised as a state party, a political party needs to **fulfil at least one of the four criteria** laid down by the Election Commission of India.
- A political party will be recognised as a state party:
  - If it wins **three percent of the total seats** in the Legislative Assembly of the state (subject to a minimum of three seats).
  - If it wins one Lok Sabha seat for every 25 Lok Sabha seats allotted for the state.
  - If it gets **at least six percent of votes** in a state during a Lok Sabha or Assembly election. In addition, it also needs to win **at least one Lok Sabha or two Legislative Assembly seats**.
  - If it wins **at least eight percent votes** in a state during the Lok Sabha or Legislative Assembly elections.

### **Benefits of being a recognised state party or national party**

- If a party is recognised as a 'State Party', it is entitled for exclusive allotment of its **reserved symbol to the candidates set up by it in the State of States in which it is so recognised**, and if a party is recognised as a 'National Party' it is entitled for exclusive allotment of its **reserved symbol to the candidates set up by it throughout India**.
- The registered unrecognised political parties do not have the privilege of contesting elections on affixed symbol of their own. They have to choose from a list of **'free symbols'** issued by the Commission.

- However, the candidates set up by a political party registered with the Election Commission of India will get **preference in the matter of allotment of free symbols** vis-à-vis purely independent candidates.
- Recognised 'State' and 'National' parties **need only one proposer** for filing the nomination and are also entitled for **two sets of electoral rolls** free of cost and **broadcast/telecast facilities** over Akashvani/Doordarshan during general elections.
- **Statement 2 is incorrect:** It is to be noted that the **Election Commission cannot deregister a party**. However, it uses **Article 324 of the Constitution to "unlist" dormant political parties**.

#### Why in the news?

- Recently, a petition has been filed in the Supreme Court seeking a direction to the Election Commission of India (ECI) to seize the election symbol or deregister a political party that promises or distributes "irrational freebies" from public funds before elections.

**115. With reference to the Central Vigilance Commission (CVC), which one of the following statements is not correct?**

- A:) The CVC was set up on the recommendations of the Committee on Prevention of Corruption, headed by K. Santhanam.
- B:) It is a constitutional body set up by the Constitution (eighty-eight amendment) Act, 2003.
- C:) It is an independent body which is only responsible for the Parliament.
- D:) The CVC is not an investigating agency, it either gets the investigation done through the CBI or through the Departmental Chief Vigilance Officers.

**Answer: B**

#### Explanation:

- **Statement A is correct:** The Central Vigilance Commission (CVC) was set up in 1964 on the recommendations of the Committee on Prevention of Corruption, headed by **K. Santhanam**, as the apex vigilance institution under the Central Government.
- **Statement B is incorrect:** The Commission was given **statutory status** by the enactment of **"The Central Vigilance Commission Act, 2003"**.
- It is a **multi-member body** consisting of a Central Vigilance Commissioner (chairperson) and not more than two vigilance commissioners.

## Functions

- The CVC receives complaints on corruption or misuse of office and to recommend appropriate action. Following institutions, bodies, or a person can approach to CVC:
  - Central government
  - Lokpal
  - Whistle blowers
- It is empowered to inquire into offences alleged to have been committed under the **Prevention of Corruption Act, 1988** by certain categories of public servants.
- **Statement C is correct:** The CVC is **not controlled by any Ministry/Department**. It is an **independent body** which is only responsible for the Parliament.
- **Statement D is correct:** The CVC is **not an investigating agency**. The CVC either gets the investigation done through the CBI or through the Departmental Chief Vigilance Officers.

### 116. Consider the following statements about INS Khukri

- 1) It is the country's first indigenously built Missile Corvette.
- 2) It is being built by Mazagon Dock Shipbuilders and will be commissioned in December 2022.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: A**

#### Explanation

- INS Khukri has been **decommissioned** after serving for more than 30 years.
- **Statement 1 is correct:** It is the country's **first indigenously built Missile Corvette** (high-speed ships that have considerable firepower).
- **Statement 2 is incorrect:** **Mazagon Dock Shipbuilders** built it, and it was commissioned in 1989.
- The ship was associated with the Indian Army's Gorkha Brigade.

- The decommissioned INS Khukri will be handed over to Diu administration and **will be developed** as a museum.

**117. Consider the following statements about Mission Karmayogi**

- 1) It was undertaken to develop highly-potent Anti-satellite weapons (ASAT).
- 2) It is a joint programme of the Defence Research and Development Organisation (DRDO) and the Indian Space Research Organisation (ISRO).

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: D**

**Explanation**

**Both the statements are incorrect.**

- Mission Karmayogi is a nationwide programme to lay the **foundation for capacity building of civil servants**. It will help the officers to learn about the best practices across the world. It was launched in **2020**.
- Officially called the "**National Programme for Civil Services Capacity Building (NPCSCB)**", the mission plans to **transform human resource management in the country**.
- Mission Karmayogi aims to **prepare the Indian civil servant for the future** by making him/her more creative, constructive, imaginative, innovative, proactive, professional, progressive, energetic, enabling, transparent and technology-enabled.
- The fundamental focus of the reform is the creation of a '**citizen centric civil service**' capable of creating and delivering services conducive to economic growth and public welfare.
- It shifts the focus from "**Rule based training to Role based training**". Greater thrust has been laid on **behavioural change**.
- The Mission Karmayogi programme will be delivered by setting up a digital platform called **iGOTKarmayogi**. The platform will act as a launchpad for the initiative and will enable a

comprehensive reform of the capacity building apparatus at the individual, institutional and process levels.

### Why in News?

- The Government of India conducted a workshop on Mission Karmayogi.

### 118. Consider the following statements about BrahMos missile

- 1) It is the supersonic cruise missile jointly developed by Defence Research and Development Organisation (DRDO) of India and NPOM of Russia.
- 2) Being a cruise missile it can be guided towards a predetermined land- or sea-based target.
- 3) BrahMos is an amalgamation of the names of the rivers Brahmaputra of India and Moskva of Russia.

Which of the statements given above is/are correct?

- A:) 1 and 3 only
- B:) 2 only
- C:) 1 and 2 only
- D:) 1,2 and 3

**Answer: D**

### Explanation

#### About BrahMos Missile

- **Statement 1 is correct:** BrahMos is the **supersonic cruise missile** jointly developed by **Defence Research and Development Organisation (DRDO)** of India and NPOM of Russia.
- **Statement 3 is correct:** BrahMos is an amalgamation of the names of the rivers **Brahmaputra** of India and **Moskva** of Russia.
- BrahMos is a **two-stage missile** with solid propellant booster as first stage and liquid ramjet as the second stage.
- **Statement 2 is correct :** Being a cruise missile it can be guided towards a **predetermined land- or sea-based target**.
- With a capability to attain **speeds 2.8 times that of sound** (Mach 2.8), BrahMos is classified as a **supersonic cruise missile**.

- It operates on the "**Fire and Forget**" principle i.e it does not require further guidance after launch.
- BrahMos currently has a **range of 290 km**, but efforts are also on to extend this to **400 km**.
- Various versions of the BrahMos, including those which can be fired from land, warships, submarines and Sukhoi-30 fighter jets have already been developed and successfully tested in the past.

#### **Why in News?**

- BrahMos Aerospace Private Limited (BAPL) signed a contract with the Department of National Defence of the Republic of Philippines for supply of Shore Based Anti-Ship Missile System to Philippines.
- The BAPL is a joint venture company of the Defence Research and Development Organisation. The contract is an important step forward for Government of India's policy of promoting responsible defence exports.

**119. Consider the following statements about the National Human Rights Commission (NHRC).**

1. It is a constitutional body to enquire into complaints of violation of human rights.
2. The chairperson of the NHRC must be a person who has been a Chief Justice of the Supreme Court.

**Which of the statements given above is/are correct?**

- A:) 1 only
- B:) 2 only
- C:) Both 1 and 2
- D:) Neither 1 nor 2

**Answer: D**

#### **Explanation**

- **Statement 1 is incorrect:** The National Human Rights Commission (NHRC) is a **statutory organisation** established in 1993 under the Protection of Human Rights Act (PHRA), 1993.
- The Act also created Human Rights Commissions at the levels of the various States.

- NHRC was established in conformity with the **Paris Principles**, adopted at the first international workshop on national institutions for the promotion and protection of human rights held in Paris in 1991, and endorsed by the General Assembly of the United Nations in 1993.

### **Functions of NHRC**

- The NHRC enquires into complaints of violation of human rights or negligence in the prevention of such violation by a public servant, studies treaties and international instruments on human rights and makes recommendations for their effective implementation to the Government.
- It is responsible for spreading human rights awareness amongst the masses.
- As per the Protection of Human Rights Act, the NHRC **can only recommend the government but the recommendations are non-binding.**
- While inquiring into complaints under the Act, the Commission shall have all the powers of a **civil court.**
- NHRC cannot inquire in any case, if the complaint is made after **one year** of the incident.

### **Composition of NHRC**

- According to the **Protection of Human Rights (Amendment) Act, 2019**, the NHRC consists of
  - **Statement 2 is incorrect:** A Chairperson, who has been a Chief Justice of India or a **Judge of the Supreme Court;**
  - One member who is, or has been, a Judge of the Supreme Court of India;
  - One member who is, or has been, the Chief Justice of a High Court;
  - Three Members, out of which at least one shall be a woman to be appointed from amongst persons having knowledge of, or practical experience in, matters relating to human rights;
  - In addition, the Chairpersons of National Commissions viz., National Commission for Scheduled Castes, National Commission for Scheduled Tribes, National Commission for Women, National Commission for Minorities, National Commission for Backward Classes, National Commission for Protection of Child Rights; and the Chief Commissioner for Persons with Disabilities serve as **ex officio members.**
- The term of the Chairperson and Members of the Commission is **three years** and shall be **eligible for re-appointment.**

**120. Consider the following statements about 'bad bank'.**

- 1) A bad bank is a financial entity set up to buy non-performing assets from banks.
- 2) The primary aim of setting up a bad bank is to help ease the burden on banks and get them to lend again to customers without constraints.

**Which of the statements given above is/are correct?**

- A:) 1 only  
B:) 2 only  
C:) Both 1 and 2  
D:) Neither 1 nor 2

**Answer: C**

**Explanation:**

- Finance Minister Nirmala Sitharaman in her Budget speech revived the idea of a 'bad bank' by stating that the Centre proposes to set up an asset reconstruction company to acquire bad loans from banks.

**What is a 'bad bank'?**

- **Statement 1 is correct:** A bad bank is a financial entity set up to buy non-performing assets (NPAs), or bad loans, from banks.
- **Statement 2 is correct:** The aim of setting up a bad bank is to help ease the burden on banks by taking bad loans off their balance sheets and get them to lend again to customers without constraints.
- After the purchase of a bad loan from a bank, the bad bank may later try to restructure and sell the NPA to investors who might be interested in purchasing it.
- A bad bank makes a profit in its operations if it manages to sell the loan at a price higher than what it paid to acquire the loan from a commercial bank. However, generating profits is usually not the primary purpose of a bad bank — the objective is to ease the burden on banks, holding a large pile of stressed assets, and to get them to lend more actively.

**Why in the news?**

- The Reserve Bank of India's (RBI's) approval for the implementation of the proposal for setting up a 'Bad Bank' is still pending.

